LEARNING TO TEACH LOW SOCIOECONOMIC PUPILS: PRE-SERVICE TEACHERS' UNDERSTANDING ABOUT EDUCATION AND SOCIAL CLASS DIFFERENCES IN CHINA

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ABSTRACT

LEARNING TO TEACH LOW SOCIOECONOMIC PUPILS: PRE-SERVICE TEACHERS' UNDERSTANDING ABOUT EDUCATION AND SOCIAL CLASS DIFFERENCES IN CHINA

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This study examines empirically what pre-service teachers learn from working with students of low socio-economic (SES) rural background during a cross-regional immersion internship in China. Drawing on the theory of *boundary work* in cultural sociology, this study attempts to explore the lived experiences of pre-service teachers and examine the mixture of cultural meanings appropriated by them for shaping their understanding and actions during the internship.

In this study, I find that social class differences were not revealed as differences in socio-economic status only, but implicitly existent in student teachers' perceptions about their rural students in the form of symbolic (intellectual, cultural, and moral) boundaries. When the interns from the city meet with pupils from a rural village, they encounter the questions of how to teach children from a social class background different from their own. By identifying the symbolic boundaries that these interns marked among their rural students as well as between themselves and their students, I draw attention to the unexamined intellectual, cultural and moral boundaries that interns constructed to understand their students. I argue that the interns used these symbolic boundaries to guide their teaching and learned to reshape these boundaries during internship.

The present study suggests that in order to better prepare pre-service teachers to work with students from low socioeconomic background, the teacher educators need to understand how pre-service teachers evaluate their students by means of intellectual, moral and cultural criteria.

In addition, explicit communication between mentors and interns about how to work with students from low socioeconomic background is helpful for interns to reflect upon their own presumptions about these students.

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about my dissertation and her work sparked my thoughts on the evaluative criteria that student teachers hold about their students.

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Chapter 1 Introduction

Drawing on the theory of boundary work in cultural sociology (Lamont, M., 2000a), this study explores the lived experiences of pre-service teachers and examines the mixture of cultural meanings appropriated by them for shaping their understanding and actions during their internship. The goal of this study is to examine empirically what pre-service teachers in China think about social class differences between rural and urban areas and how their beliefs about social class differences influence and are shaped by their experiences of learning to teach students from low socio-economic (SES) backgrounds.

Specifically, I will examine how the pre-service teachers in a key teacher training university in Hebei Province in China draw on their beliefs about social class difference to make sense of and take actions in learning to teach pupils from low socio-economic backgrounds during a cross-regional internship. It is not the purpose of this study to present any causal relationships between the teacher education program and the pre-service teachers' reports of their beliefs about social class differences or their teaching practice. Rather, the purpose of this study is to share the various ways the concept of social class differences are perceived and how pre-service teachers' perceptions of social class differences influence their experiences of learning to teach in a specific context.

In this chapter, I first position my study in the research literature about preparing teachers for diverse learners (especially low socio-economic learners) in China and in the United States, and I develop general questions that need to be addressed by teacher educators. Second, I discuss the value of studying these questions in the context of China. Third, I map the theoretical framework of boundary work. Within this conceptual map and the China context, I pose three

sets of specific research questions for this study. Fourth, I propose questions for methodology and describe my research methods. Finally, I briefly consider the significance of this research and introduce the overview of the following chapters.

I. Research Background

A key question in the field of teacher education research in the United States is how to provide high quality teachers for all students, especially those presently underserved by the educational system, including students from low SES backgrounds (Hollins & Guzman, 2005). This problem is shared by Chinese teacher educators as the social-economic gap in Chinese society has persisted and grown in recent years[1]. The *agricultural* and *nonagricultural* sectors (commonly termed as urban-rural divide) divided by the socialist residence registration system *hukou* is the most important determinant of differential privileges in China (Wu & Treiman, 2004).

The ten strata model depicting the social stratification in contemporary China was developed by Lu and colleagues from the Chinese Academy of Social Sciences (CASS) (2004). The CASS ten strata model categorizes Chinese society into ten strata based on occupation. Their classification criteria reflect Wright's (1985) class theory: the ownership and control of three productive assets: organizational resources, economic resources, and cultural repertoire (defined as skills and knowledge as recognized through certification). Among the three resources,

[1] According to National Bureau of Statistics of China, in 2008, the per capita disposable income of the rural population was about 4,761 Yuan (about $ 696.26 in February 2009), growing 8.0% since 2007. The per capita disposable income of urban residents was about 15, 781 Yuan (about $ 2,307.87 in February 2009), growing 8.4% since 2007. There were about 40.07 million rural residents under the poverty line (1,196 Yuan, about $ 174.91, in February 2009) (Resource: http://www.stats.gov.cn/tjgb/ndtjgb/qgndtjgb/t20090226_402540710.htm)

organizational resources are considered to be the determinant resources because the ruling party and government control the most important and biggest amount of this resource in the whole society. Based on these criteria, the Chinese society is classified into ten social strata shown in *Table 1.1* and ranked in descending class order. Rural areas are at the bottom of the ranking. Lu also accounts *hukou*, employment, and urban/rural divide systems as the reasons for constraining the transition of agricultural workers into higher social strata (Lu, 2004). In 2005, it was reported that the ratio of average incomes between urban and rural residents is about 6:1 (Jiang, 2005).

Table 1.1 China's Ten Strata According To CASS Studies[2]

	SOCIAL STRATUM	COMPOSITION (%)
1	Government administrators	2.1
2	Managers	1.6
3	Private business owners	1
4	Specialized technicians/ Professionals	4.6
5	Clerks	7.2
6	Self-employed entrepreneurs and businessmen	7.1
7	Business and Service industry workers	11.2
8	Industrial workers	17.5
9	Agricultural laborers	42.9
10	Rural and urban unemployed and semi-unemployed	4.8

Researchers both inside and outside China have found that many social classes have been emerging, both in rural areas[3] (Bian, 1996; Lu, X. Y., 1989; Lu, J. & Gao, 2004) and in urban

[2] Data is based on Lu. X. (Ed.) (2004). *dang dai zhong guo she hui jie ceng yan jiu bao gao*. [Research Report on Social stratification in Contemporary China]. Beijing: Social Sciences Academy Publishing House.

[3] According to Lu (2001), there are at least eight social classes in Chinese rural areas based on data in 1999: rural cadres and political elites, 7%; private entrepreneurs, 1%; managers of township and village enterprises, 1.5%; household business owners, petty bourgeoisie, 6-7%; professionals; 2.5%; migrant peasant workers in cities, 16-18%; wage labor in local private sector, 16-17%; peasants work and live on income from agricultural products, 48-50%.

areas (Bian, 2002; Xie, 2004; Zhang, W. L., 2000) since the 1980s[4] given growing differences of income, social status, education level and life style. In fact, the regional economic inequalities between the cities and the rural areas have in many ways shaped social-economic development and educational stratification in China (Bian, 2002). Researchers have also shown that the "enduring significance of geography" has become an "educational stratifier" in China (Hannum, 2006). Since the economic benefits of development have been realized more in urban areas than in rural areas, the Chinese government has spent the last decade introducing social and educational reforms in cities and rural areas in an effort to provide more egalitarian opportunities for all social groups. The reforms are still underway and will extend to following years (Ministry of Education, 2010). In recent years, teacher education reform has become central to education reforms more generally since the quality of teachers is regarded as a vital factor for the education system in China (Xu, Jin, & Yan, 2005; Zhu, X. & Han, 2006). Supported by the Chinese government, teacher education programs have been recently engaged in preparing pre-service teachers to serve students in low SES rural areas (Dai & Cheng, 2007; Liang & Chen, 2007).

Recent studies about Chinese teacher education have examined the teacher education system and its practices as well as how teacher educators, pre-service teachers, and in-service teachers think of teacher education programs and teaching practice (Wang, J. & Paine, 2001; Xie, 2004; You & Jia, 2008; Yuan, 1981; Zhan, 2008; Zhu, X. & Han, 2006). These studies provide information on how teachers learn to teach, but only a few researchers have empirically examined teachers' beliefs about different learners (Correa, Perry, Sims, Miller, & Fang, 2008; Liang & Chen, 2007; Semmel & Gao, 1992). However, these studies mainly focus on the

[4] According to Bian (2002), there were working class, administrative and managerial cadres, capitalist entrepreneurs, intellectuals (which is an ambiguous class, in Bian's words), and middle class in Chinese urban areas in 1990s.

learners' differences in terms of ability, interests, and prior subject content knowledge. Very little research has studied pre-service teachers' beliefs about social class differences and how their beliefs influence their learn-to-teach experiences.

Perhaps the scarcity of such research is due to the assumption that the egalitarian political ideology in China is so engrained that (pre-service) teachers tend to think that "similarities among children are more significant than differences" (Paine, 1990, p. 53) and that people are living in a homogenous Chinese culture. However, due to increasingly salient social class differences in Chinese society, it is worthwhile to examine how Chinese pre-service teachers perceive these social class differences, why they believe what they do, and how their perceptions affect their teaching. Why and how do they tackle the difficulties they encounter when dealing with students from different backgrounds? The data to be reported by this study have the potential to fill a gap in the research and reveal how social class difference—social class in this study—is interpreted and understood by pre-service teachers, and how their interpretations and understandings influence their student teaching practice. The variations of pre-service teachers' beliefs about social class differences have been rather thoroughly studied in the United States, but not fully explored yet in the Chinese context. Thus, this study can shed light on the variations of Chinese pre-service teachers' cultural beliefs about social class differences and their association with teaching practice.

Compared to the relative lack of research on Chinese pre-service teachers' beliefs about social class differences[5], there is abundant research literature in the United States that has

[5] In this study, social class difference refers particularly to social economic status. There are a few studies about Chinese perceptions/practices associated with gender differences and ethnic differences. For instance, Zhang, Kao & Hannum (2007) explored how Chinese mothers and girls perceive gender difference and how their beliefs and perceptions influence girls' aspirations for education.

explored this topic. Research around the same topic conducted in the American context can provide possible approaches for studying the topic in China. Below, I review US studies that are relevant and helpful to frame my research.

In the United States, what concerns teacher educators most is whether teacher education programs can change pre-service teachers' simplistic beliefs about learners' social class differences, and what approaches teacher education programs can use to impact these beliefs (Adamson, 1997; Artiles, 1998; Baldwin, Buchanan, & Rudisill, 2007; Bell, Horn, & Roxas, 2007; Garmon, 2004; Hoy, Davis, & Pape, 2006; McDiarmid, 1990; Middleton, 2002; Pajares, 1992; Sleeter, 2001; Wang, Q. & Ross, 2005; Wiggins, Follo, & Eberly, 2007). Researchers have found that most pre-service teachers attribute students' learning differences to individual factors, such as effort, ability, intelligence, and so forth. Fewer have focused on categorical differences based on socially ascribed categories, such as race, class, and gender. Pre-service teachers also try to minimize the effects brought by these social class differences (Adamson, 1997; Hoy, Davis, & Pape, 2006; Kyles & Olafson, 2008; Paine, 1990; Pajares, 1992). In Paine's (1990) study, the participant pre-service teachers did not realize that social class differences are constructed and interpretable in certain contexts, but instead viewed diversity as a static rather than a dynamic concept. Nor did they think that social class differences have implications for teaching and learning processes. This finding has been supported by many other studies (Adamson, 1997; Artiles, 1998; Hoy, Davis, & Pape, 2006; Levine-Rasky, 1998; Pajares, 1992; Valli, 1995; Wang, Q. & Ross, 2005) and reflects how some pre-service teachers see children only as individuals, not as people from diverse backgrounds who are influenced by their race, gender, and social class.

In order to work on this simplistic perspective, researchers have tried to develop powerful pedagogical tools to help pre-service teachers learn to teach diverse learners effectively. The results of such studies are mixed, and controversy remains. Within this area, the major debate is whether pre-service teachers change their entering beliefs to conform to what is expected by teacher educators. Some researchers found that the field experience (whether it is an immersion experience with a multicultural course or a separate practicum) could enhance pre-service teachers' cultural awareness and reduce their biases against disadvantaged pupils (Bondy, Schmitz, & Johnson, 1993; Capella-Santana, 2003; Grottgau & Nickolai-Mays, 1989; Kluegel, Mason, & Wegener, 1999; Lazar, 1998; Wiggins & Follo, 1999). For example, Lazar (1998) studied two White pre-service students who began to question their assumption that low-income African American parents do not care about their children's literacy after tutoring children over a semester in a low-income community. Hyland and Noffke (2005) also found that white, female pre-service teachers in their study developed respect for, knowledge of, and relationships with members of marginalized communities via structured action research assignments in community-based field practice experiences. However, others have suggested that practice teaching may not remove pre-service teachers' biases and may even confirm their previous stereotypes (Haberman & Post, 1992; Reed, 1993). For instance, Haberman and Post found that most of the white pre-service students they studied interpreted their inner-city field experience mainly through preconceptions they brought with them. By the end of the field teaching experience, coupled with a multicultural course, students characterized pupils with more negative descriptions than they had before.

In spite of their different results, these studies share a fundamental assumption about pre-service teachers that regards them as a product of teacher education who are immune from other

influences. A few researchers have analyzed pre-service teachers' motivation for working with students from disadvantaged groups and have found that pre-service teacher's prior experiences and personal characteristics are quite important for their understanding of multicultural encounters (McCall, 1995). But in most studies, pre-service teachers' entry characteristics and experiential background with regard to working with minority students before they take teacher education courses or field teaching were not fully considered. In addition, the expectations of the teacher education programs are seen as the only appropriate way to shape pre-service teachers' beliefs. Perhaps this is based on the assumption that prospective white female teachers in the US share a common culture, and their identities are built as embodied categories different from pupils from diverse backgrounds. (For more discussion see Rodriguez (1996))

However, there is another approach that contradicts this unitary view of the pre-service teachers. As Britzman (2003) elegantly put it, this view emphasizes *becoming* instead of *being*. *Being* refers to the unitary approach described above. By *becoming*, she means that pre-service teachers are "continuously shaping and being shaped by the dynamics of social practice, social structure, and history" (p.49). She accordingly proposed a dialogical model to examine pre-service teachers' experiences of learning to teach. This dialogical model recognizes the agency of the pre-service teachers and "the multiple realities, voices, and discourses" (Britzman, 2003, p. 49) that conjoin and clash in teacher education.

My study follows the dialogical approach suggested by Brtizman (2003). It differs from many previous studies that focused on the linear changes in pre-service teachers' attitudes and beliefs regarding teaching for diversity as the result of a fieldwork experience. Instead, it views pre-service teachers as actors who actively construct meanings out of their fieldwork experiences and position these experiences within shifting "boundaries" drawn between themselves and low-

SES students as different "others". Indeed, these pre-service teachers are not passive recipients of what they are told during student teaching (Britzman, 2003; Segall, 2002). They can reshape their understanding of their own identities and past experiences when encountering pupils from different backgrounds and when thinking about what is told to them by teacher education. Chandra Mohanty (1994) argued that "the central issue, then, is not one of merely *acknowledging* difference; rather the more difficult question concerns *the kind of difference that is acknowledged and engaged*" (p.146, emphasis added). That is, what the social class differences mean for pre-service teachers encountering diverse (especially disadvantaged) pupils is largely *produced* by the pre-service teachers' perceptions within certain contexts. And their previous cross-cultural knowledge or experience also influences their beliefs regarding working with diverse students (Barry & Lychner, 1995; Valli, 1995).

Given their diverse experiences, pre-service teachers' perceptions based on self-constructed meanings may not be anticipated by teacher education programs, and hence may be perceived by teacher educators as resistance or negative changes (McDiarmid, 1990; McDiarmid, 1992). Haberman and Post (1992) suggested that the lack of change in their participant pre-service teachers can be explained by the resistance due to significant influence of previous experiences and uncomfortable feelings with various ideas prescribed by the teacher education program. However, Britzman might agree with me and suggest other explanations for this "negative change". For instance, pre-service teachers' beliefs about social class differences are not static entities subject to change, but work as mediators to help pre-service teachers make sense of their learn-to-teach experiences in cross-cultural settings. As illustrated later, using the framework based on the theory of boundary work, this study brings a needed corrective to studies of pre-service teachers' various responses to cross-cultural field teaching. This study regards pre-

service teachers' varied thinking about diverse learners as the product of pre-service teachers' efforts to search for their own identities, and to negotiate meanings among professional roles, teacher education requirements, and marketable qualifications.

Specifically, this study presumes that pre-service teachers approach the differences between themselves and low SES pupils actively, using available cultural repertoire to produce "self" and "other" relationally and contextually. This vantage point does not take cultural beliefs as the goal for people's action, but as the tools to produce meaning and to make sense of actions (Swidler, 1986). Thus, this study entails an examination of pre-service teachers' personal characteristics and relevant experiences.

Using the case of China, I consider the following general questions. First, what are cultural tools that pre-service teachers used to understand social class differences? Second, how do pre-service teachers' cultural beliefs about social class differences influence their teaching practice? And how do these cultural beliefs shape pre-service teachers' understanding of their internship experiences? Third, how do pre-service teachers' personal history, internship experiences, and teacher education requirements influence pre-service teachers' understanding of social class differences as they learn to teach low SES students? I place these questions in the context of Hebei Normal University in China below.

II. Context of the Study

The locus of this research is the special internship project initiated by Hebei Normal University (HNU)[6], a key university in the province of Hebei, China, specialized in training

[6] In China, the secondary-level schools and universities specialized in teacher training are called "Normal Schools" and "Normal Universities". From the 1990's, the teacher education reforms

middle-school teachers. In 2006, Hebei Normal University started a "*dinggang*" project (顶岗计划), which sends juniors to conduct their student teaching in less developed areas in Hebei Province for at least three months. "*Ding*" means "replace" and "*gang*" means "position". A "*dinggang*" project brings interns to schools in low income areas, where they "replace" a few schoolteachers and engage fully in all teacher-related functions of the school, with the assistance of mentors both in the local school and from HNU (Liu & Li, 2007). The idea is to get these pre-service teachers immersed in a low-SES setting. These interns live in the school dormitories[7], observe mentor teachers' teaching, prepare lessons together, teach classes every day, learn to work as class advisors (*ban zhu ren*[8]), and get involved in local community activities (*she hui shi jian*, "social practices",社会实践, such as surveying local social economic settings, taking part in "life enhancement" projects, and so forth) (Dai & Cheng, 2007; Liang & Chen, 2007). Those schoolteachers for whom the HNU interns substitute get the opportunity to take part in the in-service professional development program jointly sponsored by HNU and local educational bureaus.

Although this approach is quite a new phenomenon that is different from traditional pre-service teachers' 7-week-internship in China, similar internships have been enacted in other

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promoted by the Ministry of Education removed secondary-level normal schools, making them expand into colleges or merge into other colleges and comprehensive universities.

[7] Usually, the dormitories were built by the placement schools for the interns. The schoolteachers and students live near the school. The supervising teachers from Hebei Normal University do not live with interns.

[8] *Ban zhu ren* is the lead teacher for each class, who is responsible for classroom discipline, meeting with parents, and working with subject matter teachers to solve any problems in the class. A *ban zhu ren* usually also teaches one subject area.

regions in China for the past few years[9]. Due to its effectiveness in training pre-service teachers for low-income areas, this model of internship was implemented by many teacher education programs across the country in the past few years (Liang & Chen, 2007; Ran & Bao, 2006). Hebei Province adopted it in a provincial level education policy in 2006 (Education Bureau in Hebei Province, 2006). In 2007, the Chinese Ministry of Education recommended the *dinggang* internship to teacher training institutions nationwide because of the government's recent interest in solving social inequality through education (Liang & Chen, 2007).

Many teacher education students at Hebei Normal University (HNU) are from cities, which are relatively more well-off areas. When these teacher candidates encounter pupils in low-income areas, the differences of social economic status can translate into cultural gaps. These cultural gaps can be different ways of speaking, perceptions of the teacher's role and students' roles, ways of understanding of what to learn and how to learn, different approaches to classroom interaction, and so forth (Barry & Lychner, 1995; Dolby, 2000; Garmon, 2004; McAllister, 1999). In the face of these gaps, the teacher candidates' beliefs are challenged by unsettled and unfamiliar surroundings.

The *dinggang* internship at Hebei Normal University in China provides an informative case for examining the general research questions raised above about pre-service teachers' beliefs and the learn-to-teach process. After laying out the framework for this study, I will elaborate on these questions and develop more specific ones.

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[9] For instance, Xinzhou Normal College in Shanxi Province began to implement *dinggang* internship from 1997. (For more background information, please refer to http://www.moe.edu.cn/edoas/website18/level3.jsp?tablename=2387&infoid=34397, accessed May 21, 2009.)

III. Theoretical Framework

As discussed above, the unitary and linear model of studying pre-service teachers' beliefs about social class differences is problematic. In order to examine pre-service teachers' cultural beliefs in action, I prefer a dialogical framework that can enrich our understanding of how pre-service teacher's beliefs are shaped by and are shaping their experiences.

In this study, the theory of "boundary work" helped to frame my examination of interaction between pre-service teachers' cultural beliefs about working with low SES students and their understanding of their learn-to-teach experiences during the *dinggang* internship, and how the internship experience influences this interaction. In the following section, I delineate the concept of cultural belief and the concept of boundary work, drawing primarily on empirical and theoretical work in cultural sociology.

What pre-service teachers think and believe is important for the process of learning to teach pupils from disadvantaged backgrounds. My focus here is the cultural beliefs of the teacher candidate. This term has two facets. First, I understand "culture" both as a system of meanings and as practice. There has been a debate about what culture means in the field of sociology of culture: culture as a static preexisting structure of meanings to motivate people's actions vs. culture as a toolkit appropriated by individuals to justify their actions. (For a more comprehensive review, see Vaisey, 2008.) However, each approach seems incomplete without the other. The first approach cannot fully explain why people from a similar cultural background make different choices in action. The second approach seems to center on the role of the individual but may not identify similarities across individuals. The combination of both approaches is therefore a more complete account of culture. That is, culture is not only a web of shared meanings but also pieces constructed by individuals in their actions. Such a view of

culture is helpful to understand the pre-service teachers' meaning-making as embedded in their general views about social inequality and as constructed in their experiences of the internship.

Second, by "belief" I refer to the "structure and content of mental states that are thought to drive a person's actions" (Richardson, 1996, p.103). I follow Pajares and regard belief as a system including individual's attitudes, values, and perceptions that sift the knowledge a person can learn and use (Pajares, 1992). Belief differs from knowledge because it is subjective and does not require validation (Hoy, Davis, & Pape, 2006), but it can be influenced by knowledge, which is more factual and verifiable (Richardson, 1999). Culture is the key to understand the beliefs an individual adopts. Lee (2008) stated that beliefs "are not developed separately from the socio-cultural context". (p. 36) Therefore, by "cultural belief", I differentiate it from religious belief and used it to refer to the individual's general attitudes, values, and perceptions which are acquired through the process of cultural transmission as well as their practices embedded in interactive settings. In this study, I focus on participants' cultural beliefs about social class--more specifically, the social class differences between the economically developed urban areas and the underdeveloped rural areas (Bian, 2002; Buchmann & Hannum, 2001; Hannum, 2006).

In order to examine pre-service teachers' cultural beliefs in action, I deploy a dialogical framework that can be contrasted with the standard framework used to study pre-service learning to teach in a diverse setting, which, as described earlier, tends to be unitary and linear. Instead of asking if pre-service teachers' beliefs and attitudes can be changed according to the agenda proposed by the teacher education program, this study recognizes the complexity of how an individual accepts or rejects "other" people and makes sense of her or his own actions in a culturally diverse context. Thus I seek ideas from the literature on "boundary work" in cultural sociology. I draw especially on the studies by Lamont (1992, 2000, 2001a, 2001b, 2002) whose

work mainly focuses on one kind of symbolic boundaries—moral boundary. Morality is an important cultural and social control issue in classrooms and the larger society in China (Lizardo, 2004; Lu, o. & Lin, 2003; Yuan, 1981; Zhu, X. M. & Liu, 2004). Although morality has different connotations in different national contexts, Lamont's idea of boundary work provides a general conceptual tool for me to explore how it facilitates drawing or transgressing social boundaries in China. Her theory is especially pertinent to this study since it helps me to examine how pre-service teachers interpret social class differences in China via diverse lenses besides just socio-economic status.

The theory of "boundary work" has become key in new lines of scholarship across the social sciences in recent years (Lamont & Molnar, 2002). It is rooted in the well-established tradition of sociology and elaborated in works by Durkheim (1965), Marx (1963), and Weber (1978) that illustrate the dynamics between boundaries marked by class, religion, and ethnic groups. (On the history of the concept, see Lamont, 2001b; Schwartz, 1981) Recently, researchers developed the classic theory of boundaries by introducing the distinction between symbolic boundaries and social boundaries (Epstein, 1988; Lamont, M., 2001b). With this distinction, cultural sociologists focus on how boundaries are shaped by context, and particularly by the cultural repertoires, resources, and narratives that individuals can appropriate (Lamont, M., 2000a; Somers, 1994; Swidler, 2001). That is, individuals are not isolated, but embedded in the environment when they draw on cultural repertoire and work on boundaries — when they draw boundaries and tie meanings to their actions and identities (Lamont, M. & Molnar, 2002).

Symbolic boundaries are conceptual distinctions made by social actors to categorize objects, people, practices, and even time and space (Lamont, M., 2001b). They are tools for individuals and groups to make symbolic distinctions between themselves and "others" in their daily lives

(Lamont & Molnar, 2002). People do not use only one single symbolic boundary, but employ a set of such tools available in their accessible cultural repertoire. For instance, in her book *Money, Morals and Manners* (1992), Lamont teased out three sets of symbolic signals—moral rules, socioeconomic standing, and cultural refinement--when she explored how French and American upper-middle-class members draw boundaries between themselves and people they do not like. Social boundaries are objectified forms of social class differences. They are revealed in social inequality in getting resources and social opportunities, and they are translated into patterns of social exclusion and segregation (e.g., Logan, Alba, & Leung, 1996; Massey & Denton, 1993). To be more specific, symbolic boundaries exist at the inter-subjective conceptual level, whereas social boundaries manifest themselves in the behaviors of a group of individuals (Lamont & Molnar, 2002). For instance, in her study of the effect of merit promotion policies in Chicago, Anagnostopoulos (2006) used boundary work theory to illuminate the moral boundary, i.e. symbolic boundary, that the teachers drew between "deserving" students and those deemed "undeserving". Based on this symbolic moral boundary, the teachers enacted different classroom practices that limited the learning opportunities for demoted students. These teaching practices eventually created the social boundaries that excluded the demoted students. Thus, the boundary work includes both the conceptual drawing and the enactment of a social boundary as well as transgression of the boundaries.

Based on the dynamics between symbolic and social boundaries, recent theory of boundary work holds that symbolic cultural repertoire (e.g. conceptual distinctions, interpretive strategies, cultural traditions) play a key role in "creating, maintaining, contesting, even dissolving institutionalized social class differences (e.g., class, gender, race, territorial inequality)" (Lamont, M. & Molnar, 2002, p. 168) in daily lives (Fine, 2001; Jackson, 2001). For instance, in

Lamont's influential book, *The Dignity of Working Men*, she carefully illustrated how French working class and US working class men differ in using cultural repertoire, such as morality (instead of material resources or income), to draw lines between those *above* themselves and *below* themselves. Lamont found that the boundaries these men drew were rooted in religious and civic traditions and in the ideas of individualism, achievement, materialism, and competition, which are foundational elements of the American cultural repertoire. Lamont argued that this process of using cultural repertoire to define their collective identity in opposition to "others" is intrinsic to the process of class formation, thus presenting individuals' cultural understanding of social class as an important element in structuring their own identity. However, she stated that this does not offer a view about individuals' multiple, fluid, and problematic identities (Lamont, M., 2000a). In contrast, she adopted a balanced view about individual and context, and in her words, "This is not to deny the importance of individual agency but to stress the fact that it is bounded by the differentially structured context in which people live" (Lamont, 2000a, p. 244).

Besides providing this balanced view of individual agency and structural context, the concept of *boundary work* is particularly relevant to this study of pre-service teachers' beliefs of social class differences because it provides a lens to examine how individuals appropriate multiple cultural repertoire to evaluate and categorize people from different social backgrounds, and how they rank others based on these evaluative criteria. With the goal to send pre-service teachers to low SES schools, the *dinggang* internship intends to have pre-service teachers cross the boundaries and differences of social class. As Guofang Li (2008) suggested, social class is "lived social practices through which ordinary people live, survive and cope" (p.151). In this sense, pre-service teachers' experiences are embedded within their own social class background as well as their understanding of social class differences between themselves and their low SES

pupils. Exploring how pre-service teachers make sense of these boundaries based on social class can illuminate the multiple meanings that such a learn-to-teach opportunity can hold for pre-service teachers. Using this idea of boundary work allows us to recognize a range of voices from pre-service teachers about learning to teach low SES students. This corresponds to Britzman's (2003) idea that pre-service teachers do not speak with one voice. They have multiple voices that blend the different discourses from policy, teacher education, and "internally persuasive discourse" (p.42), which pulls away from institutional discourses and mix various contradictory social discourses. Thus, *boundary work* helps to examine how pre-service teachers use multiple cultural repertoires, negotiate social class differences in their *dinggang* internship, and blend various meanings in their understandings.

In addition, the concept of boundary work helps to examine closely pre-service teachers' identity as they position themselves in relation to low-SES students and rural teachers. *Dinggang* interns' understanding of their immersion experiences is pertinent to their own identity formation since they are "socialized" to work with students from different backgrounds (Levine-Rasky, 1998; Mauger, 1983). Cultural sociologists argue that everyday practices are the essential means by which people (re)construct their own identities and impute identities to other people. These practices are shaped by and influence the varying degrees of access to valued resources and opportunities for individuals from different social backgrounds (Anagnostopoulos, 2006). Pre-service teachers' learning experiences in a field teaching project involve learning about themselves via daily interactions with low SES students, peer pre-service teachers, and mentor teachers. Due to the fact that people's identities evolve from the interpretation of how they perceive themselves, like seeing the self from a "mirror" (Strauss, 1997), interactions in a new social setting can affect a person's identity. Thus, self-identity may be differently positioned and

understood in an unfamiliar context. When *dinggang* interns from the cities encounter low SES pupils in the rural areas, their identities based on prior experiences are re-charted according to the boundaries they perceive and enact between themselves and their pupils.

In summary, I am interested in knowing how boundaries are perceived and enacted by pre-service teachers in the context of the *dinggang* internship, and how such boundaries are influencing and are influenced by social relationships during the process of learning to teach low SES students. Drawing on the theory of *boundary work*, this research considers three sets of specific questions:

1. What are pre-service teachers' cultural beliefs about social class difference?

(1) How do *dinggang* interns interpret social class differences among themselves, the rural schoolteachers, and their pupils from low SES rural backgrounds?

(2) What are the factors *dinggang* interns believe contribute to rural children's academic failure or success?

(3) How do boundaries keep shifting as *dinggang* interns enact their understanding of teaching and engage in boundary work?

2. How do *dinggang* interns' cultural beliefs about social class differences influence their internship experiences?

(1) How do *dinggang* interns evaluate their pupils? How do their cultural beliefs about social class differences influence their pedagogical decision making and interactions with their students?

(2) How do they draw on elements of their cultural beliefs about social class differences to understand and rationalize their internship experiences?

(3) How do these cultural beliefs shape, and how are they shaped by *dinggang* interns' understandings of the internship experiences?

3. What cultural repertoire do the pre-service teachers draw on as they engage in boundary work?

(1) What are *dinggang* interns' perceptions of teacher education, community experiences in their *dinggang* community, and the support from peers, teacher educators, and school mentors during their internship?

(2) How are requirements from teacher education programs and the preservice teachers' experiences during the internship appropriated as cultural repertoire for their understanding of social class differences as they learn to teach low SES students?

(3) How do their beliefs about social class difference, family background, schooling experiences, prior experiences working with diverse students, and their experiences of teacher education serve as resources? What other resources do they draw on? How do experiences during the *dinggang* internship influence pre-service teachers' cultural beliefs of social class difference and their learn-to-teach process?

I used ethnographic methods to address these questions. Below I explain how these questions were examined and how I dealt with issues of participants, data collection and analysis, and the researcher's role.

IV. Method

The agenda for this study, as stated earlier, was to examine pre-service teachers' cultural beliefs about how social class differences shape and are shaped by pre-service teachers' cross-

cultural teaching experiences. Drawing on the theory of *boundary work*, I consider the following methodological questions: (1) What kind of research strategies can help me to tap pre-service teachers' cultural beliefs regarding differences among themselves, rural teachers, and low SES pupils? (2) What research methods will allow me to examine pre-service teachers' understanding of their internship experiences and how their beliefs about social class differences inform their classroom teaching? (3) How can I learn about what/how pre-service teachers' have learned from the *dinggang* internship in terms of changes/no changes in cultural beliefs and social attitudes associated with teaching low SES students?

The first question has been discussed by many researchers in the United States. Studying beliefs presents several challenges, although beliefs have been found to have an important influence on (pre-service) teachers' practice in cross-cultural settings (Baldwin, Buchanan, & Rudisill, 2007; Capella-Santana, 2003; Garmon, 2004; Nespor, 1987; Pajares, 1992; Wang, Q. & Ross, 2005). Examining beliefs about culture is a challenging endeavor since these beliefs are usually implicit, and the pre-service teachers may fear being vulnerable if they admit beliefs that could be perceived as prejudicial (Paige, 1993). As Rokeach (1968) stated, "Just because a person makes a belief statement, that particular statement may not accurately represent what he truly believes, because there are compelling personal and social reasons, conscious and unconscious, why he will not or cannot tell us" (p.2). McDiarmid (1992) made this point in his study when he found that asking teachers directly about their views triggered socially acceptable responses. In addition, studies about (pre-service) teachers' beliefs usually rely on self-reported information provided by the pre-service teachers (McAllister, 1999). Some researchers have argued that beliefs data without observational data or multiple data sources is problematic (Pajares, 1992; Richardson, 1999). In order to achieve more accurate representation of teachers'

beliefs, some researchers have turned to a constructivist approach to understand beliefs from the (pre-service) teachers' perspective via observation (Case & Hemmings, 2005; Cochran-Smith, 1995; Hyland & Noffke, 2005; Montero-Sieburth, 1996). Corroboration of beliefs with observation in pre-service teacher's classrooms can validate the understanding of a belief. I followed this line of research and used multiple methods to probe what *dinggang* pre-service teachers think and believe in terms of social class and the implications for teaching.

The second concern about the connection between belief and practice is quite related to the first. To address this, I used field work to get in-depth information about what the pre-service teachers I studied really thought and practiced. Although many researchers find surveys to be a useful instrument to describe categories of beliefs and attitudes about social class differences (Avery & Walker, 1993; Barry & Lychner, 1995; Deering & Stanutz, 1995; Paine, 1990), they may not be able to reveal how these beliefs are contextualized in action and how they are connected to practice (Pajares, 1992). My study took the social constructivist view that learning is shaped by a variety of factors that come before and that exist in the activities in which people take part (Lampert, 1997). From this perspective, belief is derived from social interaction, in which subjective meanings are a legitimate focus for study, and research must be conducted in social context (Crossley & Vulliamy, 1984). This exploration into subjective meaning required ethnographic methods of inquiry (Pole, 2003). That is, rather than imposing and testing predetermined categories of beliefs about social class differences, this study used various methods, such as in-depth interviews, observations, and analysis of written reflections, to have (pre-service) teachers unravel the complexities of their beliefs. Codes, patterns, and themes emerged from the data, and analysis was related to the contexts in which the pre-service teachers were learning to teach. This set of strategies allows me to get first hand information about what

dinggang pre-service teachers thought about their internship and to raise questions about observed contradictions between self-reported belief and observed practice.

The third question about detecting possible changes, whether in agreement with the goal of the teacher education program or not, in pre-service teachers' beliefs were tackled with a comparison of data collected before, during, and after the internship. In order to guard against a halo effect, in which researchers often measure the elated emotions teachers may have at the end of an intense internship, I waited for a period of time after the internship to conduct interviews about how *dinggang* pre-service teachers thought of what they had learned.

Overall, integrating boundary work theory in the research design, coupled with data from in-depth interviews and observations, seems to have equipped this study with an alternative explanation for the incoherence of pre-service teachers' self-reported experiences. Pre-service teachers' "resistance" to the changes required by teacher education programs can be reframed as a deliberate rationalization of experiences and aspirations.

I have outlined thus far the major methodological concerns and principles that guided my research design. In the remainder of this section, I detail the research instruments used in the study, their functions, my procedures of data collection and analysis, and the rationale for such arrangements.

V. Participants

In this study, I shadowed eight Hebei Normal University *dinggang* interns in one rural middle school throughout their four-month student teaching period. I used "purposeful sampling" (Maxwell, 2005, p. 88) to get a range of data to cover the heterogeneity of the critical cases that can inform the theoretical lenses of boundary work. I engaged in participant selection after the

Office of *dinggang* Internship (ODI) in Hebei Normal University assigned the interns randomly to their placements. I identified the focal participants of this study according to the following considerations (*Table 1.2*):

(1) I selected pre-service teachers who were from middle-class families in the cities and who were assigned to work in the same school of a low income area. By doing this, I was able to examine how pre-service teachers from higher SES backgrounds perceived and enacted boundaries between themselves and their lower SES students. First, I told the Office of *dinggang* Internship (ODI) that I intended to conduct the research in a county that had an annual average income below the poverty line in the Hebei area[10]. The ODI provided me with a list of the six most underdeveloped counties which had agreed to have HNU interns in local schools. I also obtained a roster of 200 interns assigned to schools in these counties. Second, I used four criteria to examine these 200 interns' socioeconomic backgrounds—parents' education level, father's occupation, family annual income, and the location of the family (urban or rural). According to researchers on Chinese social strata, these four criteria are vital to know about a person's SES background (Fang & Feng, 2005). Based on these criteria, I placed about 100 interns' names on my list.

(2) I also selected interns who taught different subject areas. By doing this, I was able to explore diverse beliefs pre-service teachers have across subjects. I intended to include pre-service teachers of Chinese language, math, and English since these are core subjects in the

[10] In 2008, according to the Hebei Province Bureau of Statistics, the average per capita disposable income of the rural population was 4,795 Yuan (about $701.23 in February 2009). The average per capita disposable income of the urban population was 13,441.1 Yuan (about $1,965.67 in February 2009). (Resource: http://gov.hebnews.cn/qw/2009/0226/bdb70d961faf7312011fb043352f1062_2.html, accessed June 13th, 2011)

Chinese K-12 curriculum and are taught. These subject teachers closely worked with students in the classroom. The frequencies of these courses and the efforts paid by teachers and pupils increased the opportunity for me to collect qualitative data in depth.

(3) Both genders were included. Since boys and girls get different school opportunities in rural China (Hannum, 2006), it seemed important to examine how pre-service teachers' beliefs are also influenced by gendered perceptions and their own genders when dealing with pupils from low SES backgrounds.

In the end, eight interns who were assigned to one rural school, Sanji Middle School (SMS), were selected and consented to take part in this study. SMS is in an underdeveloped county, and the principal is highly supportive of the *dinggang* internship. As *Table 1.2* shows, five of the participants were from well-off urban areas, and three were from economically developed rural areas. Two of them taught Chinese, two taught mathematics, two taught chemistry, one taught English, and one taught fine arts. Only one of them was a male, and this represented the general gender ratio of Hebei Normal University as a teacher training institute.

Table 1.2 Participants

Names	**Chen**	**Feng**	**Han**	**Hao**	**Jin**	**Li**	**Wang**	**Zhang**
Subject areas	Chemistry	Chinese	Chemistry	Chinese	Math	Math	Fine arts	English
Family background	Urban areas					Economically developed rural areas		
Gender	male	Female						

VI. Data Collection

The main data sources for this study included participant observations, in-depth interviews, and written documents. In summer 2009, I participated in the training sessions for the *dinggang*

interns and their supervising teachers at Hebei Normal University. During this pre-data collection stage, I observed the training sessions, collected documents about the *dinggang* internship, piloted the entry interview with randomly selected interns, and modified the interview protocol.

At the end of August, 2009, I went to Sanji Middle School with the eight focal participants. I conducted fieldwork until the end of December, 2009. As follows, I delineate my methods of data collection.

1) Observation

In order to understand the boundary work these *dinggang* interns adopted, it was critical to observe them interacting with students, with local schoolteachers, and with each other. Thus, I spent much time with these interns, both in and out of their classes, trying to understand them in their natural setting. Following all interactions and participant observations with the participants, I recorded detailed notes. In these notes I usually included descriptions of environments, people, events, conversations, as well as facial expressions, body language, and tone of voice. I also noted my own responses, emerging ideas, and questions.

I scheduled one in-class observation of each intern's teaching during the first two weeks in order to figure out what interns thought in the beginning about their students and how they enacted their beliefs in teaching. Each observation was accompanied by a brief pre-observation conversation and a longer interview immediately after the observation. These interviews helped me get an idea about the interns' lesson plans and clarify puzzles about observed details. During the pre-observation interview, I asked for their lesson plans and their intentions of using certain materials and teaching methods. If it was too rushed to conduct the post-observation interview

immediately after class, I scheduled the interview for the end of the day when their memory of the observed class was still vivid. In the post-observation interview, I shared my field-notes with pre-service teachers and discussed depictions that they did not understand or agree with. I also asked for further explanations and for details relevant to the research. The responses and discussion notes were added to the field notes.

During the following three months of the fieldwork, I observed one class taught by Wang Kun and at least three classes by each of the other pre-service teachers. I audio-taped the classes (and sometimes videotaped the classes with the interns' consent), made notes during the observations, and transcribed the audiotapes for further analysis in the evening. In these observations, I paid attention to the pre-service teachers' expectations shown in their pedagogical decision-making, pupil and (pre-service) teacher classroom behavior, and interactions between pupils and pre-service teachers. I constructed narrative records of whole-class talks, and identified the times when activities began and ended, and noted instructional formats and curricular materials.

By drawing on observational data, I hoped to get in-depth behavioral information conveying what they thought that may not necessarily be revealed in interviews. Observation notes and transcriptions of the audio-taped classes were also utilized to raise questions for the interviews with the interns. In addition, having the observation data over time helped me to figure out how school context, such as the school principal's attitudes, mentor-intern interactions, and so forth, influenced pre-service teachers' experiences during the internship.

2) In-depth Interviews

In addition to *pre- and post- observation interviews* as supplements to the observation of classes, I also conducted three in-depth individual interviews and one focus group interview with the interns. I planned multiple interviews because some researchers have found that the construction of one's own experiences and life stories may change as the interviews progress (Josselson, 1996; Wiersma, 1992). As they reflect on their lives, participants may develop new insights or reinterpret the meaning of previous stories. In addition, multiple interviews at different stages of the *dinggang* internship could give us an idea of how pre-service teachers' beliefs and understandings develop as they proceed.

In the beginning of the internship, I conducted one in-depth *individual interview* with each participant in the first week of the internship, to ask how they perceived their pupils and what they expected from their experiences of learning to teach these low-SES pupils. In October, I conducted another *individual interview* with each intern, which yielded data on how they thought about their pupils and understood their teaching experiences. Each interview lasted for at least two hours. The third round individual interview with each participant served as a "member check" (Lincoln & Guba, 1985), an opportunity for the participants to validate (or reject) my initial interpretations and further reflect upon the meaning of particular events in their experiences. This interview took place after the internship ended. We discussed their responses to my initial understanding of their perceptions of the rural students. I made changes on misinformation. Some of the third individual interviews were conducted through Skype video-conferencing since I was not in Hebei after the *dinggang* internship ended.

In the middle of the *dinggang* internship, I conducted one semi-structured *focus group interview* with the participants. The *focus group interview* served the purpose of strengthening a dialogical relationship among pre-service teachers, and between the pre-service teachers and me.

Since focus group interviews can provide multiple perspectives from the dialogue among participants (Anagnostopoulos, 2006), I also intended to use this method to look for agreed upon or conflicting ideas among the interns, and I asked for their responses to initial ideas I had found in previous interviews and observations. After this focus group interview, I conducted informal interviews with each participant individually to ask them about their shared and conflicting ideas during the focus group interview.

Although I used prompts for every interview, I developed new questions based upon the conversations to encourage pre-service teachers to discuss what was important for them regarding teaching low SES students. I went back to some individuals for more interviews when they presented rich and complex information that I needed more time to delve into. All the interviews were audio-taped, transcribed, and translated. Data were also collected informally in school discussion with pre-service teachers, mentor teachers (both from HNU and the local school), pupils, and parents both in and out of the school. Throughout the study, I use pseudonyms for all the participants and have kept their personal information confidential.

3) Written Documents

In June 2009, I collected official documents from the teacher education program which described the institutional requirements of the internship during the intensive training session before the *dinggang* internship. In addition, all the *dinggang* interns were required to write reflections during and after their internship. I gathered the participants' written reflections to

probe their individual perceptions. I also examined the *dinggang* placement school records to find out the pupils' parental SES background[11].

VII. Data Analysis

All interview and observation data, along with other qualitative data including pre-service teacher reflections and official documents, were entered into N-Vivo 7 software, allowing me to code responses, create categories, and examine relationships between the categories. N-Vivo also keeps track of the data coding history, and allows for analysis across data as well as for identification of data across time periods, such as the interviews at different phases. Upon completion of each observation and transcription of each interview, I wrote analytic memos that contained methodological decision-making and initial impressions of the data provided by the participants, and described themes that emerged throughout the conversations/observations.

I analyzed the data using the "key incident" approach, in which important events (usually recurrent events, events that have sustaining influence) are identified from the observation notes and placed in relation to other incidents, events, or theoretical constructs (Wilcox, 1982). Then I summarized these key incidents on matrix displays using techniques suggested by Miles and Huberman (1994) for standardizing and processing qualitative data. Further, I classified all the transcripts thematically in order to perform a systematic analysis of all the important themes that appeared in the interviews, observations, and written documents, approaching these data against which my research questions could be examined. Finally, I went back to the literature and compared the themes I found with the studies of other researchers. For instance, I found that the

[11] In China, schools collect information from the families of all students. Every year, teachers review information from the families of all students in their class. From these data, both parents' education and occupation are provided.

framework of multiple symbolic boundaries used by Lamont in her *Money, Morals and Manners* (1992) spoke to what emerged from my data analysis. Symbolic boundaries may take several forms in two different research settings, but Lamont's work served as a guide for me to consolidate the themes found in my research. Although not using her preset categories, I compared the three sets of boundaries she explored with the themes found in my data, and I found that they were to some degree compatible. According to Lamont (1992), moral boundaries, socioeconomic attainment, and cultural refinement coexist in people's boundary making process. In my study, moral boundaries, intellectual boundaries, and cultural refinement co-existed in the intern participants' learn-to-teach practices.

In the process of labeling the categories, I translated the categories from Chinese to English for better understanding. For most categories, I constructed a label to consolidate the meanings embodied in the varied terms used by the participants. For instance, I combined "*hao xue*" (好学, loves learning) and "*shang jin*" (上进, striving to go upward) and labeled them as "ambition". In order to translate these terms correctly, I called the participants during the write-up stage to confirm with them the meaning implied by these terms, and then I consulted native English speakers about the appropriateness of translation by displaying the meaning embodied by the original terms used by the participants. I include the *pin yin* and Chinese character in the parenthesis in order to refer to the original meaning. For some categories, I opted to keep the *pin yin* since they were either frequently mentioned by most participants or it was difficult to find a parallel in English. "*qian li*" (潜力, potential to achieve well academically) is an example of the former and "*bu xue hao*" (不学好, do not learn to be good) a case of the latter.

Once the categories and themes were established, the comparison with the literature took place (Orland-Barak & Yinon, 2007). The findings were compared to the larger literature on

boundary work and research on pre-service teachers' beliefs about social class differences to provide further insights.

VIII. Researcher's Role

Rosaldo (1993) wrote, "All interpretations are provisional; they are made by positioned subjects who are prepared to know certain things and not others" (p. 8). As the researcher, my own personal characteristics—including age, gender, class, education, language, and life experience—played an important role in determining the kind of interactions I had with the participants. As a native Chinese, I spoke Mandarin and communicated with the participants freely. I could quickly grasp the main ideas that the interns and local people shared with me. However, as a young researcher born in South China and educated in the United States, I had to be very careful to capture and interpret the nuanced meanings communicated with the local dialect in this rural school in North China. In addition, I was introduced to the interns and schoolteachers as a researcher from Beijing Normal University with an overseas education background. People seemed to be awed by my education background. The interns usually felt nervous when I observed their classes. I told them that I was there for research, not for giving grades on their teaching, and I became very cautious about my role. If the intern was open to different opinions and eager to get some advice from me, I did not want to disappoint them and would carefully share my opinions after my post-observation interview. I would also let them know that my advice was not necessarily the right answer nor the only solution, but one alternative for them to consider in their future teaching. I regarded this as giving back some help to the intern. If the intern was hesitant to share opinions with me, or she was very sensitive to advice, I would not say anything, even though all of the interns politely invited me to give

feedback after my observations. I do realize that my feedback and mere presence influenced what the interns thought of their teaching. Sometimes, my questions may have made them more reflective of their perceptions about their students. In the meantime, I hoped that through my sustained presence in the setting, the effect of my intervention would decrease and enable me to establish adequate relationships with the participants so that I could obtain more insights and sensitivity (Maxwell, 2005).

IX. Significance of the Research

This study is important because it used a dialogical model to explore the cultural beliefs pre-service teachers hold, and it expanded the academic understanding of pre-service teachers' cultural beliefs and how a specially designed internship shapes and is shaped by what interns believe in. In addition, increased awareness about and understanding of prospective teachers' beliefs regarding social class differences may assist prospective teachers with the means of changing their own beliefs and may assist teacher educators and administrators with alternatives to support the process of change. Moreover, examination of Chinese pre-service teachers' beliefs can further enhance our understanding of the complexity of the relationship between belief and teaching practices in the Chinese context compared to the relevant studies in the United States.

X. Overview of the Chapters

The organization of this dissertation revolves around the symbolic boundaries the participants drew among their students as well as between themselves and their students, and the enactment of these boundaries. This first chapter introduces the theoretical framework, the research methods, and the research questions. The second chapter depicts the context of the study,

introducing the *dinggang* internship project, Sanji Middle School, and the participants' backgrounds. The third chapter maps out the symbolic boundaries—intellectual boundaries, moral boundaries, and cultural boundaries—the participant interns utilized to understand their students and their learn-to-teach experiences. The fourth chapter pursues the discussion of how the symbolic boundaries were enacted in the interns' student teaching. Enactment of symbolic boundaries is likely to reinforce the social boundaries between lower academic groups and higher academic groups. The fifth chapter explicates the cultural repertoire the interns mobilized to construct and enact the symbolic boundaries they drew between themselves and their students as well as among their students. The concluding chapter synthesizes all the ideas to explore possible implications.

Chapter 2 Training Pre-service Teachers in Rural Schools: *Dinggang* Internship in Hebei Normal University

Hebei Normal University started the *dinggang* internship in 2006 to take student teachers from a distinguished teacher training institute, based in an urban area, to practice teach in remote rural schools. This nontraditional one semester-long internship was created because of the unwillingness of urban schools to place interns as well as the acute shortage of qualified teachers in rural areas. As a result, the *dinggang* internship is structured to serve the dual purpose of providing student teaching practice and providing teachers for insufficiently staffed rural schools. In the process of the internship, pre-service teachers are expected to learn how to teach, how to "work with students from different cultural backgrounds" (Li J., 2008, p.9), as well as to understand the social contexts of rural schools.

In this chapter, I describe education reforms in China and outline the general arrangements of the *dinggang* internship in Hebei Normal University, how it works, and how strategic mutual support has been established between HNU and Sanji Middle School (and other rural schools). I also introduce Huihua College of HNU, since all the participants of this study are from this special college. Further, the tracking system in Sanji Middle School (SMS) is discussed since it tremendously influences the process of learning to teach for *dinggang* interns, something I discuss further in the following chapters. Finally, I examine the identities of the participant pre-service teachers in terms of their family experiences, education backgrounds, and apprenticeships as novice teachers. Most of the data for this chapter is based on relevant written documents about the HNU *dinggang* internships, interviews with HNU administrative leaders, teacher educators, and prior *dinggang* interns, and local teachers, and my observation notes while at Sanji Middle School.

I. Education Reforms in China

In what follows, I introduce briefly the social and educational gaps between rural and urban areas as well as educational reforms in China in recent years to lay a background for the *dinggang* internship.

Rural teachers are not paid well in China. The gaps between teachers' incomes in rural and urban areas parallel the widening income gap between urban and rural residents. The average income of urban residents was 2.57 times that of rural residents in 1978, but the gap expanded, especially after 1997, and was up to 3.28 times in 2006 (Xinhua, 2007a). Many rural teachers make as little as 130 yuan a month, while urban teachers can make more than ten times that salary. Some rural teachers have to wait for months until they get their monthly payment in time since their salaries come from township-level governments who largely rely for funding on charging farmers (Fu, 2005, Hannum & Park, 2002).

Rural teachers' bad work conditions coupled with rural poverty have produced a problem of lack of teachers. English, computer, music, and art teachers are insufficient in many rural schools (Xinhua, 2007b). In addition, attrition is a big issue among the rural teaching force. According to UNESCO, teacher attrition in China averaged 6.5 percent (UNESCO Institute for Statistics, 2006). The rate in rural areas may be even higher. Many teachers leave for urban areas where they are provided not only with good salaries but also additional housing, pensions and medical subsidies, a situation which further worsens the problem of rural teacher shortages (Fu, 2005).

The Chinese government realized that it was an urgent task to train and maintain good rural teachers so as to provide equal opportunities for rural children to access high quality education.

From "Decisions on Reforms of the Education Structures" launched by the Ministry of Education (MOE) in 1985, with a foci on the implementation of nine-year compulsory education, to the MOE's "Guidelines for Curriculum Reform of Basic Education" in 2001, the new curriculum reforms in China require teachers to be able to

> Change curriculum implementation from an over-emphasis on receptive learning, rote memorization and repetitive mechanical training to students' active participation, motivated inquiry and hands-on experiences, and develop learners' capacity for collection and processing information, acquiring new knowledge, problem-solving and communication cooperation. (Zhou & Zhu, 2007, p. 45)

This series of education reforms puts a great pressure on teacher training since the qualified teacher is the key to implementing the new curriculum (Ministry of Education, 2010b). To help teachers adapt to the new curriculum, both pre-service and in-service teachers are exposed to training for curriculum reform. According to Yu (2006, as cited in Li et. al., 2011), from 2001-2006, over 20,000 trainers took part in MOE-organized training, and more than seven million teachers have participated in locally organized training for implementation of the new curriculum. Among the trainees were several hundred thousand teachers in 372 state-priority rural counties in poverty. However, most of the teachers in rural areas only received one-shot training that did not prepare them for the new competence-based curriculum, and therefore they still need on-site school-based training to help them to continue to get professionally ready for curriculum changes (Zhou and Zhu, 2007). Given the lack of teacher training for the new curriculum and the shortage of teachers, rural schools are enthusiastic as teacher training institutions propose to place interns, who are assumed to be well educated at the college level and open to the ideas of the new curriculum, as student teachers at their schools.

Most teacher training institutions in China are housed in universities in the cities. Although coming from diverse backgrounds in cities and rural areas, pre-service teachers live and study in

these institutions surrounded by the comparatively affluent urban areas. These future teachers are immersed and educated within the city culture while fulfilling the requirement to prepare to teach in the rural areas during their internship. As they go through the transition from their urban training programs to teaching positions in rural areas, they need to get familiarized with rural contexts of teaching. The researchers and teacher educators who designed the internships in rural areas believe that this type of teaching practice will help pre-service teachers be prepared for teaching in rural schools. The *dinggang* internship is one of the most highly commented on rural internship in the past decade in China (Ministry of Education, 2007; Su, 2009). It started at Xinzhou Normal College in Shanxi Province and became fully adopted by major teacher training programs in China. The *dinggang* internship at Hebei Normal University is one of the most systematic and comprehensive ones to appear in recent years. Below, I introduce the *dinggang* internship and in particular, the internship established by Hebei Normal University.

II. Helping and Being Helped: The *dinggang* Internship as an Institutional Partnership

Dinggang literally means to "replace the person in the positions". The idea of the *dinggang* internship is that interns take over the responsibility of the classroom teachers and the teachers are freed from their daily teaching routine to take professional workshops coordinated by teacher training institutions. Given the unequal educational opportunities for rural and urban children briefly described above, the *dinggang* internship in the Hebei Normal University has a dual purpose, as readers can tell from its full name: "*dinggang* internship and assistance to improve teaching"— (*ding gang shi xi zhi jiao*, 顶岗实习支教). The name implies that the University is helping local rural communities to improve their basic education. At the same time, the

university is supported by the local rural community to train its student teachers because rural schools open their doors to these interns and allow them to have a lot of teaching practice.

The gap of educational quality between rural and urban schools created an argument for a short-term "assistance to improve teaching" project (*zhi jiao*, 支教). Initially, this project took the form of summer social service activities, in which universities sent volunteer students to teach in poor areas. Teachers in many of these areas may not have obtained an education beyond middle school. Some schools are seriously under-staffed. One teacher may teach all the subjects for a grade or for the whole school. It was believed that college students bring updated teaching techniques, comprehensive knowledge, and wider horizons for local school teachers and children, even when they only stay for a couple weeks tutoring students during summer break. The MOE commended it as a useful project and encouraged distinguished universities in resource-abundant urban areas to support the poor rural areas (Mnistry of Education, 2007). Such experiments were also intended to get college students out of the Ivory Tower, to learn about social contexts, and to extend services to areas where they are most needed.

This "assistance to improve teaching" project began to be combined with the internship in Xinzhou Normal College in ShanXi Province in 1997, when they could not find enough placements for their intern teachers in local urban schools. In addition, teacher educators at Xinzhou Normal College had found that student teaching quality was limited by a traditional, one-month internship, and this negatively affected the employment rate of its graduates. In addition, the rural schools around Xinzhou City seriously lacked teachers. Xinzhou Normal College worked with several rural counties in Shanxi Province to create a *dinggang* internship, which sent over 5,800 student teachers to practice teach in more than 369 rural middle schools, between 1997 and 2007 (Li, S., 2007). Student teachers were reported to learn well from

teaching practice that lasted a semester or a half year. Xinzhou Normal College reported that the *dinggang* project was very successful in increasing the employment rate of its graduates to over 91%. Over 85% of its teacher education graduates served in rural schools in Shanxi Province (Li, 2007). In this way, the *dinggang* project fulfilled its mission of supporting rural schools and hence obtained financial and administrative support from local ministries to sustain the project. The *dinggang* project in Xinzhou Normal College was highly encouraged by the Ministry of Education, and it began to be adopted by many teacher training institutions, including Nanjing Xiaozhuang Normal College, Southwest University, and Fuzhou Normal College. Many of these institutions are housed in middle-sized cities around which there are vast rural areas, so that they were able to send their interns to rural schools nearby.

Hebei Normal University joined this trend when it realized that it encountered similar difficulties in finding intern placement schools in the city, and when it detected an opportunity to collaborate with local rural schools. As Zhao Fuchen, the Director of the *Dinggang* Office in HNU, described, "Schools in the city are very competitive and staffed with high quality teachers. They do not want novice student teachers to lower the standards of the education in place. Limited opportunities are given for the interns to take the teaching responsibility. The traditional internship is also very short in order to avoid interference with the exams (in the schools)" (Interview with Zhao on June 3rd, 2009).

In 2006, the HNU established the *Dinggang Zhijiao* Office and started to implement the *dinggang* project. Student teachers are sent to elementary, middle, and high schools in rural counties in Hebei Province for one semester to teach for--"replace"-- some teachers in rural schools. Or, in insufficiently staffed rural schools, the student teachers from HNU continuously fill in the teaching position for those classes that no teacher was originally assigned to teach.

HNU not only sends their student teachers to local rural schools, it also provides teacher training workshops in *shijiazhuang* for "replaced" rural school teachers to attend so as to further support rural basic education as well as obtain solid support from local educational bureaus.

Upon completion of the *dinggang* internship, pre-service teachers are expected to have obtained rich experiences in teaching because the internship involves full teaching responsibility in a longer period than a traditional one-month internship. This makes the graduates more appealing in the job market after graduation. Some interns get hired by the placement school due to their outstanding teaching performances. Hebei Normal University uses this fact to encourage student teachers to participate in the *dinggang* internship in order to obtain an advantage in job hunting. As the vice president of Hebei Normal University, Professor Dai, said to the interns during his visit to Sanji Middle School,

> The key middle schools and high schools have been fully staffed. Only a few openings are available every year. There are a lot of general middle schools in need of teachers with teaching experiences. Do you know how many openings are there in Shijiazhuan each year? No more than two hundred. We need look beyond the middle schools in the city and look 'down' toward the rural middle schools. They need us. *Dinggang* experiences in rural schools will prepare you for schools that really need you. With abundant teaching experiences in *dinggang* internship, you will have more job opportunities than those peers that did not take *dinggang*. (Field notes during the meeting of Professor Dai Jianbing, October 11th, 2009)

As the *dinggang* internship meets the need of placements for student teaching, provides temporary teachers (for free) in low quality and insufficiently staffed rural schools, and leads to more job opportunities for pre-service teachers, everyone involved in this project seems satisfied. (Of course, there are a lot of difficulties and problems which occur at the individual level, as I found out later in the field.) It has been suggested that a "mutual beneficial relationship" can be set up between the HNU and local rural schools by means of the *dinggang* internship. (Interview with Director of *Dinggang* Office, Zhao Fuchen, June 3rd, 2009)

The connection established between Sanji Middle School and Hebei Normal University is a typical case for this "mutual beneficial relationships". Sanji Middle School is a rural middle school in one of the national poverty counties (g*uo jia ji pin kun xiang*, 国家级贫困乡)[12], Pingshan County, about two hours driving from *shijiazhuang* City. SMS is led by a new principal, Principal Zhang Jianming, who has worked very hard to raise the academic performance of students. He was actively implemented reforms in the school and has reached for external opportunities for teacher professional development by working with Hebei Normal University. For instance, Principal Zhang invited an instructor, Teacher Wang, from the HNU to conduct professional development workshops for SMS teachers even before the *dinggang* internship was set up in 2006. For three consecutive years, the school has been successful in sending high achievers to high school, which is regarded as the standard to judge the quality of the schools in this county. As Principal Zhang continued to look for opportunities to maximize the education resources for his school, he immediately agreed to bring in the *dinggang* interns and to send his teachers for professional workshops when the education officer in Pingshan County and the staff in HNU's Dinggang Office approached him with the proposal for the internship.

Principal Zhang promised to assign experienced teachers to mentor the interns and to provide additional support for the pre-service teachers, such as housing, food, and other resources. HNU is responsible for transportation, supervising pre-service teachers via the

[12] National poverty counties were evaluated by the Chinese government based on the annual personal income. If 60% of the residents in a county have a personal income less than 1300 yuan in 2005, this county is classified as a national poverty county. The Chinese government provides financial support for these counties every year to foster their economic development.

stationed teacher educators in the county (*zhu xian lao shi*, 驻县老师)[13], and giving a small stipend (about 3 yuan per day) to the pre-service teachers. At SMS, these pre-service teachers do not really "replace" the school teachers but fill in the vacancies in this insufficiently staffed school. That means SMS teachers cannot leave their teaching duties to attend the teacher workshops since some classes would have no teachers. In this sense, the rationale of the *dinggang* project to have schoolteachers have substitutes to allow them to do professional development has not been fully implemented. But some of the SMS teachers, especially the cadre of young teachers who are deemed as good at teaching, are promised one-week professional workshop in *shijiazhuang* city during summer breaks.

Principal Zhang spoke highly of the *dinggang* internship during the first interview because the internship brings "teaching resources" and "new vision and horizon" to his school. However, he seemed to give different comments about interns from Huihua College, which is attached to HNU, and those from the HNU main campus. In the Fall 2009 semester when the data were collected for this study, Huihua College students were assigned to conduct their internship in SMS[14]. According to his observation of Huihua students in the past years, Principal Zhang said:

> Huihua students are very active. They design a lot of extracurricular activities, such as Mandarin speech contests, English translation series, and so on. They are quite social and easy to interact with. The culture in my school suddenly becomes lively when they come. The interns from HNU main campus demonstrate different characteristics. They have more solid subject matter knowledge than Huihua students, and give pupils very good opportunity to enhance their understanding of the subject. I'd say that many of these interns

[13] These stationed teacher educators are Hebei Normal University instructors assigned to supervise *dinggang* interns. There are usually 4-6 rural schools in each county that place about 20-60 interns all together. One stationed teacher educator is responsible for these interns in one county, living in one of the rural schools throughout the internship, and keeping daily contact with the interns via school visits, email, or telephone.

[14] *Huihua* College students are sent to *dinggang* internship in the fall semester of their junior year in the college. Students of the main campus in Hebei Normal University are assigned to *dinggang* internship in the spring semester of their senior year.

> are even better educated than my teachers. You know most teachers here have their associate's degree from local teacher training schools. They may not have extensive knowledge in the subject matter as these interns do…….Well, my teachers can offer them rich experiences though. These young interns are not experienced at all in dealing with teenagers in the classroom and they have a lot to learn in order to pass knowledge to pupils. (Interview with Principal Zhang on August 26th, 2009)

Principal Zhang is not alone in giving this comment. That Huihua students having more social skills while students from the main campus possess more solid subject knowledge has been an accepted "fact" in Hebei Normal University. As all of the participant of this study are from Huihua College, I introduce this special institute below and discuss later how being a Huihua student influenced participants' identity making.

Huihua College was established as a comprehensive college attached within Hebei Normal University in 2001. It could be considered, in the United States, as a kind of branch campus of the more prestigious main university. By 2009, it had 34 programs that offered courses leading to the bachelor's degree. Huihua recruits students from the third tier of students according to scores on the College Entrance Exam. The first tier of students gets recruited early into key universities, including the main campus of Hebei Normal University. The second tier later gets into ordinary universities, while the third tier goes to colleges with lower entering scores and possibly higher tuition fees[15]. People call the higher education institutions that recruit the first tier of students as *yi ben* (一本), those for the second tier as *er ben* (二本), and those for the third tier as *san ben* (三本). The *san ben* colleges recruiting third tier students do not necessarily have a low quality education, as many people assumed from their recruitment of less academically capable students

[15] These *san ben* colleges are usually higher education institutions that are attached to and partly funded by the public universities and local education bureaus. Unlike first tier universities which rely on state funding, *san ben* colleges have to rely on tuition fees. So they usually charge higher tuitions than public higher education institutions.

at the outset. In fact, some colleges such as Huihua provided a rigorous curriculum and high quality teacher educators (in collaboration with the main campus of HNU) for their students. In this way, Huihua has managed to keep a good reputation for educating its students well and helping them end up with good jobs, even though they enter college with poorer scores on the College Entrance Exam.

However, the Huihua students constantly get comments like "weak knowledge foundation in the subject matter while having a strong desire to learn well" (Presentation by the Dr. Cui Jian-guo, Head of Huihua College in the HNU pre-internship workshop for the stationed teacher educators in a resort in Lin Cheng, Hebei Province, July 11th, 2009.) The fact of getting a low score on the College Entrance Exam also becomes a shadow on Huihua students' self-confidence. What Liu Ting, a senior in the Department of English, said about her situation represented the self evaluation found in my informal interviews and daily conversations with over fifty Huihua students' between June and August 2009:

> It is difficult for us to find a job. People would consider *yi ben* student and then *er ben* student. They doubt if a *san ben* student teacher can teach their students well. But I know that I can help their students. I may not have a deep understanding of the knowledge. Well, you know, I am only a *san ben* student. But I am good at making students actively engaged in the class because I will arrange activities for them to take part in. And I will let them learn from my own experiences [as a *san ben* student] that they have to study hard so as to get into a good college. (Interview with Liu Ting, June 20th, 2009 in Huihua College)

Many Huihua students choose to take post-graduate exams and plan to use a graduate degree to "wash" down their *san ben* status in their future job search. In 2009, about 50% of Huihua students (1,043 out of 2,190) took the post-graduate exams and applied for graduate programs. In the meantime, they work very hard in their courses to do well academically, and they try to meet the expectations of the internship placement schools. In this way, they can get a

satisfying transcript and internship evaluation, which will help their job search if they do not get accepted by a graduate program.

Because Huihua students are motivated to achieve well in both their academic performances and their *dinggang* internship, the *Dinggang* Office of HNU does not force them to conduct a *dinggang* internship. They can opt to complete an educational internship, which is much less intense than a *dinggang* internship and only consists of two months of observation and limited teaching in a school close to HNU, or in the student's hometown. In contrast, students from the HNU main campus are required to conduct a *dinggang* internship since many of them are not as motivated as Huihua students due to their *yi ben* status. In other words, students from HNU main campus are more likely to get a good job without attending *dinggang* and they may want to spend more time on post-graduate exams and the job search instead of going to teach in a rural area. As Mr. Zhao Fuchen introduced his *dinggang* internship, he mentioned the consideration of Huihua students' needs:

> We actually encourage Huihua students to take the post-graduate exams so that they will be successful after graduation. We understand that some students choose to fulfill the educational internship so that they can have more time to prepare for the exam. We allow them to do so. But most Huihua students still choose to attend a *dinggang* internship. It helps to build their resume, and they can still take the post-graduate exam after they come back from a *dinggang* internship. You know, the internship is in their junior year. They still have a couple of months to prepare for the exam. Much fewer students from the main campus choose *dinggang* when we started this internship as an optional opportunity. So we made it a requirement for them [students from main campus] after 2008. (Interview with Zhao on June 3rd, 2009)

As soon as the institutional connections were established between HNU (including the main campus and Huihua College) and around 510 rural schools (such as Sanji Middle School) in 64 counties across Hebei Province, a structured system for the internship was set up to support the *dinggang* interns. Below, I introduce the major elements involved in the *dinggang* internship,

which is overseen by the Hebei Normal University teacher training programs, the Dinggang Office of HNU, and the local schools.

III. Guided Practice: Elements in the *Dinggang* Internship at Hebei Normal University

As institutional partnerships have gradually been established between Hebei Normal University and rural schools in Hebei Province, there is a systematic process in HNU to prepare pre-service teachers for the *dinggang* teaching experience. Whether they are well prepared to take full responsibility as a classroom teacher depends on the expectations of the individual interns and the local schools. But HNU has been striving for a supervisory system to help the pre-service teachers by including five elements for the internship as well as explicit expectations, resources, and support for implementing each element. According to the official documents from the HNU *Dinggang* Office, these major elements in HNU *dinggang* internship are: 1. orientation, 2. observation, 3. classroom instruction, 4. class management, and 5. reflection/research.

1. Orientation Activities

About one semester before the actual internship begins, there is a series of orientation activities to get pre-service teachers geared toward the *dinggang* experience. These activities aim to help student teachers not only acquire teaching skills but also get prepared mentally. Looking at the schedule of these orientation activities, I was intrigued by the extent of the events. Lectures, schools tours, panel discussions, and workshops are provided in each department to raise the awareness for *dinggang*, ease the fear of going to live and teach in an unfamiliar setting, and equip these novices with skills and tips to deal with possible problems during the internship. For instance, I observed a lecture in the English department when a highly respected veteran teacher

from an elite middle school in *shijiazhuang* was invited to talk about the new middle school curriculum and the teaching skills she employed to implement the new curriculum, which aims at creativity as well as a solid knowledge foundation. Experienced teachers are also invited from local schools to talk about how they work with students in classroom management. A panel of interns from the past year was also invited to speak to several departments. The experiences these interns shared helped the newcomers get a glimpse of the experiences they could expect to have during the internship.

Individual teacher educators are also encouraged to incorporate modules in their classes to help their student teachers transition into their internship. For instance, Professor Lin Yan in the Chinese Department incorporated a "mini-classroom" in her pedagogy class. In her mini-classroom, Professor Lin had her student teachers go through the teaching cycle by preparing lesson plans, doing instruction, taking assessment, and engaging in reflection. She also proposed hypothetical problems a teacher might encounter in the classrooms and asked her students to solve them by performing a skit. Her students found this approach very helpful for dealing with the real problems in their student teaching.

After going through months of orientation, the student teachers are sent in groups to their internship placement. The first step when they reach their placement sites is observing veteran teachers.

2. Observation (*jian xi*，见习)

Student teachers are required to spend the first few weeks meeting with veteran teachers in the placement school, sit in the classrooms, take class notes, prepare the lesson plans following the guidance of the mentor schoolteachers, and get to know the school's policies. This period is

referred to as *jian xi* (见习), during which the student teachers learn to teach by "*jian*" (looking at or observing experienced teachers). Some student teachers may just have a few days to *jian xi* since they are expected to teach immediately due to lack of teachers in the rural schools. However, all of them must go through a short period in preparation for teaching. During the *jian xi* period, interns follow the instructions in the *Guide to Dinggang Internship*, a handbook provided by the *Dinggang* Office of HNU to every intern for observing the classes. They can record the class word by word, write a narrative, or draw illustrations, paying attention to content, teaching techniques, procedure and timing, and student-teacher interactions (Li, 2008, pp.55-57). They also note down the highlights of teaching, which may involve questions, key points, and talk with the teacher as well as their peers after class.

3. Classroom Instruction

Student teachers start to take over teaching responsibilities after they have gone through the *jian xi* period. When the interns take full responsibility for teaching, they act as the "real teacher" in the classroom: drafting lesson plans, meeting with teacher colleagues to refine the lesson plan, classroom instruction, homework checking, composing exams, and giving feedback on students' exams and daily performances, and so on.

Some student teachers take the full responsibility of teaching if there is not a teacher in the position and the subject has long been taught by a substitute teacher of another subject. As Chapters 4 and 5 will show in further detail, all the interns are expected to learn from their own teaching experiences under the supervision of a mentor teacher in the school. During this process, they prepare lesson plans as a group with their peers who teach the same subject and/or they co-plan their lessons with their mentor teachers. For those who do not have assigned mentor

teachers, either because there is no such teacher teaching the subject in the school or because the assigned teacher is on maternity leave (as with Li Xuemin), the interns are advised by the school to seek support from whichever schoolteachers are able to help.

4. Class Management: *Ban Zhu Ren* (班主任)

In China, teaching does not only happen within a lesson. It extends to every aspect in a students' school life. Chinese students' activities are organized in the unit of a class (*ban*, 班). The class is directed by a head teacher on a daily schedule. This head teacher or class director, *ban zhu ren* (班主任), disciplines students, engages students in activities aimed at citizenship, and coordinates feedback from the subject teachers. *Ban zhu ren* are also responsible for extra-curricular activities, working with the parents and school administrators to help students grow academically and personally (Paine, Fang & Wilson, 2003). Being a *ban zhu ren* is deemed a very important part of becoming a teacher and requires a lot of skills and experiences. In order to help its student teachers acquire these skills and experiences, Hebei Normal University signs contracts with many *dinggang* project partner schools to allow student teachers to work as *ban zhu ren.* Those insufficiently staffed schools especially welcome such arrangements.

However, in Sanji Middle School, the student teachers do not work as *ban zhu ren* during their internship. When I asked the principal of SMS, Mr. Zhang, about the opportunities for interns to work as *ban zhu ren*, he was quite ambivalent in his answers. It might be because of his opinion about Huihua students, as described earlier in this chapter. As SMS was becoming one of the best rural schools in the county and sending more and more graduates to key high schools, Mr. Zhang was very serious about the teaching quality and the outcome of the students' academic performances in his school. "The students from Huihua College are quite active. But

they still need to learn a lot to become a mature *ban zhu ren* teacher. I would provide experienced teachers to guide them through teaching and working as *ban zhu ren* teachers." In the end, no one in the SMS intern team worked independently as, or replaced, a *ban zhu ren*, although some of them had a few experiences working as the assistant to *ban zhu ren* teachers. The opportunities for working as a *ban zhu ren* obviously depend on the school's needs as well as principal's (and the experienced teachers') judgments of the interns' capability of working as a *ban zhu ren*.

5. Reflection and Research

There is a component in the *dinggang* internship that requires interns to conduct research on their own teaching. In the *Guide to the Dinggang Internship*, interns are asked to conduct at least one research project on their own teaching by means of doing surveys or writing "teaching narratives." The teacher educators in each department also encourage their student teachers to write reflections after every lesson they teach. For the participant interns working at Sanji, the teaching reflection was a required daily routine. They had to write reflections and send them attached to each lesson plan.

As pre-service teachers quickly find out, the support from the teacher education program continues even when they are in the field teaching. There is a stationed teacher educator traveling with these pre-service teachers to the rural county, living in one of the placement rural schools and supervising all of the pre-service teachers in the schools within some area of this county. A student leader is appointed in every team of pre-service teachers in each school, each of whom reports to the supervising teacher educator of the county at the end of every day by telephone. The supervising teacher educator from HNU helps the pre-service teachers to solve problems

they encounter in their teaching as well as life in general in the rural school. S/he keeps communication with local school principals. For instance, some interns in Gangnan County wanted to reduce their teaching load and did not know how to talk with the principal without framing it as an offending complaint. They talked with their supervising teacher educator and had him communicate with the school principal. Supervising teacher educators also visit each school in the county and observe a couple of lessons from time to time. Although these teacher educators can give some feedback to the pre-service teachers in the same subject areas, they cannot give a lot of advice due to limited time traveling between sites. Pre-service teachers mostly rely on their mentor teachers in the placement school to give them daily direction.

In a word, after a short period of observation in the veteran teacher's classes, the *dinggang* interns take almost the full extent of responsibility of the schoolteacher during their student teaching. They are expected to function as a full-time teacher. The pre-service teachers may get overwhelmed in the beginning. With support from their mentor teachers in the school and the teacher educators, hopefully they can adapt to their teachers' roles after one or two months of the internship and begin to feel at ease in their own classrooms, according to the expectations of the HNU teacher educators. As we will find out in the following chapters, the pre-service teachers' teaching experiences vary and they are constantly juggling issues of understanding themselves, their students, their peer interns, their mentors, and various factors embedded in the context they are working in. They keep struggling with what they have understood and what they are facing within an unfamiliar setting. In the following section, I introduce Sanji Middle School (SMS), the immediate context, in which my participants worked in. Then I will introduce the hierarchical tracking system that SMS employs to differentiate its students, and I will lay the institutional background for participants' *dinggang* teaching experiences and their boundary making.

IV. Hierarchical Structure in Sanji Middle School: *Shiyanban* and *Putongban*

Although there is a system for pre-service teachers to go through their internship step by step, as described above, pre-service teachers' experiences differ depending on the school context. In what follows, I describe the site for this study, Sanji Middle School (SMS), by illustrating the first day the participant interns and I arrived at the school. Then I introduce its tracking system in particular because it is a key system to influence participants' internship.

> The bus was bumping along the road to Sanji. Green crops were thriving along the way, among which I saw the dark roofs of scattered houses. It rained yesterday. The road was very muddy. As the bus passed the main street of the town lined with vegetable, meat and fruit stalls, it was met with curious looks from local people, who were walking in the mud with the ends of their trousers rolled up. The bus stopped in front of an iron gate, beside which was marked "Sanji Middle School" in light green bricks. Entering the gate, I dragged my luggage down the bus and found myself in front of an old three-storied red brick building. A red banner with the line of "pursue the goal of being a whole person, a useful and successful person" (*li zhi cheng ren, cheng cai cheng gong*, 励志成人，成才成功) was hanging in front of the teaching building. One of the classrooms was right beside the entrance, with its door open. A tall male teacher was passionately reading a piece of an article along with his students, in the Sanji dialect, which I did not quite understand. On the south of the teaching building, there was a public lavatory labeled "women's" and "men's". In front of the lavatories, there was an open air sink, with six water faucets and a broken edge. Bells rang for the break. Students ran out of their classroom. Some slowed their steps to watch us (the interns and myself). Some already rushed to the faucets and began to wash their hands or hair, with an eye peeking at us.
>
> On the wall behind the faucets hung a board introducing the school which gave prominence to the outstanding academic performance of the graduates from *shiyanban*, the renovated and new teaching facilities, caring teachers, as well as the strict management aiming at the all-around development of the students. Beside this board there was another board to highlight the "Pingshan Vocational Center", a secondary vocational school awarded as a "Safe and Civilized Campus" of Hebei Province and the "Excellence in Vocational Education" of Pingshan. It looked like an advertisement for this vocational school. I wondered if many students from Sanji Middle School get into this vocational school after graduation.
>
> There was a hallway in the middle of the teaching building, which led us north to a small playground surrounded with a newer three-storied teaching building with bright white ceramic tile in the north, another teaching building under construction and a dining hall on the east, and a two storied student dormitory on its west. The new teaching building was split into two parts. The west section is for classrooms, and the east housed offices for the administrators and a few dormitories for teachers. *Dinggang* interns would live in these 4-

> beds dorm rooms. The principal insisted on accommodating me in a separate room, which was converted from one of the offices. He called me "Teacher Jiang", assuming that I was a teacher researcher from Capital Beijing since I established access to HNU and Sanji Middle School via a professor in Beijing Normal University.
>
> A banner hanging in this newer building stated "serve for students' lifelong development" (*wei xue sheng zhong shen fa zhan fu wu*, 为学生终身发展服务). As the noon break began, students purchased lunch in front of the sole window of the dining hall and leisurely squatted in the playground beneath the banner, chatting and eating. There was only one dish for lunch and dinner, accompanied by steaming buns. The lowest price I could get for a lunch in Beijing was five yuan, while all I need here was 1 yuan for everything.
>
> As I talked with the principal, Mr. Zhang Jianming, I was told that there were about 500 students altogether in the 7th-9th grades, and 38 teachers and staffs. Principal Zhang was very proud of the achievement the school had made in the past few years after he took over the leadership in 2005. (Field notes on August 26th, 2009, the first day in Sanji Middle School.)

There are a lot of reasons for Principal Zhang and his teachers to be proud of their achievement, among which is the fact that Sanji Middle School is ranked among the top in graduation rates and graduate academic scores in Pingshan County. Principal Zhang explicitly told me that it was the tracking system in SMS that contributed to these achievement, and "luckily the tracking system (*fen ban zhi*, 分班制) was implemented early so that we surpass our counterparts" (Interview with Principal Zhang on August 26th, 2009).

As the following field notes recording the gymnastic exercises suggest, the hierarchical tracking structure of the classes is evident in every aspect of the school life in Sanji. The different kinds of exercises for different classes are analogous to what the students in different classes experience academically in the school.

> After the second class in the morning, there is a twenty-minute period called "big break" when every student has to do some physical exercises. This is a very common requirement all over China, and a set of gymnastic exercises were designed for students nationwide.
>
> The bell rings signaling the end of the second class in Sanji Middle School (SMS). Marching music for the gymnastic exercises flows in the air. Students pour out of the classrooms. They quickly get into two big groups in the small playground of the school.

The playground was newly built in winter 2008, with the funding provided by the county government as the reward for SMS' students' promising academic achievement in the past two years. Cement steps separate the playground into two sections. *Putongban* students form a big circle in the lower section and the *shiyanban* students get together in rows in the upper section of the playground.

The marching music is changed to the melodic rhythm for the gymnastic exercises. The *shiyanban* students begin to follow the rhythm and do the exercise, stretching arms and legs, bending down, and jumping. It looks like dancing, and it is also a combination of carefully designed movements of major muscles and joints. There are two supervising teachers standing beside the rows. *Shiyanban* students are supervised to do every movement properly so that they can fully exercise their tired bodies bending behind the desks for almost two hours. Supervising teachers may pull those students who look sloppy out of the rows. Today, one of the students that are picked up is Li Zhi, a student recently switched from *putongban* to *shiyanban* by means of his mother's connection with the administrator in the school. He is obviously not familiar with the movements, and blushed as his teacher stared at him with a stern look. He cannot help looking at his former peers in *putongban* on the other side of the playground.

On the other section of the playground, the *putongban* students are jogging. Their steps are not following the rhythm of the gymnastic exercises since it keeps changing, while the students have to run in small steps at almost the same slow speed. Interns and most teachers are jogging with *putongban* students. For most teachers, the gymnastic exercises are quite new to them since it started in 2008 and is very different from what they have learned to do back in their own middle school days. "It takes time to learn the complicated gymnastic exercises. And it looks strange to jump in front of your students. … Running is easy and you can get some exercise, too", Teacher Li Shuqin once told me when I asked why teachers did not join the *shiyanban* students to do the gymnastic exercises. One of the interns, Han Na complained that it is boring to run, and she still felt cold after running with the students in the winter. "You cannot really run. It is very slow…slower than walking. I always worry that I may step on others' shoes. And you eat a lot of dust." (From my field notes on October 9th, 2009)

Students doing gymnastic exercises and those jogging in repeated small steps (see *Figure 2.1*) metaphorically reflect a contrast between two groups of students cultivated in the dual academic tracking system in the SMS: General Classes (*putongban*) and Experimental Classes (*shiyanban*). Students are classified into these two types of classes based on their scores on the entrance examination that is administered by the school itself. High achievers get into Classes 1& 2, and those with scores lower than average get into Classes 3, 4 and 5. Teachers and

students all know that Classes 1 and 2 are experimental classes, which means that they have better equipped classrooms, more experienced teachers, and the most recent learning materials, promising academic achievement by the students and a higher rate of key high school enrollment upon students' graduation. Classes 3, 4 and 5 are general classes where students do not have any multimedia equipment or recent learning materials. Those are only booked for experimental class students. *Shiyanban* students do complex gymnastic movements and they are also assigned more advance academic tasks which require sophisticated thinking. In contrast, *putongban* students jog slowly with the same steps. They are also assigned easier learning tasks in their classrooms which stress memorization.

Figure 2.1 Gymnastic Exercises by Shiyanban and Putongban Students
(For interpretation of the references to color in this and all other figures, the reader is referred to the electronic version of this dissertation).

Expectations for general classes are quite different from those for experimental classes in the school. As Mr. Sun, the Director of Teaching Affairs of SMS said,

> Less than 1% of the students in general classes can get into the key high schools every year. Most of them graduate without pursuing further education. Some students choose to drop out of the school before graduation. We work hard to improve their learning achievement. But that is all what they can finally achieve. In the past two years, about one third of the experimental class students got into the key high school. Many of them can get into ordinary schools or vocational schools. We have to have certain numbers of graduates to get into the key high school every year. If we could not meet the requirement for three consecutive years, our principal would be fired and the school would not be among the top of the funding list in the Education Bureau of Pingshan County. Every year, about 20 to 30 *shiyanban* students can get into the key high schools in the town or the city. We have kept a record [of graduates that enter the key high school] that ranks among the top middle schools in Pingshan County. Look at the new buildings and new playground. They were just built with the award funding from the education bureau in the past few years. And we get better students because we have this reputation to send them into key high school.

Mr. Sun also told me that this tracking system exists due to its efficiency in yielding high academic achievement by investing limited resources for those students that are most likely to achieve better. It also meets the needs of parents.

> This tracking system is not allowed, as you know. But it means a lot for parents and for the development of the school. Parents want their children to be classified with "good students" and spend most time with "good students". If we do not have *shiyanban*, they will opt to send their children to other schools which have *shiyanban*. You know, we have to recruit students with good grades in elementary school, and we have to set up *shiyanban* to attract their parents. (Interview with Mr. Sun, August 27th, 2009)

For Sanji, the tracking system is vital for the school development and its reputation. For the pupils, they have to study very hard in *shiyanban*, which was expected to be the "crib for key high schools" (Interview with Mr. Sun, August 27th, 2009). In doing this, they may be able "go out of the rural village, get into the key high school in the urban town, hopefully follow the track to be a college student, and then obtain a decent job in the city" (Interview with Principal Zhang on August 26th, 2009). Hence, the *shiyanban* seems to be the gatekeeper for rural students to follow an academic track and pursue a better life in the city. However, academic success may not

be the only way for students to get away from their rural hometown. Many students in *putongban*, who are not expected to achieve well academically, still dream to get into the city, according to Teacher Wang Jihong, teacher of politics for all classes in the 7th grade:

> *Putongban* students may not achieve very well in school. But they know that they can land a job in the city. You know. There are some manual work, such as construction, cleaning company, restaurants, and so on in the city that recruit migrant workers from the rural areas. My students think that they can follow their relatives to hunt for such a job in the city. They envy those neighbors or relatives come back from city in pretty clothes and act like a person in the city. But they do not know how arduous the manual work can be. And those might be the only possible jobs they could get in the city without a high school diploma. (A casual conversation with Teacher Wang, November 21th, 2009)

During my field work, teachers kept telling their *putongban* students that they had to study hard and at least get into a general high school so as to have a bright future. As Teacher Li Shuqin once reminded her absent-minded student in the class 5 of the 7th grade,

> Look out of the window. Those workers are sweating in the hot sunshine [on the new teaching building under construction]. They make 30 yuan a day, less than 1,000 yuan a month, without health or retirement benefits. As a teacher, I can make 2,500 yuan a month with all the benefits. The difference is that I have a college education, and they do not. Do you want to lay back now and get a construction job right after you graduate from the middle school? It is not just about difference in job. It is about different ways of living, too. (Field notes on a math lesson taught by Teacher Li, September 8th, 2009)

Later, Teacher Li told me that she wanted to let her students understand that although manual workers could live with dignity, they might have more job options for a better life if they had completed their high school and even completed higher education. Many teachers in *putongban* told me similar stories. Still, there were quite a few drop-outs from *putongban* and many *putongban* students remained unmotivated to learn as they got the message that the "chances for them to get into college were very slim." (Interview with Mr. Sun, August 27th, 2009). This message was explicit in the tracking system and the teachers/principal knew that

"they [*putongban* students] are deeply hurt by the *fen ban zhi* [tracking system]." (Interview with Principal Zhang, August 26th, 2009)

The tracking system in Sanji Middle School also define the opportunities for interns to teach, how they think of the nature of teacher-student interaction, and how they choose teaching techniques for different groups of students.

Upon arrival, most *dinggang* interns are assigned to general classes so that they "would not interfere with the intense teaching speed of the experimental classes", as Han Na recognized. But Han finally got an opportunity to teach both experimental classes and general classes due to the lack of chemistry teachers in the school. Jin Junshu was able to teach math in two experimental classes since her supervising teacher, Mr. Shan, was the lead math teacher for the experimental classes in the 7th grade. But Jin complained about the limited opportunity to teach compared to her intern peers in the middle of the second month in her internship, "There are several kinds of classes, such as introduction concept classes, review classes, and exercise classes. Teacher Shan only allows me to teach the review classes and exercise classes. I have not taught the introduction class of the new concepts yet." By the time of this remark, she had mostly observed Teacher Shan's classes and only taught a few classes. Her peers had taken over the full teaching responsibility of teaching *putongban* for almost a month by then.

As I will show later in Chapters 3 and 4, pre-service teachers learn to draw intellectual, cultural, and moral boundaries between their *shiyanban* and *putongban* students as well as inferring boundaries between themselves and their students. In their learn-to-teach experiences, they also acquire and develop techniques to categorize different exercises, and they prescribe these categorized exercises to *shiyanban* and *putongban* students and the students with different levels within the classes. Thus, Sanji Middle School and its tracking to a large extent frame the

dinggang experiences for the participant interns. Of course additional factors influence participant interns' *dinggang* experiences, as it will be discussed in Chapter 5 about cultural repertoire for boundary making. All these influential factors impact participant interns' experiences via their understanding of themselves in relation to people they encountered during *dinggang* internship. In the remainder of this chapter, I explore the interns' identities as they introduced themselves in the beginning of the internship. The interns' identities described below were constantly under scrutiny and molding when the interns examined their positionalties as a teacher in an unfamiliar setting.

V. Pre-service Teachers on the Journey: Identity of the Participants

Pre-service teachers' understanding of their *dinggang* immersion experiences is pertinent to their own identity formation since they are "socialized" to work with students from different backgrounds (Levine-Rasky, 1998; Mauger, 1983). *Boundary work* is useful in analyzing social identity as an unstable, fluid, and ever-evolving entity in an interactive setting (Lamont, 2001a). Cultural sociologists argue that everyday practices are the essential means by which people (re)construct their own identities and impute identities to other people. These practices are also shaped by and influence the varying degree of access to valued resources and opportunities for individuals from different social backgrounds (Anagnostopoulos, 2006). Pre-service teachers' learning experiences in the *dinggang* teaching project involves learning about themselves via daily interaction with low-SES students, peer pre-service teachers, and mentor teachers. All of them are from Huihua College attached to Hebei Normal University. All Huihua students do their internship during the fall semester of their junior year.

Altogether there were eight interns placed in the Sanji Middle School (See Table 1.2 in Chapter 1). Five were from cities and three were from towns or economically advanced rural areas. When these pre-service teachers encountered low SES pupils in the less developed rural areas, their formed identity was re-charted according to the boundaries they perceived and enacted between themselves and their pupils. Before I examine identity in-the-making during the internship in later chapters, I will start with what the participant interns said about themselves at the beginning of the internship. In this way, the snapshot of their self-identity can be captured and compared with the boundary work they went through later during the *dinggang* internship.

Below, I introduce each participant according to their interviews at the beginning of the internship. During these interviews, I mainly asked about their family, why they chose to attend *dinggang* internship, and their impression of Sanji Middle School and its pupils. After the introduction, I examine several facets of their identities as young people educated in a college in the city, Huihua students, and novice teachers. I examine these particular aspects of their identities because these participants frequently mentioned them during interviews.

Han Na (韩娜)

Han Na was the team leader among Sanji Middle School interns assigned by the Dinggang Office of HNU due to her past experiences as a student cadre in the Department of Chemistry of Huihua College. She is from Han Dan, a city with a population over 9 million in the south of Hebei Province. As the only child in the family who lost her father a couple years ago, she was adored by her widowed mother and her grandparents. She thought that getting into Huihua was good for her since she "was not an excellent student in the middle school with a below average score, and Huihua has a good reputation in education." However, she was anxious of her future job search due to limited positions open to *san ben* students in Huihua and the burden of high tuition fees of 20,000 yuan per year. Her family had paid for the tuitions and this added a huge burden on her mother's humble income and the retirement pension of her grandparents. She hoped to get a well-paid job after graduation so that she could better support her family. "If I cannot get a good job, I will go through the post-graduate exam and get a master's degree. A higher degree will help me to get a good job in a few years." When asked where she would like to get a job, she planned

to “be a teacher in a good school or an education officer in the local government which are stable and afford a comfortable life in my hometown or *shijiazhuang*.”

In order to fulfill her dream, Han Na tried very hard to accumulate all the credentials and skills she could get: taking part in the student organizations and becoming a cadre, taking computer tests and getting related certificates, trying to excel in all her grades, preparing for the post-graduate exam; and of course, joining the *dinggang* internship, which would help her “gain a lot of hands-on experiences of teaching and enrich the resume”. Before she took *dinggang* internship, she attended a two week summer teaching project in a rural village near *handan* city. The comment she gave about her pupils in this teaching project was “they do not want to study at all because they do not see any hope in doing it. Few of their friends and relatives get into college. They did not find any difference between themselves and those who came back to the farm after graduating from high school. If they themselves are not motivated to learn like I was in the middle school, the teacher can do nothing to help. Well…Maybe the first step for their teacher should be pushing them to learn and having them desire to learn. ” (Interview with Han Na, September 26th, 2009)

Chen Long（陈龙）

Chen Long is the only male intern in Sanji Middle School. He was well read and very articulate. Like Han Na, he also comes from a big city, *shijiazhuang*, the capital city of Hebei Province. He could take a bus and go back to his home from Huihua College within 20 minutes. He chose to study chemistry in the college because he was very tired of learning liberal arts, such as Chinese language and English. While he was in a key high school featuring high quality of foreign language instruction, #43 high school, in *shijiazhuang*, he felt that he was under great pressure to learn English as all his in-school and extracurricular time was consumed by English language learning activities arranged by his teachers and parents. Chemistry was not as hard as English or physics; and he became interested in it since high school.

Being in Sanji was the first time for him to get away from home and stay in the rural areas. Compared with his middle school peers in the key high school in *shijiazhuang*, he said that the students in the rural areas were simple and did not have access to a lot of information. So they should be able to concentrate on learning without distraction. But he also felt that they might become unmotivated to learn because of the limited information about what they could do with a good transcript and higher education degree. In his opinion, parents were the most important factor for students’ learning because his own parents were “on top of everything” that he did in middle school. Although he thought that his parents had driven him too much and almost led to his negative reaction to learning, he believed, as a new teacher, that parents should lead the students to realize that it was important to learn in the school. According to his observation of the parents in the first week of internship, some parents were “like my own parents”, cooperative with the teachers and following the guide of the teachers to supervise students’ learning at home. These students were mostly in *shiyanban* and could usually achieve well academically. Chen also thought that some parents in *putongban* did not respond to the teacher because they may either work away in

the city, leaving their children with grandparents, or did not see the value/hope in sending their children in *putongban*.

For Chen Long, taking part in *dinggang* internship was an experiment to test if he was suitable for teaching. As the only son of the family with both parents working in a big company in *shijiazhuang*, he knew quite well that a lot of jobs for the urban children exist in the social network that parents have built over years. But he wanted to earn his job by his own excellence in teaching if he was meant to be a teacher. "If I can teach a group of children in a rural school and help them mend the weak knowledge foundation, this certainly adds something to my resume. I am not quite sure that I can also teach urban children as well since they may be more demanding and challenging, but I can get a better sense of working with children from *dinggang* internship than from general education internship [which lasts only one or two months with limited teaching opportunity]." With the plan to help him teach well in Sanji Middle School and later land a job in an urban school, Chen Long sought all the information he could get to adjust himself to the internship—conversations (coupled with wines) with male teachers during after school hours in Sanji, advice from his mentor teacher, Ms. Ru, books he brought from home, and internet (he is the only intern taking a laptop to SMS, making frequent visits to the only computer lab in the school to connect to the internet). (Interview with Chen Long, September 1st, 2009)

Feng Qian （冯倩）

As a Chinese language major, Feng Qian had talent for writing beautiful prose and often posted on the blog via her internet connected cell phone. Coming from a family with her father as a worker and mother a homemaker, she chose to study Chinese language not only because she loved it but also because of a lot of potential job openings for a Chinese major.

Being a quiet student in an experimental class in high school, she found herself an outsider due to her below average test scores in math and the aloofness of her teachers and peers. "Teachers attended more to students with excellent test scores or loud ones." She said, "I did not act out nor achieve well. So I am in the blind spot of the teachers. The only exception was my Chinese language teacher. She once read my article in the class and highly praised it. I was so encouraged. I guess that this incident made me choose Chinese as my major and plan to become a Chinese language teacher." She resented the distance between peers in her high school, "everyone is working hard to compete with each other. It was like a war field in the classroom, and test score was the major topic during the break. How horrible it was!" As she observed the happiness and friendliness among her students in the Class 5 of Grade 8 in *Sanji* Middle School, she could not help admiring it. "I am lucky to teach in putongban. I might get crazy if I were assigned to teach a shiyanban. It is suffocating to observe the children bending over the desk, doing nothing but writing on a test paper." What she saw in the shiyanban in SMS seems to me to reflect what she experienced in her high school and she opted to invest all her energy to teach and learn more about her "lovely" putongban students. As the goal, Feng said that she did not really want to push her students to get outstanding grades and enter the key high schools in the

city. In contrast, she wanted her students to "grow happily with a healthy mind and body." (Interview with Feng Qian, August 29th, 2009)

Hao Chen （郝晨）

Hao Chen looked fashionable and was once suggested by a SMS teacher to wear plain clothes so as to "look like a teacher". In her high heel shoes, shining earrings, and bright short skirt made with fine textile, this 19-year-old girl from *shijiazhuang* city did not think that her clothing was unfit for a teacher. "As long as I can teach my lessons well and get my students to attend to the class, I am a good teacher." She said. As the only daughter of a family of workers, she had been very confident about her Chinese language talent. It was her below- average scores in math and science for the College Entrance Exam that sent her to Huihua, a *san ben* college. "Without pursuing a master's degree, there is a slim chance for us to get a decent job. I plan to take the exam and get enrolled in the Department of Classic Chinese in the Hebei Normal University. There are many people trying to get in and the entering score is usually very high. But it is worth trying", she said.

As to her new role as an intern teacher, she had a plan to support students who are not confident about their Chinese language learning. She said that she had negative experiences with her math teacher in the middle school and high school who did not pay attention to her work. In her opinion, a teacher can help students learn if s/he believes in them, and she planned to encourage her SMS students to learn by giving attention to the individual students.

She was a little surprised by her SMS students as she thought that students in the rural areas did not know much and adopted a simplistic personality. "They do know the outside world. My students in the class 5 of grade 7 asked me about my hobbies and told me that they liked to surf on the internet. They asked me to keep this as a secret since their teachers do not allow them to go to the internet bar. They also asked me about what it was like in the city. They are generally more polite and shyer than children in the city, and they are quite at ease with us to talk about new things they read in books or internet. " (Interview with Hao Chen, August 31st, 2009)

Li Xuemin （李学敏）

Li Xuemin was very energetic with a quick speed of talking and walking in spite of her small figure. As she stood in front of the classroom in her first demonstration class, her powerful voice immediately attracted her students and the observing teachers. She was a big sister in her family in a county close to Zhangjiakou City, north of Hebei Province. She chose to study math, her favorite subject in Huihua and hoped to test if she could be a good teacher in *dinggang* internship. Although her parents wanted her to be like her sister-in-law and become a teacher, which in her hometown is commonly assumed to be a secure stable career for a female, she herself was looking for something more "challenging" and "better-

paid". Thus, she was not only planning to excel in teaching, but also seeking opportunities to "interact with local people and teachers" which was a very important "social skills" for her to get an ideal job in the future.

When asked about the impression of the pupils in SMS, she disagreed with the concept of "rural students" since "they (rural students) differ from each other although they are distinct as a group from students in the city". She had observed her relatives living in the villages close to her hometown as they often visit her parents during weekend. "Some villages have this culture of respecting knowledge and they have most students graduate from high school and even have one or two students go to top universities every year. By contrast, some areas value financial success in business and most of their children tend to drop out after middle school and become apprentices in local small businesses or migrant workers in the city…… Families differ, too. Some parents put more pressure on students to study while others adopt policy of laissez-faire. Some are divorced families and some parents seldom stay at home since they take jobs away in the city. These types of family produce different students. Of course, students are different individuals. Some students are even smarter, and many are even more diligent than those in the city; while the rest are just lazy and less smart." Seeking advice from her sister-in-law, an elementary school teacher in her hometown, she stressed that it was important for the teacher to establish connections with the students and help the students learn "with heart". Her specific goal for her *dinggang* internship was to "be a teacher loved by all the students, with all the knowledge about the text and the students." (Interview with Li Xuemin, August 26th, 2009)

Jin Junshu （靳隽殊）

Being a member of the varsity volleyball team in the Department of Mathematics of Huihua College, Jin Junshu looked very active and athletic. She is the single child from a divorced family in *shijiazhuang* City. She explicitly expressed her passion in teaching and frequently quoted lines she read from the books about great teachers and the textbooks of pedagogy. "Middle school students have this resistant mentality. As a teacher, I need to reflect upon my professional practice and creatively approach the students. For instance, I can visit students' homes, have them write personal narratives, and write letters to students. In this way, I can know my students have them take my classes seriously."

Jin had never left *shijiazhuang*. She was not quite sure about the students' characteristics that she would observe during *dinggang* internship. But she said that she had this general idea about students in the rural areas that they should all study very hard because studying is the most important route for their bright future. In addition, given their family burden, they would have to help with the family chores and in the mean time work diligently to study well in limited time. "By contrast, children in the city, like me, have more opportunities to get into colleges and we do not have to help much with the family chores…. I remember that my mother told me that the sole task for me during middle school was to study and stay healthy." With this idea about hardworking students in rural areas, she found most of her students in *shiyanban* at SMS fit her expectation. As to those *putongban* students who seemed not to study hard nor achieve well, she thought that the

main reason for their problem was "not using the heart" (*bu yong xin*, 不用心) to focus on study. And this problem of "not using the heart" can also occur in a student in the city. (Interview with Jin Junshu, August 26th, 2009)

Zhang Qiufang （张秋芳）

On the first day the interns got settled in the Sanji Middle School, Zhang Qiufang sighed as she stood behind me to buy lunch in the dining hall, "It is so familiar. My middle school was so much like it here. We also had this small playground with a one-window dining hall in my middle school." Later during my interview with her, she told me that SMS made her miss her hometown since what she experienced in her middle school resembled what her pupils went through here.

Qiufang's father worked as a carpenter in a village in Langfang County, north of Hebei Province. Her mother stayed at home, taking care of Qiufang, her younger brother and all the house chores. The parents were very proud of Qiufang as she was the first college student ever in the family history. She even got into the Department of English, which was usually deemed very difficult for a student from a rural village. She planned to make her parents even happier by getting a certificate of professional translator. "Being a teacher will be my backup if I cannot get a job in translation." She said. She also mentioned her brother, a drop-out following suit of his peers. "There are quite a few students in rural areas like my brother. He did not want to go to school at all, saying studying was useless and it was more fun to hang out with friends. Now he is a carpenter apprentice supervised by my father. But being a carpenter is his only future and he will realize this." Given the similar settings in SMS compared to her own middle school, she thought that her own experience as a child from the rural area getting into a college would help her teaching pupils in Sanji. (Interview with Zhang Qiufang, August 27th, 2009)

Wang Kun （王琨）

Wang Kun was a very outgoing girl with a cheerful and loud voice. SMS teachers joked that "wherever Wang Kun is there is laughter". As a native from Pingshan, she quickly became popular among her peer interns since she helped them to learn the Pingshan dialect so as to approach the pupils. Pingshan dialect was difficult to understand in the beginning. All the interns could understand it in conversation after one or two months, but it was not easy to speak with its accents. When Wang spoke Pingshan dialect to greet her students in the beginning of the class, she found her students' faces "light up".

Wang worked as a substitute teacher in the past summer in a Pingshan art high school and loved to share her experiences "managing" students. During their bedtime talks in the dormitory, according to Han Na, Feng Qian and Hao Chen, Wang Kun gave them sound suggestions on how to deal with difficult students with the stories she herself had experienced as a teacher.

> Majoring in Fine Arts, Wang was thinking of seeking a job related to art design. Her parents, however, expected her to secure a stable teaching position since they themselves were tired of frequent travels running their family business. Wang took her parents' advice and found herself very "suitable" for teaching based on her successful summer teaching experience. Although her family was in a town that was more like a city than a rural area, she was confident that she knew her students in Sanji.
>
> When asked about her impression of the students, she often referred to the students she encountered in the art high school in Pingshan City. She observed that the teacher's authority had to be earned in the high school in Pingshan City as the students were likely to challenge the teacher. While in SMS, the fact of being a teacher could establish the authority among students. However, SMS students in her *putongban* seemed to lack the initiative to learn while *shiyanban* students were more like her students in the city who were able to take notes and raise questions without being pushed to do so. She also noticed that SMS students did not have many materials to learn art. They could not afford to buy the special sketch paper or oil paint. By contrast, her students in the city could have whatever materials required in learning fine arts. (Interview with Wang Kun, August 28th, 2009)

Three facets of the participants' identity emerged from these narratives elicited by the interviews: being a college student educated in an urban setting, being a Huihua student, and being a novice teacher.

1. Educated in the City: College Students

These interns were from different social classes in Chinese context and their social class background influenced their perceptions about people from rural areas. Most of them came from the city. Some were from the areas between the urban and rural areas. Only Zhang Qiufang was from a rural village. Inspite of the social class differences of their background, they had one common experience and enormously impacted their understanding of rural students: college education in the city. In addition, their prior experiences of interacting with rural people also influenced their perception of their rural students.

Five of the participants were from cities while they were from different social classes within the city. Chen Long's parents work in a big company in *Shijiazhuang* city and they sent their son to the elite middle school, which brought Chen Long up to the highest rank of the social class compared to his peer interns. Chen often compared his elite middle school with Sanji Middle School and implied a sense of the superiority over rural students. Hao Chen and Feng Qian's parents were workers in factories. With experiences in *shiyanban* and *putongban* in general middle schools, they demonstrated empathy towards putongban student in Sanji Middle School. Han Na and Jin Junshu were from single-parent families in the city. They tended to strongly believe in hardworking and favor those Sanji students who were diligent and self-motivated. So did Zhang Qiufang who struggled her way out of rural village and went to a college. Li Xuemin and Wang Kun were from towns, the middle areas between the rural and the urban. Both of them had known people, either friends or relatives, from both rural areas and urban areas. Their parents also had business in the town and in the city. They had more knowledge than their peers from the cities about the situations rural people lived with, and probably had more understanding than Quifang of how material abundances helped urban students in learning. Among all the interns, Li Xuemin and Wang Kun were the most flexible ones in drawing distinctions among their students as well as between themselves and their students. Although these interns' family background mattered, it seemed to me that from the interviews they often mentioned how their interactions with people from different backgrounds influenced their thinking.

The interns from the cities did not have much experience interacting with children in the rural areas. Of them, only Han Na had a short period of working with these children before the *dinggang* internship. When they talked about their understanding of SMS students, they usually

referred to their peers and their own lives to form a comparison. In their opinion, the SMS students and students in rural areas in general shared the characteristics of being hardworking, shouldering the family burden of chores, being simple and limited in the knowledge about the city and larger world. As they began to interact with their students, they became a little "surprised" to observe that these children in the village were also interested in modern technology such as the internet and also knowledgeable about the "outside world". They became a little disappointed when they found that some SMS students, especially those in the *putongban*, were not working diligently. Given their presumptions and stereotypes about rural students, the *dinggang* internship offered a fresh perspective to their pre-existing perceptions; and as later chapters about their whole internship experiences suggest, the encounters provided opportunities for these pre-service teachers to continuously work on and re-chart their prior perceptions.

Interns from towns, Wang Kun and Li Xuemin, had more interactions with and knowledge about rural students. In contrast to the general blurred view about the pupils their urban peers held, they learned to understand their students in specific contexts. For instance, Wang Kun suggested that it was due to lack of material resources that rural children had limited access to learn fine arts. Li Xuemin also found that the family and the culture in a village can influence students' academic performances.

Zhang Qiufang was the only participant coming from a rural village. She found SMS similar to her middle school and she seemed to attribute the academic success/failure to individual factors. Growing up in the similar context, she believed that individuals could achieve academic excellence if they wanted to and if they worked hard as she herself followed the same track.

Thus, since these interns were from different socioeconomic backgrounds, their family experiences influenced their perceptions about their rural students. In Chapter 5, the influence from their families were further explored to exmine how their own social class identity shape their boundary work. Although they had different family backgrounds, they had similar college experiences in the capital city of Hebei Province.

As all these interns have been included in college education at an urban institution, they were looking at the characteristics that were valued in their own school and university experiences, such as being hardworking, being able to follow the teacher's guidance without being pushed to do so, an open manner in student-teacher interaction, and so on. They tended to find these characteristics more in the *shiyanban* than in *putongban* students. Thus, they tended to view these *shiyanban* students as those who had the more desirable characteristics and thus were more likely to be admitted in the urban education system. Some of them, however, such as Feng Qian, thought from an opposite direction, taking their own school experiences as lessons and preferring to enjoy a relaxed classroom atmosphere in their *putongban*.

2. Career Aspirations of the *San Ben* Students: *Huihua* Folks

The participant interns are from *Huihua* College affiliated with Hebei Normal University, and they have a clear vision about their future careers based on their understanding of how "valuable" their *Huihua* degrees are. This vision influenced their expectations about the *dinggang* internship and their perceptions about their students.

As introduced earlier, *Huihua* is a secondary college recruiting students with comparatively low scores in the National College Entrance Examination, so high quality graduates is not expected by many people. Mr. Cui Jian-guo, Head of the *Huihua* College, said:

> Graduates of Huihua have a high rate of delaying job searching by taking exams to enter the master's programs. It is difficult for them to land a good job immediately after graduation since the employers tend to think that the graduates from a secondary college are not capable students and unlikely to be capable employers… But Huihua graduates have comparatively better employment opportunities compared to other secondary colleges in Hebei because Huihua is known for highly strict discipline and vigorous academic training. As you can tell from our students, many of them are quite good kids. They just failed one exam, and they value the opportunities to learn in the college. They also know that their parents paid a lot of money for their tuition. They need to work hard to get a good score for future good jobs. (Interview with Dr. Cui, June 19th, in Huihua College)

The students surely knew their own situations. On the one hand, they were not very confident in their job search compared to their counterparts on the main campus. On the other hand, they were hopeful in putting themselves in a relatively better position in the job market by following the "strict" training in *Huihua* College, getting all sorts of certificates (computer certificate, translator certificate, and so on), actively taking part in the *dinggang* internship, and preparing for the post-graduate exams. In the beginning of the *dinggang* internship, all these pre-service teachers were highly motivated to learn from their teaching experiences and eager to add a good record of teaching to their resume. As part of their endeavor, they put much effort in trying to understand their pupils by drawing on their prior experiences.

What is more, these *Huihua* students confessed that they were not top students in their middle school. This seemed to let them sympathize with mediocre academic achievers in *putongban,* try to connect with them, and understand the pressures these pupils faced. This was also the reason for why these pre-service teachers from *Huihua* College desired to "help" *putongban* students achieve better. Since they themselves got into college, they wanted to help their *putongban* students end up with higher education. In the meantime, they realized that situations in the rural areas, such as lack of materials and high quality teachers, might make this plan even harder for their SMS students. Especially Zhang Qiufang, Li Xuemin, Wang Kun and

Han Na, who had direct interactions with rural students before they took the *dinggang* internship, understood the difficulties these students faced.

3. New Teacher

The participants also carry the characteristics of new teachers: understand teaching from past experience as a student (Lortie, 2002). During interviews, participants often referred to their school experiences and what they had observed from their own teachers to make sense of their own teaching. When they had positive experiences with teachers in middle school, they attempted to follow their own teachers in the beginning of the internship and used what they had experienced as a norm in their teaching. If they had some negative experiences, they tempted to choose different approaches from what their own teachers had chosen. For instance, Li Xuemin said that she was motivated by her teacher in the high school to learn math when she was transferred from *putongban* to *shiyanban*. Following her teacher, she stated that she would encourage her *putongban* students to learn no matter what difficulties they may encounter. Chen Long observed that teachers in his elite middle school in *shijiazhuang* city did not have to spend much time to discipline students. When he found, in his first class taught to Class 5 of the 8th grade (*putongban*), that he had to demand the students sitting in the back of the classroom not to talk, he criticized these students as unable to regulate themselves and focus on learning. Feng Qian was unhappy about the learning pressure her teachers gave while she was in a *shiyanban* in a key middle school. When she began to teach *putongban*, she decided to have her students learning with interests and tried to exert too much pressure upon them.

As new teacher, they were also eager to prove that they could become effective teachers or showed that they had planned to do so.

These facets of the participants' identities were intertwined to develop mixed feelings about their internship: a paradox of the sense of honor and the uncertainty of their teaching efficiency. On the one hand, they thought that, with their college education background and/or urban resources, they could "help" simple rural students and mend these students' weak knowledge foundations. On the other hand, as a student in a *san ben* college and a novice teacher with limited teaching experiences but fragmented understanding of their own teachers' performances and bookish knowledge from the teacher education program, these interns were not quite sure if they could excel in teaching rural students however they all desired to prove that they would be successful for sake of self-respect as well as their own value in the job market.

The mixed feelings seemed to shape their perceptions about their students. For instance, as a *Huihua* student, Han Na thought that she was marginalized in her key middle school as a mediocre academic achiever and so felt connected with her *putongban* students. In the meantime, as a girl brought up in the city, she hoped to "push" her students to learn well and later become urban residents, which was a sound life choice for herself. For those who did not have many prior experiences working with children in the rural areas, they tended to have a more individualistic view about their students and judge their performances based on personal traits such as diligence, simplicity, and intelligence. Those who already had experiences encountering rural students tended to consider more contextual factors, such as peers, family burdens, and teaching materials. For Zhang Qiufang, who benefited from working hard in a rural school, however, she firmly believed in individual effort.

As is shown in the next chapter, participants used multiple evaluative criteria to make sense of their students. Their identity certainly played a significant role in how and why they selected certain types of criteria instead of others in specific times.

Chapter 3 Symbolic Boundaries: Urban Interns Making Sense of Rural Students

In the first chapter, I introduced the framework of boundary work: people use an array of symbolic evaluative criteria to differentiate themselves from others and enact boundaries in their social practices. In the second chapter, I delineated the context of the *dinggang* internship, which cultivates a unique learn-to-teach setting for student teachers to encounter other people different from themselves. Following Lamont's lead, in this chapter I explore the symbolic boundaries that the *dinggang* interns used to understand their pupils in Sanji Middle School (SMS). I begin with several telling vignettes to illustrate three sets of symbolic boundaries—intellectual, moral, and cultural. By drawing these symbolic boundaries, interns were engaged in an evaluative process to judge the worthiness of a student. These three types of boundaries are not mutually exclusive. An intern using cultural boundaries also used intellectual or moral boundaries. Indeed, these boundaries coalesced in making the evaluative criteria for interns to understand their students and to make sense of their own teaching. The interns used these boundaries differently depending on their rational interpretation of how they dealt with particular groups of students.

In the second section of this chapter, I examine more closely the symbolic boundaries in terms of participants' interpretation of the differences among students as well as between students and themselves. I argue that participant interns blended multiple symbolic boundaries to rationalize their perceptions about their students and teaching practices. What is more, they might not recognize how the biased symbolic boundaries they were using functioned as the evaluative criteria to differentiate students. I suggest that their unexamined symbolic boundaries were confused with the evaluation of what the student is really capable of and what s/he needs.

The emotional distance marked by the symbolic boundaries may hold the teachers back from approaching the students with sympathy and understanding.

I. Mapping the Landscape: Illustrative Vignettes

Below, I describe several vignettes to illustrate three sets of boundaries the interns made during their internship: intellectual boundaries, moral boundaries, and cultural boundaries. I selected these vignettes because they are representative incidents that demonstrate how participants often talked and/or used symbolic boundaries.

1. Intellectual Boundaries

Vignette 1

Five students of Li Xuemin's Class 5 in the 7th grade were transferred to *shiyanban* since their parents pressed the school principal to do so. The *ban zhu ren* (class advisor) of Class 5, Teacher Jiao, was crying in the office, "They are the best students in my class. The average score of the class is going to be much lower. Poor kids…How can they fit into *shiyanban*? It would be difficult for them if they were sent back here." Teacher Jiao was worried that these students might feel humiliated if they failed in the *shiyanban* and were sent back to *putongban*.

Li Xuemin said to Teacher Liu, "Don't worry! I will get you some good math students from the rest of the class. There are quite a few with potential (*qian li*, 潜力)!" She seemed very confident in helping the students with *qian li* to achieve better academically, and she meant it:

Chen Xiaofei, a shy boy in grey, walked into Li's office. He handed in a piece of paper with a few problem-solving procedures and asked for extra exercises. Li reached for a reference book in her desk drawer, *Preparing for the High School Entrance Exam in Math*, scanned it, checked two problems, and lent it to Chen. "Come with your answers to these two (problems) tomorrow. I will talk with you about your last piece of work this afternoon," she said. Then she turned to me and pointed to Chen, "He is one of my seed students. He has the *qian li* to achieve very well. " She said that she did not have much time and energy to pay attention to every student in this class of forty. Therefore, she had to adapt her teaching to yield the most desirable outcomes for the students that were most likely to succeed. She said, "Some students cannot learn. They work really hard, but they just do not get it. You cannot ask too much from them. I usually give them relatively

simple work for them to master the basic knowledge points. Student with *qian li* are different. They may not always get the right answer, but they have a good brain. You can tell that when you look at the type of 'exploratory problems' you assigned to them. They use right procedures to think through the problem even though they may not have the right answer. A student without *qian li* may 'memorize problems' correctly, but s/he rarely solves the 'exploratory problems' correctly unless they master the method of solving these kinds of problems. They simply do not get the point." (Field notes taken in Li Xueming's office and interview with Li afterwards, October 2nd, 2009)

Vignette 2

Another math intern, Jin Junshu, taught *shiyanban* in the 7th grade. For the first four weeks when all her intern peers were teaching independently, she was still sitting in Teacher Shan's class to observe her mentor's teaching. "Teacher Shan will not let me teach until next week," she said when I asked if I could observe her class. But she let me observe Teacher Shan's class with her and promised to have me in her class later. Jin said, "It seems a good experience for me to observe how he works with the students. But I may try some way of my own." By the term of her "own" way of teaching, she referred to following model:

Students should learn by themselves. I will put the new knowledge points on the blackboard, explain briefly, ask students to do exercises, and have them explain the problem-solving procedure by themselves. The teacher does not have to lecture too much in *shiyanban*. They have a solid foundation of knowledge. And they are quite smart, the sort that is usually quick to understand the idea. It is not like *putongban* where you have to explain a lot to the students. (Interview with Jin Junshu, September 29th, 2009)

In Teacher Shan's class, a boy was asked to write his problem-solving procedure on the blackboard. "The answer is correct," Teacher Shan commented, "But the procedure is redundant. Obviously you are from *putongban*!"

After class, Jin Junshu explained as I asked about this comment from Teacher Shan:

The problem-solving procedure [one uses] demonstrates the way of thinking. *shiyanban* students are trained to think clearly and write the problem-solving procedure concisely. Teacher Shan always strengthens the standard for procedure writing to make sure that students master the math-thinking skills. The boy was recently transferred from *putongban*. He does not have this standard way of writing problem-solving procedures. But he has *qian li*. He got the right direction in problem- solving. He just needed to make his thoughts more explicit and clearer in writing. Then he can master this skill to solve problems of the same kind. (Interview with Jin Junshu, September 29th, 2009)

Vignette 3

> Feng Qian was reflecting upon what her mentor, Teacher Zhou, had commented about her Chinese teaching. "He said that I was teaching a geography class. You know, I had this framework of showing the directions of the scenery described in the text of *The Pavilion of the Old Drunkard* (*zui weng ting ji*,《醉翁亭记》). And I was too detailed in quizzing students' understanding of specific words and sentences. He told me that I had to approach the lesson with a holistic strategy for the students to appreciate the beauty of the text. "
>
> Feng Qian admired her mentor, who teaches *shiyanban*. However, she also realized that there were sharp differences between the groups of students Teacher Zhou taught in *shiyanban* and those she herself taught in Class 5 that housed the lowest academic achievers. She said:
>
> My plan was to help my students gain the main idea of the text and master the basic knowledge points in the class without spending extra time after school. I heard that almost every *shiyanban* student hands in homework. [In contrast,] *putongban* teachers do not usually grade homework, and their students are not self-disciplined enough to complete their homework. It is said that *shiyanban* students are in the boarding dorm, and they have a lot of time to study after school. While the *putongban* students have to commute and do home chores before they go to bed. I know that my students do not have time to preview or review. And *putongban* students are not quick to tease out the main points in the lesson. They are not stupid though. They just do not have time or the learning habits to explore, I guess. So I designed this framework so that my students can even recite the text right in the class with the prompt of a few words. The holistic approach to appreciate the lesson is great for students to cultivate the 'sense of the language'. Teacher Zhou is right that I did not realize that I can use this approach when I did the lesson plan. But as I think of it after the conversation, it [the holistic approach] seems far from my students right now. My goal is to teach them the storyline and to model the way of understanding the words, the sentences and the overall meaning of a text. (Interview with Feng Qian, October 9th, 2009)

These three vignettes show that interns used criteria based on intelligence to evaluate their students. That is, they constructed the intellectual boundaries. This set of boundaries is not the equivalent of inborn brightness, but seems akin to cognitive competence to learn a set of thinking skills and use skills to solve learning problems. This competence is not immediately visible because it is not simply signaled by test scores or correct final answers. For the math interns, this competence needs to be detected by observing how students demonstrate problem-solving procedures. For the Chinese intern, the intelligence that a language learner needs to possess is the ability to sketch the storyline of the text as well as to indulge the "sense of language" holistically.

2. Moral Tales

Vignette 1

Sitting beside a high stack of exam papers, Zhang Qiufang looked frustrated about what some of her students had presented in their latest exam.

> They simply do not work. You can tell that they did not spend time memorizing the spelling or the conventions. These students are not stupid. If you work hard, learning English should not be difficult. Well, it is certainly more difficult for rural students than it is for city kids. Rural children do not have access to native English speakers or even a recorder that can show how to pronounce the words correctly. But this does not hinder them from achieving high scores in English exams. Speaking and listening are only small parts of English learning. I am from a rural village. My middle school teacher led me through English learning and now I am an English major in college.

For Zhang, learning English is an arduous, while quite straightforward, process; and hard work coupled with following the teacher's guidance is the trick for a student to achieve well in learning English. As she explained,

> My middle school teacher trained us very well. I'd like to teach my students in a similar trajectory. In the 7th grade, you lay a solid foundation of spelling, vocabulary, and some simple grammar. The key is to read the text loudly until you are familiar with the grammar, and perhaps get some 'sense of the language' (*yu gan*, 语感). My teacher also asked us to copy the words for many times until we can accurately spell them. Short writing practice is also necessary. In the 8th grade, grammar is more systematically taught. Reading comprehension skills can be acquired by reading new texts in addition to the ones in textbooks. In the 9th grade, the teacher needs to summarize what has been learned for students, and hone the skills of taking tests. The steps are very clear. I went through my middle school English learning in this way. There is no problem at all. The problem is that some students do not want to study at all, like my younger brother. He hangs out with his friends who are all drop-outs. Nothing is interesting for him in the class. He dropped out of the school in the 8th grade. I can tell that a lot of students here are like my brother. (Interview with Zhang Qiufang, September 27th, 2009)

Vignette 2

Li Xuemin also complained about students not doing their work. What she felt most unbearable was that some students are not honest. "I have no idea what I should do with those

dishonest students. They cheat in the exams. They copy other's homework. How can they make any progress? I do not even know where to start working with them. What they present in their work is not based on their real competence. I am very concerned about them." She also thought that being overly proud of oneself was not a good quality in a student:

> Zhao Jitao always looks out of the window during the class. I used to tell him that he needs to pay attention in the class. But he does not change at all. Now I have decided that I would not spend so much time on him. He simply thinks too highly of himself. He has a good brain. I know that he quickly grasps the new concepts in the beginning of the class. But he never achieves a high level because he is not willing to practice in drills. He thinks that he already knows everything. (Interview with Li Xuemin, October 22nd, 2009)

In contrast, she thought highly of students who cooperated with the teacher, appearing honest and humble:

> Shang Yanhui is a particularly good boy. He is not a top rank student. But he is very sincere, respectful and humble. He completes every task meticulously and discusses them with me. He is very determined to correct his mistakes. If he promises me that he will never make mistakes in one kind of problem, he will keep his promise. At least he tries. I really enjoy tutoring him after class. (Interview with Li Xuemin, October 22nd, 2009)

Vignette 3

Both Zhang and Li emphasized hard work. By contrast, Feng Qian seemed to show a respect for the carefree characteristic of *putongban* students in Class 5 of the 8th grade. Like other interns, Feng described her rural students as being "pure, simple and unsophisticated" compared to their urban counterparts. And she especially appreciated that her students got along well with each other and worked together:

> My students are very good kids. They are polite to teachers, and they are friends to each other. When they are in learning groups, they are very happy working with each other. I like this air of friendliness in the classroom. I was in a *shiyanban* throughout my middle school. I hated entering the classroom feeling that I was pressed to study hard. It was so boring that the major topic of conversations among my classmates was the test score.

Not pressing her students to work too hard, Feng thought that she had to protect the "healthy" and happy character that her rural students possessed by connecting Chinese learning with their life experiences:

> My *putongban* students do not have much pressure to get into college. What is the point to have everyone take it [getting into college] as the life goal? I do not want to have them become bookworms. I think that cultivating a good characteristic and nourishing a learning interest are the most important objectives in school. Chinese is not a rigid subject. It does not have right or wrong answers. If they become interested in using Chinese language, they will be definitely willing to study and they can learn something in that way. When they write about their own lives, the essays are really brilliant. I particularly enjoy reading their writings about how they take care of their younger siblings, pick wild dates in the mountain and dig peanuts in the fields. (Interview with Feng Qian, November 1st, 2009)

Grouping her students to read literature magazines she bought from a recycling store beside the school and encouraging them to write whatever they would like to share in weekly journals, Feng Qian extended her goal of helping her students to master basic knowledge in the textbook to inspiring their learning interest.

In these three tales, Zhang, Li, and Feng drew moral boundaries between themselves and their students and among their students in order to understand how other factors besides intelligence matter in the learning process. They were less prone to base their judgment on students' intelligence than those in the vignettes illustrated in the earlier section. Rather than "intelligence", "hard work" was the key word in thinking. A work ethic seemed to be the guarantee of moral purity of a student—that is, whether they were responsible for their own work in learning. For Zhang and Li, hard work was directed by the teacher and aiming at higher academic achievement. Feng Qian, the intern teaching Chinese, in contrast, showed a great deal of interest in having students enjoy language learning and be motivated to work hard. In addition to the strong ethic of diligence, these three interns were concerned, to various extents, about

other moral qualities in a student, such as humility, politeness, friendliness, teamwork, and upward aspiration.

3. Cultural Boundaries

Vignette 1

> Looking downstairs, Chen Long pointed to several students walking in the playground. "I did not wear my glasses today. But I can tell those are my students in *putongban*. They have this sloppy way of walking. My *shiyanban* students do not walk in this way… They are more upright, steady. They appear totally different. " Graduated from one of the best middle schools, the No. 43 Middle School in *shijiazhuang* City, the capital of Hebei Province, Chen Long also liked to compare what he remembered about his experiences in his Alma Mater with what he observed in SMS:
>
> I have to say that the *putongban* students in the No. 43 Middle School are better academic achievers than *shiyanban* students in Sanji [Middle School]. They not only have a more solid knowledge foundation and more learning resources, but also a wide horizon to ensure a sophisticated character. You know, city kids dare to challenge what the teacher is teaching. We google online and get whatever we want to know. We are not intimidated by the teacher. When I think about my classmates, they look quite different from children here…they appear active, sophisticated, and much more confident [than my SMS students]. Yet, my SMS students are more polite. It makes me feel like a teacher here [laughing]. (Interview with Chen Long, September 21st, 2009)

Vignette 2

Like Chen Long, Han Na also taught chemistry in both *putongban* and *shiyanban*. She was troubled by the question of how to make her *putongban* students understand her:

> It is not about accent or something. I do not understand their dialect, so I ask them to speak in Mandarin. But it is still hard to use Mandarin to get through a point in *putongban*. For instance, I asked the same question to Class 2 and to Class 4, 'Why should we use an experiment to test the characteristics of oxygen?' Nobody responded to me in Class 4. Many of them seemed puzzled. I had to give them a follow-up question, 'Why don't we just look at it?' Then it clicked and some students answered, 'Because we cannot see the oxygen!' In contrast, my students in Class 2 responded immediately after I threw out the first question, 'Because the oxygen does not have any smell or color!' I just have to prepare a lot more prompts in Class 4 to help students understand what I say for EVERY lesson. It is much more work. They cannot 'jump' to understand the abstract idea used in the textbook. I feel like a translator for a colloquial version of the textbook. But sometimes I do

not know how to get colloquial in their way so that they can get the point. You know, when I was a student, I did not often use that kind of language in my own class. (Interview with Han Na, September 26th, 2009)

Vignette 3

In a pair of fashionable red high-heel shoes, Hao Chen was grading the monthly Chinese exam papers with other teachers in the office. The part of the test papers that contained names of the students was sealed to ensure objective grading. Teachers seemed to enjoy guessing which class they were grading. Hao Chen quickly joined this conversation, "This [test-taker] must be a student from *shiyanban* because the handwriting is very clear. Most *putongban* students cannot write so well." She later explained to me, "The first impression is very important. As I read through the paper, especially the composition, if the handwriting is pretty and the length of the article is appropriate, I cannot help elevating the score. Handwriting reflects a person's persona and refinement. A piece of text with decent handwriting looks pleasant, and shows that the student is aesthetic, and is quite earnest in taking the exam." As part of her assignments, her students in *putongban* were required to practice pen calligraphy every week. (Field notes on October 8th, 2009)

Chen Long, Han Na and Hao Chen are all from big cities in Hebei Province. They are similar in that they all draw symbolic cultural boundaries to differentiate their rural students: cultural standards such as posture, manner of interaction, spoken language, and aesthetic refinement in handwriting. They used these criteria to differentiate themselves from their rural students and/or to separate one group of students (*shiyanban* students) from another (*putongban* students). In each case, there is an explicit or implicit sense of "worth". In the above examples, the definition of a worthy student revolves around cultural principles rather than intelligence or moral principles.

The first group of cases I described presents the intelligence criteria the *dinggang* interns mobilize to differentiate worthy students from unworthy students. The second group shows that in some situations, interns are inclined to value or emphasize moral qualities, and they attach

relatively less importance to intelligence as the marker of superiority. The third group gives us a glimpse of cultural qualities that some interns look for in their students. The ways they relate to their students are explicitly affected by their cultural tastes. To various degrees, these three sets of criteria live side by side in each of my participants. The way they assess their students and themselves—the boundaries they draw between desirable and undesirable characteristics—charts the categorizing systems that lead their experiences of learning to teach. These are the very systems I will explore.

II. Symbolic Boundaries in Learning to Teach

At the outset of the study, I intended to focus on the moral boundaries that the *dinggang* interns utilize to understand their students and their own learn-to-teach experiences. However, as the analysis went further, I saw that a moral boundary by itself is not sufficient to describe what *dinggang* interns think of the differences between themselves and their students as well as those among their students. Represented by the vignettes above, the data suggest that three symbolic boundaries—moral boundaries, cultural boundaries, and intellectual boundaries—worked together on interns' understanding of their students and their own teaching. A majority of the labels the *dinggang* interns used to describe and differentiate their students pertained to at least one of these three symbolic boundaries. Some labels seemed to relate to more than one category. For instance, ambition simultaneously signaled smart life choice, high moral character, and cultural sophistication. My participants also used other criteria, such as personality, to differentiate students. However, since these other criteria usually do not lead to participants' idea of being "worthy" versus "unworthy" or "inferior" versus "superior", the key feature of boundary work (Lamont, 1992), they are not examined in this study.

Below, I describe in more detail these three types of symbolic boundaries (Table 3.1):

Intellectual boundaries are drawn on the basis of cognitive quality, such as competence to analyze and solve learning problems, having a solid knowledge foundation, and organized learning habits that ensure clear ways of thinking. As the examples above show, Li Xuemin and Jin Junshu stressed that *qian li*— a latent competence of analytical thoughts in using knowledge points to solve problems—was an important criterion to identify whether students were worth teachers' extra time and attention.

Moral boundaries are drawn based on such qualities as diligence, steadiness, honesty, discipline, and ambition. Diligence （*qin fen*, 勤奋）is the key word that permeated most moral characteristics the interns described. For instance, in the above vignettes, Zhang Qiufang and Li Xuemin valued the characteristics of honesty and steadiness since these traits reflected and ensured hard work.

Cultural boundaries are drawn on the basis of manners, language, and appearances. For example, Chen Long, describing his own classmates in middle school as more sophisticated and confident, drew cultural boundaries. Language, postures, and dressings, were also used as labels to signal differences.

These three sets of boundaries influenced how the interns understand rural students as the boundaries enabled or constrained interaction between the interns and the students. They also manifested what the valuable characteristics the interns expected in their students who were worthy of attention and teaching resources.

1. Teachable Potential Competence: Elements of Intellectual Boundaries

In my interviews and observations, the interns explicitly drew intellectual boundaries, but they did not just draw such boundaries based on the students' academic scores. They tried to see into students' potentials by reading students' problem-solving procedures when they graded their homework or exam papers. In this way, they knew in whom and how they could "invest" more resources.

Table 3.1 Symbolic Boundaries

Boundaries	**Sub-Categories**	**Definitions**
Intellectual Boundaries	1.*Qian li* （*qian li*, 潜力）	A latent competence of correct thinking skills to solve a learning problem
	2. Knowledge foundation （*xue xi ji chu*, 学习基础）	Mastery of key knowledge points prescribed in the prior curriculum and understanding the connections among these knowledge points
	3. Learning habits (*xue xi xi guan*, 学习习惯)	A mindset and related behaviors to lead clear and correct ways of thinking
Moral Boundaries	1. Diligence （*qin fen*, 勤奋）	Working hard
	2. Steadiness （*wen*, 稳）	Being able to work steadily and consistently
	3. Honesty （*cheng shi*, 诚实）	Working hard without cheating
	4. Self-discipline （*zi jue*, 自觉）	Staying away from distractions and staying focused on learning
	5. Ambition （*shang jin*, 上进, *hao xue*, 好学）	Striving to go upward, being curious in learning and enjoying learning
Cultural Boundaries	1. Manners	Ways of interaction with teachers and other students
	2. Language （*zi ji*, 字迹）	Spoken and written language; use of words and handwriting
	3. Appearance (*yi biao*, 仪表)	What a person looks like (posture, clothing, etc.)

***Qian Li* （潜力）**

Q*ian li* (潜力) was a frequently mentioned term by most of the participants. One of the math interns, Junshu's words are a good illustration of what these interns thought about *qian li*:

> A student with *qian li* may not achieve well in exams. But you can identify him when you look at the procedure he uses to solve a problem. You can tell that he is using a correct method of thinking about the problem. He is on the right path to analyze the problem and able to identify the key knowledge points to solve it. Such a student can be a sparkle to your eyes. Although he may end up with a wrong answer, you know that he is capable of getting the right one. That he does not achieve well may simply be because he does not put much effort in learning, or is not careful enough; or he does not fully master a few knowledge points. (Interview with Jin Junshu, September 29th, 2009)

Thus, *qian li* is a latent competence of correct thinking skills to solve a learning problem. Students with *qian li* usually achieve well. They may also achieve mediocre results or even do badly in tests. But they demonstrate that they can achieve much better by showing that they have the "correct method of thinking about the problem." Teachers can tell if a student has *qian li* or not by carefully reading students' test papers and homework, especially the procedures students use to solve difficult problems. Since the definitions of difficult problems vary in subject matters, the competence of *qian li* was interpreted differently by my participants teaching different subjects.

Mathematics involves abstract thinking. There are multiple ways of thinking about a math problem. How to identify the simplest and correct way of thinking is vital for math problem-solving. Difficult math problems for a 7th grader usually involve a process of "going around a turn" (*zhuan wan er,* 转弯儿). Li Xuemin explained, "Going around a turn means being able to tease out the unwritten conditions from reading the known premises." She used a problem to illustrate this "turn":

> There are two methods to pay the cell phone fees. The first method is to pay the monthly fee for 30 yuan plus 0.30 yuan for every minute. The other method is to pay 0.40 yuan for every minute without paying the monthly fee. Problem-solving: (1) How much would you pay if

you use 200 minutes on talking over the cell phone? How much for 350 minutes? (2) Which payment method helps you to save money?
(有两种方式收手机话费。方式以每月收月租 30 元，此外通过通话时间 0.30 元/分钟加收费用。第二种方式没有月租，按照每分钟收取 0.40 元计费。思考：（1）一个月内在本地通话 200 分钟和 350 分钟各收多少钱？（2）哪一种方式付费比较划算？)
(Interview with Li Xuemin, November 4th, 2009)

The first section of the problem is quite simple for students. To solve the second section, the more difficult part of the problem, Li pointed out that a student has to analyze the known premises as well as observe the result for the first section of problem in order to get the unwritten condition—for a certain length of time, the cell phone owner pays the same amount of money by either method of the payment.

According to Li, students with *qian li* could solve a difficult problem like the above example by identifying the "eye of the problem" (题眼)—the unwritten condition—by reasoning through the known premises:

> If they pick the time as x and write down the correct equation, I'd give them a point even if they did not get the correct final result…From reading this kind of problem-solving, I know that this student can get 70 even though he only got 50, such as Shan Yanqi. I was right. He was commented as being stupid by his *ban zhu ren* (班主任). He got 20 in the first math quiz. Now he is one of top math students in my class. (Interview with Li Xuemin, October 22nd, 2009)

Specifically, *qian li* involves competence to analyze the problem, connecting the problem with what is already known (both within the given problem and prior knowledge), and applying what is known to solve the problem. People are not born with this magic cognitive power, although some may be "quicker to identify the correct way of thinking", according to Jin Junshu. However, both Li and Jin believed that teachers can help students to reveal their *qian li* by handing them "math thoughts" (*shu xue si xiang*, 数学思想), thinking skills that could guide students to move from one problem to another. A few of the methods Jin and Li mentioned were "categorized discussion method" (*fen lei tao lun si xiang*, 分类讨论思想), "induction and

transformation thinking methods"(*zhuan hua yu hua gui si xiang*, 转化与化归思想) and "thoughts of equation" (*fang cheng si xiang*, 方程思想) for the 7th graders. Mastering these skills depends on the teacher explicitly explaining the skills, a lot of practice on solving different types of problems, and sound understanding of the relevant knowledge.

Compared to math interns, the Chinese interns also found it important for students to be able to identify the "eye" of the article. For Chinese interns, reading comprehension and essay writing were the difficult parts in language learning and tests. "Some students have this *qian li*. You know, they can quickly find the 'eye' of a piece of an article (*wen yan*, 文眼) that they have never read. The main idea is revealed if the student can point to the 'eye'," said Feng Qian. She found boys in her class were more likely to have this competence. "It is quite surprising to me. Girls are usually doing well in language, I suppose. But the girls in my class seem to lack this talent [of getting the 'eye' of the article]. They usually give me a lengthy answer on the test paper without being even close to the key point. While some boys just put down four words, and I can tell that they get it. Most boys in my class tend to be like this…you know, smart."

Similar to Feng Qian, Hao Chen explained that students with *qian li* in learning Chinese had the "sense of language" (*yu gan*, 语感)—whether they could accurately comprehend the main idea of the article or write a coherent essay. Both Hao and Feng stressed that by "wide exposure to a lot of extracurricular reading". This helped the students to enhance their "sense of language". Further, Hao Chen thought that the competence and skills to get the main ideas could be taught by giving students a framework for doing a type of test items. For instance, Hao was appreciative of her mentor, Teacher Xu, as he introduced her to the strategy of structuring the framework for types of test items:

> I had to explain how the article title functions in an essay since it is required in the test. Teacher Xu told me that I should not simply explain the titles one by one. Instead, I have to tally major functions of the article titles, categorize them into, say titles for narration, for argumentation, for prose, etc., and give a few examples of each type in this framework. Then it can prepare the students well for such kind of test item. They know the repertoire of the title functions, and they can quickly get to the point if they have to answer such a question in the test section of reading comprehension. Teacher Xu also shared his notebook including the summary of such frameworks according to past High School Test Exam items. It helped a lot! (Interview with Hao Chen, October 19th, 2009)

Feng Qian also worked closely with one of the most respected Chinese teachers in SMS, Teacher Ren, to summarize the skills to tackle the test sections of reading comprehension and essay. Both interns regarded the framework of test taking skills important to equip their students to extend their *qian li* to full use.

Chemistry interns also learned to sketch a framework to help their students. For them, the framework of knowledge points helped their students to understand the connections among different types of knowledge. "Students with *qian li* may automatically reason through the given premise and raise a sound hypothesis," said Chen Long. "Some of my *shiyanban* students are of this kind. But I still have to give them the map of knowledge points to ensure that everyone in the class sees the connections among the [knowledge] points. " After I observed his teaching of the same unit in *putongban* and *shiyanban*, I asked why he did not present the knowledge framework in *putongban* while he focused on explaining it to his *shiyanban* students. Chen explained, "Chemistry is like a liberal arts subject in science, at least in the middle school. Memorization of the knowledge points is the main part of chemistry learning. Unless students have memorized and understood the knowledge points, they cannot see the connections among the points. Giving the framework to my *putongban* students may confuse them. They even do not understand most of the points. It is like driving without being able to recognize the signs. How do you find the road without knowing where you are?" For Chen Long, students in *putongban*

seemed to lack the competence to solve the difficult problems in the chemistry test, which involved reasoning based on connections among knowledge. It was hard to tell if they had the *qian li* or not since they were not able to signal their latent competence without a solid foundation of knowledge.

By attaching importance to *qian li*—the latent competence of reasoning through a learning problem—the interns valued a set of refined thinking skills to solve a math/chemistry problem or understand a piece of an article. These ways of thinking involve skills of targeting the "eye" of the problem (or the article), going through a logical analytical process to understand the problem (or the article), connecting with prior knowledge, and synthesizing knowledge to solve the problem (or to understand and appreciate the article). Gardner (1989) observed that "the Chinese believe in skill development first" (involving repetitive practice) while Westerners "believe in exploring first then in the development of skill" (p.15). This skill-oriented teaching based on repetitive practice which aims at revealing students' *qian li* seems to be echoed by the case with *dinggang* interns in this study.

However, although all interns tended to think that some students already had these thinking skills before they went into the class, they still varied in thinking whether these skills were teachable and how to teach these skills in their classrooms. For some interns (Li Xuemin, Zhang Qiufang, Feng Qian and Hao Chen), these thinking skills were teachable. Categorization of test items, summarizing knowledge points and problem-solving skills were important strategies for these interns to work with students who varied in their *qian li*. These strategies are elaborated in Chapter 4 as the interns' enactment and dissolving of boundary work. Still, for some interns, thinking skills were not teachable, at least in their own student teaching, not only because their students did not have a solid knowledge foundation, as in the case with Chen Long and Han Na's

putongban students, but also because a few important factors interfered with students' *qian li* to affect their learning. Below, I discuss knowledge foundation and learning habits, as well as moral qualities and cultural features, to further our understanding of how *dinggang* interns mobilized various symbolic criteria to evaluate their students.

***Knowledge Foundation（xue xi ji chu,* 学习基础）**

As discussed above, *qian li* is a latent competences that equips students with appropriate thinking tools to solve learning problems. But *qian li* is not the only criteria for the interns to judge whether a student is worth their effort to work with. *Qian li* usually goes hand in hand with other criteria *dinggang* interns considered in their teaching. "Knowledge foundation" is one of the intellectual criteria that the participants often use to differentiate their students. Possessing a solid knowledge foundation means mastery of key knowledge prescribed in the prior curriculum and understanding the connections among these knowledge points, which can lead to a smooth transition to acquisition of new knowledge. The interns tended to utilize this criterion because they understood teaching as a continuous process which lays the foundation for students' learning new concepts. By taking this point of view, they employed different methods to teach students with different knowledge foundations. For students with solid foundations in prior knowledge, the interns quickly learned that they could teach them new knowledge with further depth. For those with weak knowledge foundations, the interns deemed mending the foundations with basic knowledge points a proper approach for teaching and learning.

Li Xuemin taught math in Class 5 of the 7th grade. She thought that *putongban* students did not have a solid foundation, so they were not able to apply knowledge to solve learning problems, not to mention engage in flexible problem-solving. "They simply did not understand the problem since they did not master the basic knowledge points. For instance, in a math problem "5-1-5-

2”，they would subtract from left to right, without thinking of moving the figures and do 5-5 first”. One of the most difficult kinds of students for her to teach were those who “missed too many steps” in learning. This kind of student did not have a solid knowledge foundation, which hindered their learning of the new knowledge. Chen Wenjie was one of this kind. Chen did not know the basic addition algorithm, which was required knowledge in primary school. Even if the teacher teaches how to use the correct way to think through the learning problem, it is still very difficult for the student to navigate the thinking process without the raw materials of basic knowledge points, according to Li Xuemin. For her, “math learning in the middle school is similar to taking steps. The prior steps are important for students to arrive at the higher step. With a few knowledge gaps in math learning, the students may find it difficult to catch up. Chen Wenjie is still on the ground level, while now we are teaching from the third floor. He missed too many steps. It may take a lot of time to help them make up these steps.” Therefore, knowledge foundation is the sine qua non for a student to learn well. Even if they are given right thinking tools in the class, the students with weak knowledge foundations cannot achieve well. For Chen Wenjie and other students on the “lower step” of learning, Li Xuemin worked with simple learning problems which were planned to complement their knowledge. In order to do that, Li learned a few techniques from her mentors to categorize learning problems in relation to key knowledge points, which will be further illustrated in the following chapters.

Interns tended to think that *putongban* students have weaker knowledge foundation compared to students in the *shiyanban*. As one of the earlier vignettes showed, Jin Junshu thought that she could teach her *shiyanban* students with her “own” way. That is, she did not have to lecture much in class. With a solid knowledge foundation, her students should be able to grasp the concepts by their careful self-study and brief explanation by the teacher. “It is not

necessary to break the knowledge into pieces and get into detail. My students know the key concepts by their own preview of the text. Their teachers in the primary school have helped them lay a firm math knowledge foundation, and they also have very good learning habits. Based on what they have already learned, they know how to learn new things and can learn by themselves." Jin admitted that she preferred to teach *shiyanban* students because she did not have to repeat the simple knowledge pieces over and over again like her peer interns did with their *putongban* students, who did not have substantial knowledge foundations.

Although teaching a different subject matter, the Chinese intern, Hao Chen, agreed with Jin Junshu that *shiyanban* students were "well cultivated from early on". She taught Class 5 of the 7th grade and could not help being curious about how well students in Class 1 and Class 2 could achieve:

> I randomly picked a piece written by a student in Class 1. I was amazed by how different it looks from my students' writing. The student (in *shiyanban*) obviously has a good language foundation in primary school. The logic in writing (is clear) and the penmanship is beautiful. The article flows and shows a complete story from a unique perspective. And (the student) had a refined choice of words. Many students in my class are not able to present a coherent story with a reasonable length. What have they learned in primary school? (Interview with Hao Chen, October 19th, 2009)

Feng Qian also thought that the foundation of Chinese learning needed to be mended in her Class 5 of the 8th grade:

> My strategy is to help them lay the knowledge foundation and catch up. I usually ask my students to dictate words or ask them to write learned ones from memory. Repetition (of such practice) helps to learn. I think that knowledge foundation is very important for students to learn Chinese. You know, being able to use the language is an accumulative process. Constant dripping can wear the stone. By a lot of reading and repetition of practice (dictating words and writing from memory), knowledge foundation is laid imperceptibly. I should push them in doing this. (Interview with Feng Qian, October 9th, 2009)

Interns teaching math and Chinese, they found it vital for students to start their learning in middle school with their feet on a solid foundation of knowledge since they had already learned these subject matters in the previous six years of primary school. It is difficult to make up for the missing knowledge, especially in math learning, since the knowledge is taught and learned step by step. This does not mean, however, that there is no way to make up the math foundation. Li Xuemin spent a lot of effort in classifying the test items and explaining the simpler ones to students with a weaker knowledge foundation as well as demanding repetition of a group of learning problems. The foundation of learning Chinese is about words, sentences, handwriting, and being able to write complete stories, which should also have been taught in the elementary school. Compared to math learning, however, the foundation of Chinese seems to be a little easier for the interns to mend if students are provided with ample opportunities to practice reading and writing. As Feng Qian did with her class, every student had to write weekly journals in addition to the required weekly composition assignments. She also encouraged her students to read individually and/or together both within and after class. She acknowledged that her students needed to make up for their weak knowledge foundation in Chinese:

> Everyone knows that we need ample time in reading and writing in order to learn Chinese well. My students can catch up by a lot of reading and writing. They are not stupid. Words and a sense of language can be acquired in the process (of reading and writing). As long as they begin to get interested in reading and writing and really take on a lot of practice, they will do well in learning Chinese. (Interview with Feng Qian, November 1st, 2009)

For the interns teaching math and Chinese, the knowledge foundation was used to help students acquire related new knowledge or solve problems in the test. It seemed to them that *shiyanban* students had a more solid foundation of knowledge they could use to solve problems in the test, while *putongban* students had not even mastered the basic knowledge points.

Unlike math and Chinese, which were already learned in the elementary school, chemistry is newly taught from the 8th grade. Chen Long and Han Na gave the introductory courses to the 8th graders. Interestingly, they also thought that *putongban* students had a less solid foundation of knowledge from early on. According to Chen Long, *shiyanban* students had learned a lot of general knowledge in primary school so that they could grasp the abstract ideas in chemistry. However, he was not specific about what kind of general knowledge was needed as a foundation of chemistry learning. He seemed to assume from the beginning that his *putongban* students lacked a solid knowledge foundation and that they needed to do little beyond memorizing the basic concepts. This influenced his pedagogical decisions in teaching:

> Teacher Ru [Chen Long's mentor] told me that it is vital for my *putongban* students to grasp the basic idea. It is OK that they cannot do well in the exam this semester. They will learn the textbook again next year anyway[16]. Teaching for Class 1 [*shiyanban*] is different. You have to press them to practice exercises and deepen their understanding by teaching them how to solve one type of problem. They need to be able to infer the method of solving a set of problem (*ju yi fan san*, 举一反三). In order to do this, we have to select exercises for them to practice again and again. One type of learning problem needs to be presented to them in varied forms. We do not do this for Class 5 [*putongban*]. It is not necessary. As long as they master the foundation, memorize the concepts— that content that must be and can be learned by them—they can be held from those learning questions that are in need of in-depth thinking for now. (Interview with Chen Long, September 21st, 2009)

The (pre-service) teachers' expectation of Class 5 (*putongban*) stayed at the level of mastering basic knowledge. The solid foundation of knowledge is the most important goal for *putongban* students. By contrast, being able to grasp the basic knowledge and possessing a solid knowledge foundation are regarded as natural for *shiyanban* students; and hence the learning

[16] In middle school, it is required that the students learn chemistry for two semesters, and usually in the 9th Grade. In rural schools such as Sanji Middle School, teachers start to teach chemistry from the 8th Grade and reserve the whole year in the 9th Grade to review and prepare for the High School Entrance Exam.

goal for them is to build upon the knowledge foundation and reach tpward solving the learning problems that are "in need of in-depth thinking".

Learning Habits (学习习惯)

As the vignette about Teacher Shan's standard for writing math problem-solving procedures in the earlier section suggested, learning habits are regarded as a mindset and related behaviors to lead to clear and correct ways of thinking. The most often mentioned learning habits are (1) willingness and skills to learn and think, and (2) time management.

The most valued learning habit is being willing to learn and think carefully and taking actions to do so. According to Chen Long and Han Na, this learning habit was shown in their *shiyanban* students, but was lacking in their *putongban* students. Chen Long commented on his *shiyanban* students as the ones willing to "use their brains" (*dong nao zi*, 动脑子): "Willing to use their brains is not just because they are smart, but because they tend to do so all the time. It is a habit. My *putongban* students take everything being taught as correct, and they never give it a second thought. If you say something wrong in *shiyanban*, students may notice it because they are using their brains to think through what is being taught. "

After the first week of teaching both *putongban* and *shiyanban* students, Han Na also found that her students differed in learning habits they possessed. During one of our casual conversations after dinner, she said,

> The differences between *shiyanban* students and *putongban* students are striking. All of them started to learn chemistry from last week. The textbooks have not arrived yet. Without books, the students in Classes 1 and 2 [*shiyanban*] gave me great answers when we reviewed the first class. (Students in) Classes 3 and 4 [*putongban*] simply could not answer my questions. Their excuse was that they did not have books. I had to use 15 minutes to teach the key content of the first lesson again…I forgot to mention that they need notebooks in Class 2, while everybody got one in the second class. I told my students in Classes 3 and 4 that they needed notebooks in the first lesson, while many of them did

> not have one ready. I had to mention the key knowledge points in every class and tell them, 'please note down this point'. But I do not have to do this in *shiyanban*. They automatically write it down in their notebooks. They want to learn, and they know how to learn. You see? They have good learning habits. " For Han Na, the behavior for the learning habits can be cultivated, while the willingness to learn is very difficult to get across for her *putongban* students. "The attitude may be the most difficult part for my *putongban* students. You can ask them to prepare the notebooks and take notes, but they may never take the initiative to do it. Perhaps more attention from the teacher can change their attitudes, I am not sure… (Field notes by Heng Jiang, October 22nd, 2009)

For Han Na, good learning habits requires a willingness to study hard and prepare oneself well to learn in the class, such as getting a notebook ready for the classnotes. For Li Xuemin, one way to help her students in Class 5 in the 7th grade was to get them to form desirable learning habits to think through the exam papers. Li found that her students threw away the exam papers after the papers were scored.

> It is not a good learning habit. They have to be careful about the errors they made in the exam. Now I have them read through their test papers immediately after I return the papers back to them. I told them that learning from the errors is much more important than the scores. Now they form the habit of correcting the errors they made in the test paper immediately after the examination. If they do not know how to correct, they can ask their peers. After they have worked on their test papers, I will help them to go through the difficult problems and explain how to resolve those problems. Now they know that there is no need to copy others' answers in the homework or cheat in the exam. It is more important to be honest about their mistakes. I still have to work on those newly transferred students in my class to get this learning habit. (Interview with Li Xuemin, November 4th, 2009)

Another learning habit assumed to differentiate *putongban* students from *shiyanban* students was time management. Hao Chen noticed that almost all of her students in Class 5 of the 8th Grade were happily running in the playground during the session breaks, while many students in Classes 1 and 2 stayed behind their desks during the break, burying their faces in stacks of books and exam papers. One day, the electricity was out before sunset and the classroom became a little dim. Many students came out of the classrooms to hang around in the playground. Walking side by side with me, Han Na pointed to two students writing homework

on the balcony in front of Class 1 of the 8th Grade, "Time matters. *Shiyanban* students make use of every minute at their disposal to learn. They work hard. They simply know that they need to use the time wisely and learn well".

Desirable learning habits help students keep themselves on task and hence improve their learning achievement. As Han Na pointed out, learning habits are cultivated based on the willingness to learn, which leads to consistent hard work. As I discuss in the following section, hard work has a strong moral tint. Therefore, "learning habits" is a label that pertains to both intellectual boundaries and moral boundaries.

2. Importance of Hard Work: Elements of Moral Boundaries

Morality entails a sense of responsibility. A person is morally upright if s/he fulfills what s/he is responsible for. In Chinese schools, the student is responsible for learning through hard work. If a student does not put effort in learning his/her subjects, s/he is deemed as deviant. Howard Becker (1963) and Erving Goffman (1963) have studied deviants and outsiders to sharpen our understanding of moral rules. Following their lead, moral boundaries in this study can be understood by looking at contrasted conceptions of diligence that were revealed when my participants explicated the labels they use to describe students that did not work hard—"Do not learn to be good（*bu xue hao*, 不学好）" and sloppy (*fu zao*,浮躁).

Bu Xue Hao

There are three types of students in Sanji Middle School: good students (好学生), backward students（差生）, and double-backward students （双差生）. Good students are hardworking, self-disciplined, and achieve well. Backward students may be hardworking and self

disciplined, but they do not achieve well academically. There are a few students who have slight behavior problems, but are medium performing in academic achievements. They are not usually referred to as backward students, but "naughty ones". Double-backward students are a headache for teachers. Their most salient characteristic is "*bu xue hao*" (不学好). *Bu xue hao* means "do not learn to be good", and it is intertwined with *bu hao hao xue* (不好好学), meaning "do(ing) not work hard". But it has a strong moral implication that a student does not behave like a good person by being "*bu xue hao*", since he does not intend to learn from good students and become hardworking, self-disciplined, and achieving.

Yang Hao was an example of this kind of double-backward student in Li Xuemin's class. He did not pay attention in class and he was known to fight and hang around with youth gangs. The *ban zhu ren* of the class, Teacher Jiao, commented on Yang Hao as "*bu xue hao*", and Li Xuemi admitted that her first impression of this boy was not good due to this comment: "I do not want to pay much attention to Yang Hao. I guess that I had sort of a bias against him. If he does not want to be good, I just do not want to spend much time with him." There were quite a few double-backward students in *putongban* in the 8th Grade as well. They did not work hard on learning, but put their time and energy to acting out in class, resisting teachers, and hanging around with each other. Yang Yan'gang in Feng Qian's class was the most notorious one, who became a frequent visitor summoned by the teaching affair director who was in charge of disciplining students.

These double-backward students were usually sitting in the *putongban*. There were low-achieving students in *shiyanban*; however, double-backward students were rare in these advanced classes. If students in *shiyanban* did not achieve well academically and also acted out, they were put "down" to *putongban*. Plus, being in *shiyanban* was deemed an honor and

endowed students with an upward aspiration, which might have prevented students from being "*bu xue hao*". There was an unusual type of double-backward student who could be described as a downward migrant from *shiyanban* to *putongban*. As Teacher Yang, the English teacher for Classes 3 and 4 in the 8th Grade, commented, "Many of these students (in Classes 3 and 4) do not see hope in being in *putongban*. They pass along their days in school. But most of them are cooperative and do not act out. The trouble-makers are those that were sent from *shiyanban*. They did not achieve well or made severe discipline mistakes in *shiyanban*. After they are sent to *putongban*, they are so filled with anger, not learning and making all sorts of troubles. " As McLeod (1995) described in his *Ain't no making it*, aspiration contributes to the behaviors of the students. They have rational justification for their behaviors when they see (or do not see) any hope in their current schooling.

Sloppy Students

Hard work always involves large amounts of practice and learning drills in Sanji Middle School. It was suggested by my participants that a student needs to be extremely careful and concentrated during practices and drills. Otherwise, they may make mistakes, especially those that are not due to lack of understanding of knowledge. According to my participants, being not careful enough was not only because of intellectual ability, but to a larger extent, was a moral quality because a person with a humble attitude toward learning would put a lot of effort toward learning and would be scrupulous in problem-solving. By contrast, a student who is sloppy (*fu zao*, 浮躁) tends to think too highly of himself, disdains to practice the problems carefully again and again, and appears lazy.

It was not that none of the *putongban* students could learn well. Some students had the capability to achieve well, but could not do so simply because of being sloppy. "There are some students that can sometimes give the correct answer when I ask them in the class," said Zhang Qiufang, who taught English to Classes 3 and 4 in the 8th Grade. "They can quickly grasp the grammar as I teach them. But they just do not practice the exercises after class. They think that they already know. When it comes to the exam, and when the problem takes a varied form, they cannot do it right. Chen Heng is like this. I think that he is quite smart. He just takes too much pride in himself in learning English and does not really get down to practice."

This sloppy characteristic was also criticized by Li Xuemin. "Zhao Jitao can get 70 when most his peers only get 40 in a math test. But he is not consistent. This time he only gets 34 while the average is 45. He thinks too highly of himself, always shouts out an answer in my class. Well. He is a clever boy. You can tell it when you look at his eyes, which are very bright and keep looking around. And his way of thinking is correct when you look at his problem-solving procedure. He just cannot get the right answer! Too much pride may come from ignorance. He does not want to get into the details in the practice. Seldom hands in the homework. I guess that he is lazy and cannot get very serious in learning. "

In contrast to being *bu xue hao* or sloppy, students with desirable moral qualities were more likely to be favored by the student teachers. Like *qian li*, moral qualities are not revealed automatically. There are a few signals that assist interns to detect moral qualities in their students. The most salient signal is diligence—effort in working hard. The picture of moral boundaries my participants traced for me revolved around diligence, which seems to be read via a number of other traits, such as steadiness, honesty, discipline, and ambition.

***Diligence*（用功，勤奋）**

Hard work differentiates pupils. For my participants in SMS, diligence is a moral quality that guards the road to good academic achievement. By being hard working, the pupils could fulfill their responsibility of learning. What is more, the diligence boundary interacts with intelligence —smart children can learn more with less time. Less smart children can learn as well if they spend more time. To some degree, diligence can complement intelligence.

Han Na, Hao Chen, Feng Qian, and Chen Long found that there was a group of smart students who were described as "achieving OK in tests without studying really hard." For instance, Feng Qian commented on a boy, Cao Shaokun, in her class, as one of this kind. "He seems to not study hard. He is not very attentive in the class, likes chatting with others during the class. But he is ranked as the No. 9 in his class in the final exam last year. He might be very smart, and learn without much effort. " However, all the student teachers in SMS suggested that, for most students, studying hard is the most important factor to contribute to high academic achievement.

Student teachers in SMS frequently mentioned that the *shiyanban* students differed from their *putongban* peers in terms of the effort they made in learning. "You can just look at their desks," said Han Na:

> My *shiyanban* students organize their books and notebooks in stacks neatly. Whenever you enter their classroom, you can always find someone studying, even after class. They raise questions about the lesson and ask you to help them solve the questions during the break. I never encountered such a student raising questions during break in my *putongban* classroom. Their desks look empty, with scattered books and sheets of papers. They do not do much work. (Interview with Han Na, October 9th, 2009)

Shiyanban students lived in the school dorm and went back home once a week. They spent most of their waking hours doing large amounts of exercises. *Putongban* students went home

every day, doing chores for their family and spending much less time on studying. It was not just about the amount of time that students can use. It was also about the willingness to find every means to achieve well.

As Zhang Qiufang found in her students in Classes 3 and 4 of the 8th grade,

> My students do not have the same urge to study hard as the *shiyanban* students do. The *shiyanban* students would get a small vocabulary notebook and memorize the words during their lunch. They learn by every means and find ways to solve the difficulties they encounter in the class. My students are everywhere in the playground during lunch and taking naps on their desks during noon break. It is quite a different mode (*zhuang tai*, 状态) of learning. I sat in Teacher Zhang's class. Her Class 1 students are very attentive, trying to absorb everything the teacher says and respond to teacher's questions. The air is a little tense in her class. But I like it compared to the relaxed atmosphere in my class. I can get few responses from the students, and their attention is so distracted. (Interview with Zhang Qiufang, November 23rd, 2009)

Diligence involves strong initiative to study and self-disciplined behavior to follow the teachers' lead. As was also shown earlier in one of the vignettes for moral tales, for Zhang Qiufang, who had grown up in a rural village, working hard under the lead of the teacher was the key to academic success. She had this belief because she herself had excelled in learning English in middle school following this path: study hard and follow the teacher's guide. Her younger brother could not catch up with schoolwork because he did not want to work hard in school and preferred to hang around drop-outs. Hence, hardworking is ensured by a dedicated attitude to learning. Han Na also emphasized the attitude by differentiating her students into "using the heart" (*yong xin*, 用心) and "not using the heart"（*bu yong xin*, 不用心）. She said that the students "using their heart" to study have the right attitude for learning. In other words, they were willing to learn and tried every means to work hard in school. "For instance, a student will spend a lot of time to memorize the knowledge points if he really uses his heart in learning." She said, "If you cannot memorize it by one or two rounds of recitation, you can recite for ten times.

If you do not know how to solve one problem, you learn from others and solve ten problems of the same kind. Then you know the key to solve one kind of problem. Those students that do not use their heart to learn merely cope with the teacher. They will do the work if the teacher checks. They will not do it if the teacher does not check. They do not know why they are studying and never take initiative to study hard."

Han Na said that most of her *shiyanban* students were "using their heart" in learning. Some of her *putongban* students were extremely smart, but could not learn well because they were not "using their heart". Jin Junshu also particularly valued the trait of being able to "use the heart". She spent a lot of time tutoring twin sisters in Class 2 in the 7th grade after class because "they are really working hard and using their heart. I am obliged to help them find the way to learn math well. I really do not like those students who do not work hard and cannot do well (in learning). "

Most of my participants found that students with *qian li* often ended up achieving low academically if they had not worked hard. This phenomenon was quite obvious in *putongban*. Hao Chen once told me about one of her students, Zhou Weijian, in Class 5 of the 7th grade. "Zhou Weijian never hands in his homework. I pressed him to hand in the homework, and he would always put it off and give me all kinds of excuses. He is attentive for most of the time in the class, but sometimes he is easily distracted. He is OK on tests, and gets the average grades in the class. I think that he can achieve much better if he studies harder and hands in his homework on time."

Hard work may not always render high academic achievement. My participants commented on the low academic achievers who worked really hard without improving their test scores. "Cannot learn no matter what (*zen me dou xue bu hui*, 怎么都学不会)" was the label for these

students left behind in despair. “I do not know how to help those students that simply cannot learn no matter how hard they work.” says Li Xuemin, who was very dedicated to helping her *putongban* students learn. But she still insisted that all her students should keep on working, and she asked every student to hand in their homework and correct their test papers in group work. For An Haixia and Chen Wenjie, students who could not learn well in spite of hard work, Li gave them simple problems to work on. “If they are still learning, they can learn something. We can start from the simple part and gets more advanced later. It is better than not learning anything at all.”

Zhang Qiufang agreed that there were a few students who were quite diligent in memorizing English grammar and vocabulary, and they still could not achieve well. “I have done everything I could to help them learn. And these students also spent a lot of time to work on the exercises. But they make the same mistakes again and again even after I corrected their answers. They simply do not get the knowledge. Teacher Yang says that these students have poor intelligence. They cannot understand what is taught. ” She learned from Teacher Yang that the recitation of the idiomatic usage, vocabulary, and grammar through repetitive practice was important for these students, hoping that they could at least get a few points in the test by filling in the answers they had memorized.

In conclusion, diligence is believed by the interns to be a moral quality of vital importance for a student to achieve well academically. It ensures that a student fulfills his/her responsibility by devoting a lot of time and energy to studying. When a hardworking student cannot achieve well, the student teachers tend to be empathetic of such a student and are willing to spend time working with him/her both in and after class. By contrast, the student teachers despise those students that do not study wholeheartedly, in their words, “not using their heart”.

Working hard can be read via a few more moral qualities, such as steadiness, honesty, discipline, and ambition. I consider each below.

Steadiness **（稳）**

Hard work can produce steadiness in learning. Without hard work, students can become sloppy. Being able to work steadily and consistently is regarded as a desirable moral quality because it shows that a student is loyal to his/her responsibility of learning and never refuses to study hard. Student teachers seem to give preference to students with steadiness in learning.

Jin Junshu pointed to a small boy with round glasses on his nose who appeared quiet and concentrated on his exercise book. "That is the best student in my class," she said.

> Cao Peng always ranks first in math tests. But he is not conceited at all, always scrupulous and steadfast in solving problems. He is a very quiet person, and seldom says anything in class. But you know that he follows your guide and really understands what you taught. When you ask him to answer a question, he always gives you the right answer in logical steps. When he raises questions, I really listen and other students listen, too, because those questions must be important ones. (Interview with Jin Junshu, September 29th, 2009)

Li Xuemin also spoke highly of one of her students, Chen Xiaofei, who was "serious and steadfast in learning." She liked to pick up Chen's homework first and check it each day because it gave her a pleasant start, with most, if not all, the correct answers. By contrast, another student in her class, Bai Chao, fluctuated in his test scores and homework quality.

> Bai Chao is very smart. He can instantly grasp the main idea when I teach it in the class. But when it comes to problem-solving, he cannot get every step correct. He is that kind of sloppy student, not being able to consistently pay effort in practice and solidify his learning. (Interview with Li Xuemin, November 4th, 2009)

Honesty **（诚实）**

Another moral quality that ensures hard work is honesty. Dishonest students copy others' homework or peek at the book during exams, and they can avoid hard work by cheating. By contrast, honest students spend a lot of effort to study by themselves rather than copying. For students who really work hard, being honest in their performance can help them find out the weak points in their learning. This was the case with Han Na's *shiyanban* students:

> They do not copy each other during quizzes even when the teacher is not in the classroom. They voluntarily closed their books as I ask them questions during review. If they find that there is a point that they do not understand, they note it down on a paper and stick it to their desk to study it again and again. My *putongban* students are playful in dealing with tests. When I told them that we would take a quiz about the periodic table of elements, they open their books under their desks and copy. If they work hard enough, it is not necessary for them to cheat at all. (Interview with Han Na, September 26th, 2009)

There are some methods to reduce cheating on the tests, as Li Xuemin later found out. Like Han Na, Li used to feel very upset about student cheating in her Class 5 of the 7th grade. "Some students copy each others' homework. In tests, some students try every method to copy others' answers. " After the first week of teaching, she said that she could not sleep during the night by thinking over and over again about this problem:

> They will never learn if they cheat. I do not know what to do with them. If they do not show what they can really do with their homework and test, how can I know where to start to help them? Besides, it is a flaw in the personal character. I mean, they are not honest. I do not like dishonest person. (Interview with Li Xuemin, September 22nd, 2009)

This was the first impression of her students. However, she soon found that the students cheat because "they do not want to cooperate with the teacher, or they feel too much pressure to get a good score". She tried to solve this problem by reading books and talking to SMS teachers. She quickly realized that establishing trust with her students was not that difficult. She attempted to establish rapport with her students by spending a lot of time talking with them after class. After using adhesive tape to carefully fix the broken homework exercise books for her students,

she began to feel that "they (the students) seem to be moved and become more cooperative." Then she told her students that learning was for themselves, and she trusted that they would be true to their own academic performance.

"We can go from where you are, but you should let yourselves know where you exactly are. Cheating, however, cannot reveal how well you learned. It does not matter how much score you get in my class, but how much you have learned." In one of their class meetings, she clearly explained this to her students and let them know that she would not be in the classroom to supervise their test taking. She said to me, "I do not know what would happen if I leave them behind in the classroom while they are taking the exam. I am really worried that they may just go wild. But I learned this from Teacher Li (Shuqin), and I figure that it was worth a trial." It was to her delight that her students quietly went through the exam as she sat in her office while paying attention to the sound in her classroom next door. As she checked her students' homework, it showed that there was less copying as well.

Han Na seemed to let the distance between herself and her *putongban* students grow by assuming that the students did not want to be honestly working hard. She thought that her students should know that they could work hard and thus cheating was not necessary. For Li Xuemin, she eventually altered her idea about the dishonesty in her students. Taking the pressure off her students and establishing good rapport with them helped her students be honest and put more effort into learning.

Self-Disciplined **（自觉）**

Hard work requires discipline since the student is expected to stay away from distractions and stay focused on learning. All interns used a saying, "Teaching involves three tenth of instruction and seven tenth of discipline." (*jiao xue jiu shi san fen jiao, qi fen guan*, 教学就是三

分教，七分管). A self-disciplined student shows a strong motivation to learn consistently. By contrast, those lacking self-discipline need extra attention and discipline from the teacher.

Hao Chen commented on her self-disciplined students as those who were "more actively engaged in study and take part in the classroom activities." She also found that the self-disciplined students could take the initiative to fulfill their learning tasks without being urged by the teacher to do so:

> They just finish the work quickly and well! They surely learn better than those in lack of discipline. Sometimes I do not know what next assignment should be given to them. You know, I have to wait for those students that learn slower and those that get easily distracted. So I would ask them (self-disciplined students) to preview the next lesson or give them extra readings while I push the other students to catch up.

Hao continued to say that she liked the self-disciplined students not only because they learned better, but also because they were like what she was in her middle school years:

> I was that kind of student that does not need much prodding from the teacher (in the middle school). I know that I can learn well without being pushed to do it. Some students in my class are just like me. There are other students that do not learn unless a teacher urges them to do so. Still others do not even learn in spite of pressure from the teacher. They simply do not have the will power to discipline themselves, I'd say. (Interview with Hao Chen, October 19th, 2009)

Hao also noticed that some of her students in Class 5 of the 7th grade expected that the teacher would push them to learn. "Some students told me that they are afraid of the strict teachers. But they also said that they like those teachers because they help them learn. I guess that I need to *guan* (管) those students and help them. Not everyone can be disciplined by themselves, you know."

Li Xuemin also recognized that she had to pay extra attention and work, *guan*, to discipline students. As was described earlier, she expected the student to be cooperative with the teacher and refrain from cheating on the tests and homework. It required discipline as well.

"Some students are immature and may be easily distracted by all sorts of things. I need them to concentrate on learning."

Ambition **（上进, 好学）**

Working hard is linked to two terms often used by the SMS interns, "*shang jin*" (上进) and "*hao xue*" (好学). *Shang jin* means striving to go upward. *Hao xue* means being curious in learning and enjoying learning. Interests in learning do not just grow naturally. People have fun in doing what they can do well in. And doing well requires working hard. So working hard and enjoying learning are intertwined. These two terms of *shang jin* and *hao xue* are also intrinsically connected since enjoying learning implies a strong desire to learn persistently and consequently go upward in academic ranking, for a better future than their fathers—*shang jin*. I combine these two terms and use ambition to label them because they are frequently used interchangeably by my participants to refer to students' desire to learn well and pursue a good future by means of schooling.

Zhang Qiufang thought that hardworking students had different ambitions from idle students. "Children do not have the same ideas about their future." Zhang once commented on the group of students in the back of their classroom:

> They may not think that they can make the college. They do not have such a goal after graduation from the middle school. They may plan to help their family in their farm or go the city to do the temporary work, like construction or other kinds of manual work. They do not have to study now if they have these kinds of goals. Some children set high aspirations, and decide to go to college. No matter what the result is, this ambition makes them study hard. (Interview with Zhang Qiufang, October 28th, 2009)

When I asked her, Zhang Qiufang was not sure why students had different levels of ambition. Coming from a rural family in Hebei, she felt close to the "ambitious" students as she

herself was such a *shang jin* student. “I think that I know these ambitious students more since I was like them when I was in middle school. None of my family members went to college, and I promised myself that I would be the first one (to go to college). ” As was stated earlier, she compared the students without ambition to learn with her younger brother, who dropped out of school after the 8th grade. “It is all about your plan for the future. My brother never thinks that he is going to anywhere besides our village and small towns nearby. He just wanted to hang around with his friends. Many of my students here are like him.” It was not just Zhang who thought that the *shang jin* and *hao xue* students were more likely to get better academic achievement and a brighter future; her peer interns also appreciated this quality.

Cao Xiaolin, a boy in Hao Chen’s class, was one of this ambitious kind. According to Hao, Cao was a diligent boy, loving to study, doing whatever the teacher asked him to do in the class, and even paying extra effort in learning after class, which was rare for *putongban* students. Hao said, “He told me once that he wants to be an athlete in college. He is on the sports team in Sanji and might be the best academic achiever in his team. I can tell that he is a child that is particularly Shang Jin.” Although Cao Xiaolin did not achieve very high in his class, Hao paid special attention to him during class by asking him to answer questions and by giving him extra tutoring during the breaks between classes.

Thus far, intellectual boundaries seem to be independent of morality (such as working hard) since a person can show that they are competent in learning without studying too hard, such as Cao Shaokun in Feng Qian’s class. And some hardworking students, like Chen Wenjie in Li Xuemin’s class, simply “cannot learn”, no matter how hard they try, because of weak knowledge foundations. But when it comes to examining learning outcomes, intellectual boundaries go hand

in hand with morality for interns in judging whether a student is worth the teacher's time and attention to get them to achieve better academically. Diligence was the most valued and frequently mentioned moral category by the interns. A strong work ethic seems to be read as a guarantee of moral purity as well as academic success. Laziness was condemned as a hindrance to academic achievement.

Excellent academic achievers are expected to have a strong work ethic in exercising their minds intellectually, in order to get into good schools, be admitted to colleges and universities in the cities, and hopefully get a decent job in the city. Academic failure does not mean being corrupt in morality as long as the students work hard in manual labor, which can also lead to a proper life in the future.

Interns, especially those from the cities, separated hard work in manual labor from that in intellectual work. As Han Na said after she went to a gardening project with her *putongban* students,

> Do you still remember the boy I told you yesterday? The one that seems imbecile, does nothing and knows nothing in the class really surprised me this afternoon. He shoveled the weeds quickly and cleaned half of the garden. I do not know how to use the shovel. He came over and helped me. This really gives me a new perspective to look at these students. (Interview with Han Na, October 9th, 2009)

This separation of manual labor from intellectual work was also institutionalized in Sanji Middle School. Students in China are responsible for cleaning the campus. As Chen Long noted, *putongban* students were assigned to arduous work, such as cleaning the bathrooms, weeding, and emptying the trash trolley. Some of the students in *putongban* were asked to help clean while they were in the class. In contrast, *shiyanban* students were only responsible for cleaning their classrooms and the playground. Thus, morality such as hard work is a dual standard for students expected to have different lives in the future.

3. Civilized Sophistication: Elements of Cultural Boundaries

For the interns, the cultural boundary is as salient, if not more salient, than the moral boundary. Cultural boundaries are drawn on the basis of manners (such as interaction manners, confidence, etc.), language, and appearance (such as postures, dressing, etc.). Discussions about these cultural boundaries were abundant in the interviews, especially about the ways by which students interact with teachers and peers. In the beginning of the internship, most of the participants told me that the rural students were "simpler" (*chun pu, 纯朴*) than the urban children. Being "simple" meant being "pure", "less sophisticated", and "knowing little things that may distract from learning". However, as they got to know more about their students further along the internship, they found that not all rural children were as "simple" as they thought. Variety exists.

Manners

There is a paradox in reading interns' comments on Sanji students' manners—simplicity and sophistication. On the one hand, the interns enjoyed the authoritarian role of a teacher when they worked with the simple rural students, who respected the teachers and appeared more obedient. On the other hand, the interns expected their students to behave like "civilized" people in the city—sophisticated, confident, and refined in manners—during student-teacher interactions because these manners make the teacher at ease with the students and thus help students learn. For the participant interns, the difference in terms of simplicity and sophistication did not only mark the urban-rural division but also represented the distinction between *shiyanban* and *putongban* students. For them, *shiyanban* students were more like their sophisticated urban

counterparts, while *putongban* students were typical of simple rural children. Some *dinggang* interns favored the simplicity and some preferred the sophistication, depending on how they expected their students to behave during student-teacher interactions.

As one of the vignettes in the beginning of the chapter shows, Chen Long enjoyed being respected by his students, who were mild and polite compared to their urban counterparts: "They do not argue often with me in the class." He said, "While in my middle school, my classmates like to challenge teachers in the class. Especially boys liked to look for mistakes my teacher made. Of course my teacher did not make many mistakes, but I guess that she might be examined by the microscope and we were not afraid to raise questions. " He thought that it was good for a student to raise questions, which showed that the student was thoughtful and studying hard. However, as a novice, Chen seemed to feel safe in his *Sanji* classroom, especially in his *putongban* class, where students took his lecturing for granted. By contrast, he felt somewhat challenged in his *shiyanban* class since these students "are very attentive and I have [he has] to be very careful in crafting out the lesson."

Han Na found that her students "are sensible and polite when they interact with the teachers". She said,

> They really respect the teacher. You can see that they blush and speak in a soft voice in front of you. We went weeding in the playground the other day. My students caught a worm and showed it to me in their hands. Urban kids won't be so nice. I remember the boys in my middle school class threw some beetles on our intern teacher's dress. (Interview with Han Na, September 26th, 2009)

This comment was on the level of personal interaction. In addition to that, Han seemed to agree with Chen Long in expecting the students to be more audacious, like those in *shiyangban* in Sanji and their urban counterparts, in challenging teachers in the class. "I feel more energized

in Class 2 where I can get a lot of responses, questions, and even challenges to what I said," Han said.

> I *unconsciously* [italics added] gave them more knowledge in addition to what is included in the lesson plan. My teaching in the Classes 3 and 4 seems dull. I myself do not feel interested because they are so quiet without giving me any feedback. Well, sometimes the classroom can get quite noisy because those students sitting in the back always enjoys their own conversations. But mostly, I get dull classes in *putongban*." (Interview with Han Na, October 9th, 2009)

Both Chen and Han were amazed by the peer interaction in their *putongban* classes. Chen found that "they do not play with words, but speak out their direct thoughts. They seem to be very helpful to each other. " Han said that she might feel very relaxed if she had studied in this rural school since there was much less pressure from peer competition. "In my middle school, classmates protect their own study materials. Some students will not share the problem-solving tactics even if they know how to. In my *putongban*, students help each other and discuss a lot."

For Chen Long and Han Na, being "simple" meant straightforward, obedient, and polite. These characteristics were more likely to be found in their *putongban* students. Their *shiyanban* students were bolder and more confident during student-teacher interactions. These manners resembled what Chen and Han remembered from their urban friends.

Feng Qian loved to interact with "simple" rural students. For her, being simple did not mean being ignorant, but being happy with limited choices in their lives. Further, for an urban young girl like Feng Qian, the lively experiences of the rural children on their farms were complementary to her largely indoor activities in the city:

> Children in the city chase after brand clothes, but my students are able to work on their farms. They may not know much about the large world outside their villages, but they are still full of life experiences beyond what is dictated in the books. They know how to grow wheat, for example, while my city friends never know about that. I envy their childhood when they can make friends in picking wild fruits in the mountain, you know. (Interview with Feng Qian, November 1st, 2009)

When asked if there was any lack of connection between her students' life experiences and what was learned in her class, Feng Qian continued to give an optimistic comment:

> I do not think that their limited horizon is going to hinder their learning Chinese language. They are learning their mother tongue anyway. Sometimes it may take some additional effort to explain, but it is not like insurmountably difficult. For instance, I mentioned the newly released film 'Chibi'(Red Cliff, 赤壁) when we were learning the text of 'Red Cliff Ode'. They were lost at that moment. Then I switched the topic and asked them to read the novel 'the Romance of the Three Kingdoms (*San Guo Yan Yi*, 三国演义)' to get the historical background information about this text. Sometimes, their life experiences on the farm can help with reading comprehension in the texts about countryside lives, which are quite a few in our regional textbook in Hebei. (Interview with Feng Qian, November 1st, 2009)

It seems that the interns, such Han Na and Chen Long enjoyed being respected by their "simple" rural students, while also expecting their students to adopt a proactive manner and be more challenging in the classroom. This challenging manner seems to be familiar to them in their urban education setting, although I am not saying that being proactive and challenging are traits found only in urban students. But the interns did imply that these traits were more likely to be found in their *shiyanban* students, who demonstrate the characteristics helpful for them to adapt to the urban high schools where they are expected to enter after graduation.

Language

Language is another cultural marker that pre-service teachers relied on to distinguish their students. For Han Na, as presented in one of the vignettes in the beginning of this chapter, she seemed to think that the formal language she usually used can convey the abstract chemistry ideas in the textbooks, while colloquial language conveys the meaning that is grounded in students' rural lives. As she tried to explain chemistry knowledge to the *putongban* students in a more colloquial form, she felt that these *putongban* students were incapable of explicating abstract ideas.

As discussed earlier, Hao Chen found written language a useful criterion to differentiate the students. Handwriting signaled the capability of the student to learn Chinese. Although she also argued that the content and meaning within the students' compositions were important to evaluate how well they learned Chinese, she got her first impression from their handwriting and made her judgments based on the forms of the language.

Li Xuemin found that some difficult problems might involve understanding language about something absent in students' lives. But there is a way to solve such a problem. As illustrated in the section about intellectual boundaries, the example Li Xueming used showed that rural children had a hard time understanding the cell phone fee since they did not have their own cell phone as their urban counterparts did. There is another example that shows how language makes math difficult:

> A branded shoe chain store is selling a membership card. If you buy this card for 200 Yuan, you can get 20% discounts off in the store. How much do you have to spend on their shoes so that the membership card helps you save the money?
> (某名牌连锁店出售一种会员卡，花 200 元购买这种会员卡后，凭会员卡在名牌鞋店的任一连锁店享受八折优惠。什么情况下买会员卡购物合算？)

Li pointed out that the first step for students to solve this problem was to use math language—the numbers and the premises—to restate the language in the problem. Li thought that this seemed difficult since students in the rural areas did not know about discounts in shopping. And there were quite a few problems that were similar. Students could quickly solve this kind of problem as long as a teacher explained what it was meant by "discount", walked them through the process of looking for the relationship among the items, and wrote down an equation. "After practicing several problems in the same kind, the students will have no problems in solving these problems."

Language, in both spoken and written forms, was used by the interns to differentiate their students and strengthen their impression of differences between *putongban* and *shiyanban* students. However, Li's experiences suggested that the chasm based on language could be fixed as long as the teacher realized that it was the meaning, rather than the form, of the language that mattered.

Appearance

Appearance influenced the pre-service teachers' perceptions about their rural students and served as an evaluative criterion for them to examine their students. Some inferred other qualities, such as intelligence and morality, from how students appeared. Some pre-service teachers, however, could detect the quality beneath the appearances.

From early on during the internship, all the pre-service teachers commented on the fact that SMS students wore plain, simple clothes. As Han Na said, "Students in SMS are wearing simple homemade clothes. They look like what I saw in the film depicting stories that happened a decade ago." Those children falling out of the stereotypes of being a "simple" rural child were thought to be as sophisticated as a city child if they wore fashionable clothing, and behaved boldly, as well as achieving well academically. Xu Hao was such a boy. Being referred to as the "boy in red shoes", Xu Hao was deemed by the interns as a student like those from the city.

Pre-service teachers later found differences in appearance between their *putongban* and *shiyanban* students. Chen Long, as was shown in the vignette earlier, favored the upright posture of his *shiyanban* students. He assumed that those walking slackly were those from *putongban*. For him, good students appeared to be full of vigor and vitality, which were linked to their strong motivation, discipline, and confidence.

Jin Junshu commented on those *putongban* students who recently transferred to her *shiyanban* as "messy". "They appear less organized than *shiyanban* students, with messy desks and beds in the dorm. My *shiyanban* students keep complaining about how these students are lazy, loud and untidy." She said to Li Xuemin who was already a little upset about losing her best students in Class 5 since they went to *shiyanban*. This led to an argument between Jin and Li. Li later told me that she felt a little angry about her friend since *putongban* students did not deserve such comments. "They may appear differently from *shiyanban* students," Li says, "They are still good kids. They (*shiyanban* students) just look down upon them. Given opportunities and more attention, my students (those transferred to *shiyanban*) can learn as well as most of the *shiyanban* students."

In a word, appearance served as a cultural label for pre-service teachers to understand their rural students. Although mainly describing the outlook of the students, this label is frequently attached to the refinement of the students' minds. A vigorous walking posture, tidy desks, and fashionable clothes seemed to suggest desirable characteristics in the students—being confident, organized, and sophisticated.

III. Summary

In this chapter, three sets of symbolic boundaries——intellectual, moral, and cultural——are delineated to examine the *dinggang* pre-service teachers' perceptions of their rural students in Sanji Middle School. As was introduced in Chapter 2, the tracking system of *putongban* and *shiyanban* shaped the pre-service teachers' boundary drawing among their students as well as between themselves and their rural students. The intellectual, moral, and cultural boundaries the interns made reinforced or explained the differences the school creates throughout its tracking.

Nevertheless, in this chapter, I showed that these intellectual, moral, and cultural boundaries are not firm, and they are malleable to some extent in specific circumstances.

Pre-service teachers used intellectual boundaries to differentiate students with or without intellectual potential. For students with potential, pre-service teachers were willing to assign more advanced learning tasks. For students without potential, pre-service teachers tended to assign simple learning tasks and gave less attention than those with potential. This distinction resided both between *putongban* and *shiyanban*, as well as within these classes. When the intellectual boundary was considered along with the moral boundaries, pre-service teachers tended to re-chart their boundary drawing. For instance, Cao Xiaolin, the student regarded as having minimum intellectual potential, demonstrated a strong work ethic. This moral quality of hard work invited his intern teachers to provide extra attention and effort to help him improve academically.

For some interns, cultural boundaries seemed to signal the intellectual potential of students. As Chen Long and Hao Chen pointed out, a "sophisticated" "urban-like" student appeared more intellectually refined and confident. This cultural boundary making could be dissolved quickly; however, as Li Xuemin found that a "simple" rural student could solve advanced learning problems after s/he mastered the key to tackle this type of learning problem.

Hence, I argue that these pre-service teachers did not use one single criterion to evaluate their students. Instead, they mixed these criteria to make sense of their students. How they used these criteria to evaluate their students hinged on how they identified themselves and how they rationalized their learn-to-teach experiences.

As young people from comparatively affluent urban areas, Chen Long, Han Na, Jin Junshu, and Hao Chen expected their students to appear like their urban counterparts, being confident,

audacious, and refined in their manners. The appearance seemed to ease their interaction with these rural students as well as signal these students' competitiveness and brightness. For them, *shiyanban* students demonstrated these desirable characteristics, which ensured the access for them to get into a key high school in the city and eventually become urban residents if they could make it to college. In contrast, most *putongban* students were not like these urban pre-service teachers. The *putongban* students seem to be typical simple rural children who were carefree without worrying about competition to get into a key high school in the city, and instead lying back without hard work. For Li Xuemin and Zhang Qiufang, who were from a similar background to their rural students (small town and rural village), they tend to emphasize the moral boundaries, especially hard work. They themselves strived to leave their rural hometown and enter a distinguished college in the city by hard work. They expected that their rural students, no matter how they appeared or whether they were very smart, to study hard. Hence, the moral boundaries for Li and Zhang seemed firmer than other boundaries for them. The only exception was the intellectual boundary—if a student could not get the point no matter how hard s/he worked, this student was largely excluded from the group that could move upward academically. Both groups of pre-service teachers, with either rural or urban backgrounds, tried to understand their rural pupils out of their own experiences but ended up with various perceptions.

Revisiting the symbolic boundaries the pre-service teachers used, I find it necessary to further explore how these boundaries linked to the teaching practices they employed to either strengthen or cross these boundaries. Pre-service teachers seemed to intertwine the distinctions and boundaries they constructed with what they had learned about teaching, and they used these distinctions as kinds of evaluative criteria to guide their teaching practice. During this process, they acquired teaching skills in response to the evaluative criteria they used to differentiate their

students. For instance, Zhang Qiufang learned from her mentor to have her sloppy *putongban* students memorize answers to a set of learning problems. Li Xuemin grappled with the idea of classifying learning problems according to levels of difficulty, and to help her leveled students make progress. In turn, the enactment of teaching skills pushed pre-service teachers to either reinforce boundaries or dissolve them. It seems that Zhang's strategy of memorization made both her students and she herself bored and hence strengthened the idea that her *putongban* students were below average and were not motivated to learn. Li Xuemin seemed to set a higher goal for her students to make progress—starting with simple questions while aiming at more advanced problem-solving. For Zhang's case, the previous boundaries drawn between good students and backward students were reinforced, while Li may have managed to help backward students to cross the boundaries set by their teachers or by their peers. Therefore, it is important to examine how the symbolic boundaries played a role in actual teaching practice and how they interacted with pre-service teachers' learn-to-teach process.

As is shown in this chapter, and is further explored in Chapter 4, one of the most important teaching strategies for the SMS teachers and the student teachers was to have the pupils practice on categorized learning problems in the tests. That is, through drills on the variety of the problems that connect to one set of knowledge points, the pupils were expected to master the knowledge as well as to grasp the thinking skills to solve one category of learning problems. Different types of learning problems were assigned to different groups of students, who were classified based on the symbolic boundaries the (pre-service) teachers had in their minds. In the following chapter, I first explore the cultural repertoire that contributed to the making of these symbolic boundaries before I discuss the strategy of categorizing learning problems briefly described above.

Chapter 4 Differentiation: Boundary Work in Teaching and Test Exercise Lessons (*xi ti ke,* 习题课)

In the last chapter, I suggested that the pre-service teachers may not have been aware of the biased symbolic boundaries they were using as the evaluative criteria to differentiate students. In some cases, they confused the unexamined symbolic boundaries with education evaluation of what the student is really capable of and what s/he needs. The emotional distance marked by the symbolic boundaries may have prevented the interns from approaching the students with sympathy and understanding. In this chapter, I explore this further as I depict how the symbolic boundaries—cultural, intellectual, and moral boundaries—were enacted when the intern participants learned to teach different groups of students. Specifically, I examine one particular type of lesson—test exercise lesson (*xi ti ke*, 习题课) —to explore what the interns learned to teach different students, and how individual interns used the test exercise lessons differently. In the last section of this chapter, I will use the cases of Chen Long and Li Xuemin to illuminate these differences among interns.

In her book comparing teaching practices in France and in the United States, Anderson-Levitt (2002) articulated how the practice of teaching is rooted in complex indeterminate knowledge. Also, teaching is composed of moment-to-moment interactions and thought in action organized by culturally shared underlying principles and norms in national and professional contexts. One of her findings was about teachers' practices of differentiation and grouping. She found that in the US, grouping means less content and slower pace for weaker learners (Anderson-Levitt, 2002). Besides "covering" less content, lower groups typically get treated differently than higher groups. In other studies about differentiation in US classrooms, teachers tend to correct students in the lower group more often and more quickly, thus reducing the

children's opportunities to correct themselves (Allington, 2000; Cazden, 2001). Teachers also tend to emphasize correct decoding and hence the pronunciation of individual words with the lower group, while stressing comprehension and intonation with the higher group (Cazden, 2001). In addition, US educators seem to believe that weaker students will learn better if they are burdened with fewer materials, a belief which Barr and Dreeben found in their influential study many years ago (1983). These differentiations in teaching based on unexamined symbolic boundaries can have a negative impact upon students. For instance, Anagnostopoulos (2006) suggested that differentiation based on students' morality limits the instructional resources and learning opportunities provided to demoted students and in turn reinforces the moral boundaries the teacher initially drew.

In *Sanji* Middle School, *putongban* students, the lower groups, are exposed to the same sets of concepts as other students, but the teachers tend to give easier assignments. Easy assignments were referred to as "recalling, understanding, and applying discrete knowledge points to solve problems, and fewer tasks in making connections among knowledge points in problem-solving" (Interview with Jin Junshu, September 29, 2009). *Putongban* students did not necessarily obtain less attention from the teachers. Lower groups within the *putongban* and *shiyanban* got more or less attention from the teachers than their peers in higher groups in the same class, depending on how their behaviors and performances were judged. I argue that differentiation in teaching does not necessarily mean exclusion, and thus does not naturally lead to reinforcement of the boundaries. Being used with caution and respect, differentiation in teaching can be a way to empower students based on the individuals'/groups' distinct characteristics. For instance, various exercises and tests were constructed and assigned to students at different levels. Lower groups got "easy" exercises and higher achievers were assigned more "difficult" ones. It may look on

the surface like separate treatment. I think that these separate treatments aimed at transcending the original symbolic boundaries can achieve this goal if the teaching is suitable for individuals' academic development.

Specifically, I examine a particular type of instructional activity—*test exercise lessons* (习题课)—that my participants were intensely engaged with during their internship. They designed the quizzes/tests organized by knowledge points and/or types of test items, had the students complete the quizzes/tests, read and appraised the test papers, and later explained the test items (*chuan jiang*, 串讲) in the *test exercise lessons*. During this process, they learned, or acquired without much awareness, about the veteran teachers' differentiation techniques. Some of them acquired the differentiation technique to teach *for* tests and reinforce the boundaries among the *putongban* and *shiyanban* students. It did not matter whether it was intellectual, cultural, or moral boundaries that justified the differentiation they made in teaching. These interns ended up with strengthened biases against the lower groups. Some interns, however, learned to actively use this "teaching *through* assessment" technique to rewrite their own enacted curriculum, tailored for their own students, based on a solid understanding of the key content, the level of the students (the misconceptions the students were most likely to have), and a sincere effort to look for approaches of presentation that could make sense to their students.

I. Boundary Work in Action: Evaluative Criteria and Differentiation in Teaching

During classroom observation, I found that there were several aspects of differentiation that the participant interns were engaged in to make distinctions among groups of students pedagogically: content, tasks, attention, and time/pace. That is, they learned how to select content to teach students at varied content levels, devise more difficult or easier assignments for

different students, employ different strategies to give attention to diverse students, and spend more or less time with various groups at different paces. As I asked the participants about the rationale behind the differences they made in teaching, they referred to the symbolic boundaries they drew among their students—intellectual boundaries, moral boundaries, and cultural boundaries. Further, given the background of these interns as young people being raised in the city and/or educated in a college in an urban area, these symbolic boundaries reflected the evaluative criteria for these interns to perceive rural students as well as what a teacher valued in a student. These evaluative criteria always separated those students with desirable characteristics from those without. Often these symbolic boundaries were used as criteria for differentiated teaching. Without pondering what counted as criteria that truly reflect students' capability and learning needs, what interns relied on to differentiate students were mainly their own assumptions.

I observed thirty classes in total, each followed by a post-observation interview. These observations were scheduled depending on the willingness of the interns to have me sit in the class. I sat in the back of their classes for most of the time, and audio-taped (sometimes videotaped with interns' permissions) the instruction. When there was group work or individual student work, I moved around in the class and observed what the students were working on and how teachers interacted with the students. After the observation of a 45-minute class, I conducted and recorded a 30-60 minute interview with the intern. If I felt rushed to conduct this post-observation interview immediately after class, I tried to interview them at the end of the day when they still remembered the details of the class. During the interviews, I mainly focused on learning about the different assignments, activities, and their thinking about when to choose some students to answer certain types of questions. The interns shared with me their lesson plans,

test papers, exercises, and the additional teaching materials they used for the class when I asked them.

Thus, the data includes field notes, written documents (test papers, exercises, etc.), audio-tapes of two classes taught by Wang Kun[17] and four classes by each of the other interns, and I recorded interviews after the class. I used N-Vivo 8 to read and code these data, and I identified four areas in which the interns explicitly talked about the differentiation techniques they used during teaching when I asked them: (1) Teaching Content; (2) Learning Activities; (3) Teacher Attention (the ways and amount of attention that a teacher provides to students); and (4) Time/Pace.

Table 4.1 Instances of Differentiation in Teaching Based On Symbolic Boundaries

	Intellectual boundaries	Cultural Boundaries	Moral boundaries
Teaching content	17	5	8
Learning activities	14	3	9
Teacher attention	5	10	13
Time/pace	7	2	6

A pattern stood out as I used the query-matrices function in N-Vivo8 to find out how the symbolic boundaries were operationalzed to rationalize the differences the intern participants made in their teaching. As represented in Table 4.1, the numbers show how frequently each set of boundaries was mentioned when the interns were asked about differentiation in their teaching during an observed class. For one instance of differentiation they made in teaching, they might explain it with one or two symbolic boundaries. Intellectual boundaries were frequently referred

[17] Wang Kun taught fine arts and geography. Due to time conflicts and much of her teaching of geography, which was not her field, I observed her in fewer classes than her peers.

to when the intern participants talked about the differences in teaching the content they selected for different groups of students. Sometimes they mentioned cultural and moral boundaries for the differences in the selected tasks. Intellectual boundaries again dominated, while fewer cultural and moral boundaries were mentioned to support the differences in the learning activities they designed. They referred to all three boundaries while particularly stressing the moral boundaries as evaluative criteria to guide their strategies of allocating attention. Intellectual and moral boundaries were also occasionally used to decide different time allocations and paces of instruction, while cultural boundaries were seldom mentioned for this aspect. Specifically, teaching content, learning activities, teacher attention, and time/pace will be discussed below:

Teaching Content: All classes in the same grade used the same textbook, and hence the same teaching content was provided in the standardized textbooks. But *shiyanban* students got additional learning materials, such as a bi-weekly paper full of exercises in synchrony with the textbook units, while *putongban* students did not. The concepts students were required to master were the same for both groups, but they were taught with different expectations along with different assignments. For instance, Jin Junshu tended to ask her students in *shiyanban* with "*qian li*"—on the higher level of the intellectual boundaries—to answer difficult questions which involved "thorough understanding and complex connection among multiple knowledge points". Lower achievers in her class got to work on assignments that "only request recalling and applying one or two knowledge points". Jin's justification was that

> The lower groups have not understood the individual knowledge points yet. Asking them to do complex assignments can make them even more confused. Easier assignments could help them get a better understanding of the individual knowledge points before they can establish connections." (Observation and following interview with Jin Junshu, October 18th, 2009)

Thus, learning the same sets of concepts in the standardized textbooks, the more advanced students were given content in a way that required deeper understanding of the knowledge and the connections among the knowledge. However, Li Xuemin distinguished simple (*jian dan*, 简单) questions from easy ones (*rong yi*, 容易) for her students to practice with the concepts:

> Those simple exercises are too easy for *shiyanban* students. But they may not be very easy for *putongban* students. Doing these exercises can be a good start for them to grasp the concept, go through the correct procedure of problem-solving, and really understand the concept…not just memorizing the equation, but really understand why they should use the equation" (Observation and following interview with Li Xuemin, October 27th, 2009).

Feng Qian also provided additional reading content for her *putongban* students and stated that "abundant reading that speaks to their simple life experiences will refine their ability to appreciate the Chinese language and help them learn" (Observation of Feng Qian and following interview, September 10th, 2009). By putting understanding of math concepts or the appreciation of Chinese language as the goals instead of having students get the correct answer by memorizing, interns seemed to be able to discern the characteristics of their students and to try to figure out the pedagogical implications of how to teach these students.

Learning Activities: In the dimension of learning activities, interns learned to design different activities for different groups of students during the period of my observations. For instance, interns used more group work and peer discussion in *shiyanban* than *putongban* since they worried about the discipline problems involved in group work in *putongban*. They were also concerned that *putongban* students may "not know how to use the time efficiently to talk with peers in class", and they therefore preferred teacher-whole class instruction in *putongban*. (Observation and following interview with Han Na, November 4th, 2009)

Another example is that Zhang Qiufang was advised by Teacher Yang Yan not to have her *putongban* students practice oral English conversation in pairs, which was used by *shiyanban* students, since "it was a waste of time to have these [*putongban*] students practice oral English as they do not even know how to use the vocabulary to make a conversation in English". Instead, Zhang had her students read aloud the texts in the book as a whole class "in order to memorize the usage and vocabulary" (Observation and following interview with Zhang Qiufang, October 29th, 2009). In contrast, however, Li Xuemin, influenced by Teacher Li Shuqin, was trying to adopt group work in her math lessons with Class 5 (*putongban*) of the 7th Grade, with detailed guidelines for students to group and discuss problems. Her reasoning was that most of her students "were capable of and interested in solving problems at their level". It also occurred to her that, given the opportunity, her "students' explanations sometimes made more sense to their peers". In addition, she observed from Teacher Li's class that "the group work helped to push students actively to explore the problem with each other instead of waiting for answers from the teacher". (Observation and following interview with Li Xuemin, October 27th, 2009)

Thus, knowing how a learning activity can contribute to her students' learning requires an observation and understanding of what the students need instead of relying on what the teacher thinks about the students.

Teacher Attention: Intern teachers did not necessarily provide more attention to higher academic achievers. Sometimes, they admitted that their attention in the class was geared more toward students with disciplinary problems. Intern participants frequently used the term "*guan*" (管) to describe how they directed their attention to different groups of students. For different interns, *guan* had a slightly different meaning. For instance, Jin Junshu said that *guan* meant

"always think of my students, pay attention to how they are doing in their study, and find a way to support their learning". Han Na stated that *guan* meant "having my students complete their assignments and discipline themselves in class." Generally, *guan* denoted teachers' effort to observe students, pay attention to their studying, and supervise how students learned. In this sense, this term is close to monitoring.

Alexander (2001) cautioned researchers about the differences between "instructional/evaluative monitoring" that focuses on whether the students learn the content, and "supervisory monitoring" which aims at disciplinary, behavior management in the learning activities (Alexander, 2001, p.409). During my field work, I observed that the interns provided more "instructional/evaluative monitoring" to *shiyanban* students or higher academic achievers in *putongban*. In contrast, intern participants largely maintained disciplinary monitoring of lower achievers. For instance, Han Na constantly reminded her *putongban* students to take notes, be quiet, and stay focused. Her teaching in *shiyanban*, however, was much less interrupted with such disciplinary monitoring but instead had more comments, such as "please note that element oxygen is different from oxygen" or "check your experiment report to see if you have clearly differentiated the description of what you have observed in the experiment and the outcome/product of it."

In addition to the two types of monitoring above, Jin Junshu, Han Na, Chen Long, and Zhang Qiufang also said that they tended to ignore (*bu guan*, no monitoring at all, 不管) those "hopeless" students when they became very frustrated about these students' lack of effort and cooperation with the teacher, or about their not being smart enough. Although Li Xuemin, Feng Qian, Hao Chen, and Wang Kun also tended to use a lot of disciplinary monitoring in their teaching with *putongban* students and sometimes used evaluative/instructional monitoring,

especially with those students they thought had "*qian li*"; they were trying to give some kind of attention to all the students. For instance, as I observed in Li Xuemin's class, she walked around the classroom when students were doing assigned worksheets. She stopped beside Cao Xiaolin, who was at the bottom of the academic ranking in her class, observed him struggling with one of the learning problems, and provided suggestions on how to solve it. Feng Qian also used quite a few evaluative/instructional monitoring techniques during her teaching in Class 5 of the 8th grade (*putongban*), such as "when you discuss with your peers about the author's love for his father, make sure that you quote sentences and show how these sentences tell you the author's feelings." In this way, Feng Qian was not only directing and organizing the group work, but also monitoring the process of learning to analyze the text.

Time/Pace: I observed that the amount of time and how it was spent in the participants' classes differed for different groups of students. Most interns noted the faster pace of teaching for higher achieving students. Some preferred to have lower groups on a faster pace so that they could have more time to review what had been taught before the tests. Zhang Qiufang walked her *putongban* students through all three English units when the *shiyanban* students had just finished the second unit. In this way, she could "have a lot of time to review the knowledge and have students practice a lot of exercises and quizzes to repeat and reinforce what they have learned". When I asked why *putongban* students needed the time to practice and take quizzes, Zhang said,

> The [*putongban*] students do not have a solid knowledge foundation or systemic knowledge about English. Some of them cannot memorize more than 20 English words, let alone understanding the grammar. If we want to achieve higher test scores, as Teacher Yang Yan told me, we have to give them a lot of practice on what is most likely to be tested. Teacher Yang has a metaphor of fishing for teaching in *putongban*: You teach whatever is most likely to gain test scores as throwing your fishing pole towards wherever you are going to catch the most fish. (Observation and following interview with Zhang Qiufang, October 29th, 2009).

Han Na also used a faster pace in *putongban*, in a different way. She preferred to prepare a lesson plan, teach it first in *putongban*, and use this as a rehearsal for teaching the revised lesson plan to her *shiyanban* students, who "required more organized, coherent and well-designed lessons than their indifferent peers in *putongban*" (Observation and following interview with Han Na, November 4th, 2009). Han Na seemed to draw an intellectual boundary based on students' learning habits. Similarly, Chen Long drew intellectual boundaries between *shiyanban* and *putongban* students. He taught his *shiyanban* students at a faster pace since "they learn faster and they become bored if I teach at the same slow pace as I do in *putongban*. *Putongban* students may not be able to catch up if I teach them in such a fast pace." Li Xuemin also kept a relatively slow pace teaching her *putongban* students. She said, "I would not have them work on polynomials if they have not understood monomials" (Interview with Li Xuemin, October 22nd, 2009). Her assumption was the metaphor of "taking steps" illustrated earlier in Chapter 3, an approach which insists that learning new math knowledge involves making connections to the required prior knowledge within the system of mathematical knowledge. The time/pace of teaching was a deliberate choice based on what the intern participants expected of their students' learning.

In sum, intern participants marked intellectual, cultural, and moral boundaries among their students and used these distinctions to make sense of how their students learned and to guide their selection of teaching content/strategies. Although not all the interns recognized the problem with their presumed evaluative criteria for judging their students, almost every intern at some point of their internship said that they had to "teaching according to students' characteristics" (*yin cai shi jiao*, 因材施教), which in China is a widely accepted idea of Confucius. In other

words, they were evaluating students in order to guide their teaching. They first strived to organize the content—what should be taught in the textbook and what is to be tested—and classified it at difficult and easy levels. Then they designed different learning activities and teaching techniques, including monitoring, and teaching at different paces. They made all these differences so as to work with a group of students, who they saw as "smart" or "slow", "disciplined" or "carefree", "diligent" or "lazy", and so on. The assumption was that the teaching content and methods should be adapted to the students.

The problem was that the interns generally used the presumed symbolic boundaries and tended to take them for granted as fixed evaluative criteria. Interns started from the test scores, which had separated students into *putongban* and *shiyanban*, to understand their students. Then they attributed the students' achievement in test scores to their intellectual, cultural, and moral characteristics. That is, the interns tended to assign attributes as the cause of students' academic performances. When these attributes, in the aspects of intellect, culture, and morality, were deemed fixed and ingrained in students' learning, interns tended to use teaching methods deemed "fit" for these attributes. This was likely to reinforce the distinction among students by providing easier and more limited content to lower achievers in a less interactive and more supervisory approach. In contrast, if interns did not attribute students' personal traits solely to the cause of their academic performance and considered teaching and other situational factors vital for students learning, they were likely to view the intellectual, cultural, and moral differences in students as fluid and malleable. Given this mindset, they would try to provide lower achievers challenging content (simple but with conceptual challenge) with teaching strategies that could help students make progress.

Below, I use a type of lesson that participants intensively engaged with during their internship, *test exercise lesson* (*xi ti ke,* 习题课), to illustrate how interns enacted symbolic boundaries in their learn-to-teach process. How these interns ended up with their original symbolic boundaries—whether strengthening or shifting/crossing the boundaries—seemed to depend on whether they attributed students' academic performance to students' personal traits (intellectual, cultural and moral) solely or whether they considered teaching as the important factor. How these interns dealt with their original symbolic boundaries was also highly influenced by what they had learned in teaching this particular type of lesson, what sort of mentoring they had, and how pupils reacted to their teaching.

II. Test Exercise Lesson (*xi ti ke,* 习题课) and Rewriting Curriculum in a Standardized Curricular Setting

In *Sanji*, interns learned to polish their teaching skills in correspondence with the level and needs of their students by teaching a particular type of lesson—test exercise lesson (*xi ti ke*, 习题课), which was also a regular activity of all Sanji Middle School teachers in their daily teaching. At least half of the observed student teaching classes during my field work were test exercise lessons. Some interns complained about being given such a "low-risk" lesson instead of teaching new concepts to students (Jin Junshu, Zhang Qiufang, Han Na), while some interns found learning how to teach test exercise lessons helpful for their students (Li Xuemin, Wang Kun, Hao Chen, Feng Qian, Chen Long). Below, I introduce what test exercise lesson is, how SMS teachers used it, how interns were mentored to teach such a lesson, and what the interns learned from test exercise lessons in regards to differentiating students.

Test exercise lessons usually followed a test or quiz in the middle or at the end of every unit to evaluate how well the students had learned. Sometimes, SMS teachers would give a test

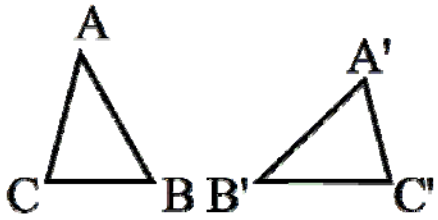
before a unit began to check for students' prior knowledge. Teachers usually designed their own tests or sometimes used commercially available tests, and marked scores on students' performance. The scores did not count in the final evaluation at the end of the semester, but were used to identify the students' learning progress. These formative tests were assigned frequently to give both students and teachers a sense of where they were in the process of learning and teaching. Researchers have pointed out that ongoing assessment plays a key role, and is possibly the most important role, in shaping classroom standards and increasing learning goals (Black & William, 1998). It checks the students' learning status and helps them establish/see connections among knowledge.

The value of these tests, however, lies not only in itself but also in the following test exercise lessons during which the teacher teaches a class and analyzes the common errors, explains the procedures to get correct answers, and provides connections between the test items and what has been taught in class. Some teachers used the form of test exercise lessons to explain the common errors students made in their homework, and so to clarify misunderstandings. As Teacher Li Shuqin said, test exercise lessons helped teachers to make full use of the test items to facilitate learning, and the teachers should not "waste" it:

> I enjoy test exercise lessons much more than teaching concepts! What we talk about in these lessons is "alive" (*huo*, 活)! All the operations become applicable in the test items and we can use them by means of correct procedures…When you ask a student to do a test, you cannot waste it. When students finish doing a test item, they should not waste their time doing it. You have to explain the test papers in a structured order (chuan jiang, 串讲) in class! Otherwise, you are wasting the test and your time! Oh, surely, you have to do it [explain the test papers] well, or you are still wasting your time (laugh…). (Conversation with Teacher Li Shuqin, November 4th, 2009)

Another reason for Teacher Li to enjoy test exercise lessons was that the tests were usually developed by herself based on what she taught, what she deemed important to learn, and the common misconceptions her students might have. By using these home-made tests, she could

know how to help her own students in follow-up teaching. Actually, developing and explaining the tests were not invented solely by Teacher Li. Such a practice was common in Sanji Middle School and in Chinese schools in general. The math Teacher Shan Junfang, Teacher Li Shuqin, the chemistry Teacher Fan Yonggang, Chinese Teacher Li Zhenxia, and many more teachers shared with the interns and me about how they practiced test exercise lessons. Here is an excerpt of how Teacher Li Shuqin explained one test item in Class 5 of the 8th grade:

> Li: Many of you got it wrong on this multiple-choice item. As you solve it, please note that we can use symbol-graphic combination method. Whenever you see such a problem to request comparison of two triangles in geometry, draw the graph. Now read aloud the item and I will draw the graph on the blackboard.
>
> Ss: (read the item) In ΔABC and ΔA'B'C', ∠A=44°, ∠B=67°, ∠C'= 69°, ∠ B'=44°, AC=B'C'. These two triangles:
> A. are not congruent; B. must be congruent triangles; C. may not be congruent; D. None of the above is correct
>
> Li: This problem tests our understanding of congruent triangles. Let's look at the graph. It can help us address the problem visually and directly. But the key to solve the problem is still the conditions the item provides. What are the conditions?
>
> S: ∠A=44°
>
> Li: And? （marks the degree on ΔABC on the blackboard）
>
> S: ∠B=67°, ∠C'= 69°, ∠ B=44°, AC=B'C'
>
> 
>
>
> Li: Now do they look congruent?
>
> S: Yes. (hesitantly)
>
> Li: How do we prove that they are congruent?
>
> Ss: Checking if they correspond to the rules.
>
> Li: What are the rules?
>
> Ss: Side-Angle-Side, Side-Side-Side, Angle-Side-Angle, and Angle- Angle-Side!

Li: Good. Please make sure that you understand what these rules mean. Now use two minutes to talk with your peers and ask if you are not quite clear about these rules. ……Now let's find out whether these two triangles correspond to one of these rules. Note that three conditions are needed for the proof. Which angles and sides are the same in these two?

S: ∠A= ∠ B', AC=B'C'

Li: Hmm, it seems that we need to find out one more condition to prove that they are congruent. Can you find one more? … (some students respond in faint voices)… If you know the degrees of two interior angles in a triangle, can you find out the degree of the third angle?

Ss: Yes!

Li: Why?

Ss: The sum of the degrees of the interior angles in a triangle is 180°.

Li: Now look at the test item again. What can you get?

Ss: ∠C=69°, ∠A'=67°

Li: Then?

S: ∠ B=∠A', ∠C= ∠C', AC=B'C'. It is Angle-Side-Angle. They are congruent! It's B!

Li: Some students said no because ∠A≠∠A'. So what? Who said that ∠A has to be equal to ∠A'? We can rotate the triangle like this, right?
(Observation of a lesson taught by Teacher Li Shuqin, October 20th, 2009)

From the instruction depicted above, we can tell that Teacher Li was trying to guide students to use the known conditions to reason and solve the problem. An implicit known condition was uncovered by making connection to the factor of "the sum of the degrees of the interior angles in a triangle is 180°". The students also learned how to convert a textual description of the problem into graphs and then use graphs to seek the solution. Thus, the connection of knowledge points, the procedure of problem-solving, and application of the

"symbolic-graphic method" were integrated in the process of explaining this single test item. As Bransford (2000) found in his study on how people learn and how math/history/science teachers can achieve effective teaching, learning skills should be made explicit to novices/students by experts/teachers:

> Skills, such as the ability to describe a problem in detail before attempting a solution, the ability to determine what relevant information should enter the analysis of a problem, and the ability to decide which procedures can be used to generate problem descriptions and analyses, are tacitly used by experts but rarely taught explicitly...(p.165)

Teacher Li Shuqin and her colleagues in SMS seemed to agree with the idea described by Bransford, as we see in their effort to make problem-solving skills explicit in their test exercise lessons. Li Xuemin was observing this class with me. Fascinated by the procedure of explaining the test item, she was thinking of adopting this method to teach her Class 5 of the 7th grade. As a matter of fact, Li Xuemin invited Teacher Li and other teachers to sit in on her test exercise lesson class to provide feedback on how to craft an effective test exercise lesson. She quickly learned that she should "focus on students' understanding of the concepts using a series of similar test items, explain four to five items in one lesson instead of going through the surface of a lot of items, and ensure that students use logical steps to solve the problems using proof"(Interview with Li Xuemin, October 22nd, 2009). Not only Li Xuemin, but also all the other interns were provided with advice on how to teach test exercise lessons. All of them observed at least one test exercise lesson taught by their mentor teachers.

Although this was a very common type of lesson during internship, taking place once every few days, not all interns regarded it as important as a "concept class" (*gai nian ke*, 概念课), which introduced new concepts to students usually at the beginning of each unit. As Jin Junshu complained, her mentor, Teacher Shan Junfang, did not allow her to teach a concept class in which new math concepts were introduced but had her teach test exercise lessons in the

beginning of the internship. Even though she had such a complaint, she carefully designed lesson plans for test exercise lessons as her peer interns did, and learned to categorize test items in preparation for test exercise lessons.

According to Sanji teachers, a successful test exercise lesson is not only walking the students through the procedure of problem-solving. It begins with a deliberate organization of "typical" test items adopted from various teaching materials. SMS teachers and later the interns frequently used "typical" test items (*dian xing shi ti*, 典型试题) to refer to those reflecting the typical misconceptions the students might have about the learning content and checking if students were able to employ correct reasoning to solve the problem. By organizing items like these, the teacher could establish a reservoir of test items organized by concepts and problem-solving procedures. From time to time, the teachers selected items from this greater pool according to what they understood as the key point in the curriculum as well as students' current understanding, had the students take a quiz on these items, and extracted the essentials of the items in test exercise lessons. Teacher Shan guided Jin Junshu to organize test items and once told me that HNU interns were learning this useful technique from scratch:

> Almost every teacher in Sanji Middle School analyzes the major test papers such as annual high school entrance exam papers and the textbook exercise guidebooks (*jiao cai tong bu xun lian ce*, 教材同步训练册). We have our own system of analyzing the tests, develop our own tests for the students, and explain their errors afterwards….Maybe you can tell those researchers and teacher educators in Hebei Normal University to train their student teachers to learn how to do this. (Interview with Teacher Shan Junfang, November 3rd, 2009)

Teacher Shan's suggestion to teacher educators seemed to me to correspond to what some researchers' advise—new teachers must develop the ability to "understand in a pedagogically reflective way; they must not only know their own way around a discipline, but must know the 'conceptual barriers' likely to hinder others" (McDonald and Naso, 1986, p.8). This could not be

done by simply handing over and reading a standardized textbook to the students. Curriculum-based assessment and assessment-informed curriculum enacted in SMS classrooms, and in many Chinese classrooms in general, might offer opportunities for (new) teachers to teach effectively.

In the Chinese education context, where national or provincial standardized curricula are prescribed, SMS teachers do not only rely on textbook publishers, who know little about their particular students, for decisions about how to best organize knowledge for students. They collect and organize "typical" test items, which are believed to be useful and efficient learning problems to test students' knowledge of concepts and problem-solving procedures, and develop their own test papers followed by detailed test exercise lessons. Hence, writing assessment items, making use of assessment, and explaining assessment items could lead to a re-writing of the curriculum. Rewritten curriculum, in a form of organized test items, integrates what is known about students with the content knowledge by providing a conceptual map of what is required in the standardized curriculum and exams and what is known as common misconceptions by students.

A curriculum and curriculum-based assessment that features deep knowledge and encourages connections among knowledge can help students learn effectively (Bransford, 2000; Pavri, 2011). The test development-test exercise lesson process described above in SMS opened the opportunity for interns to learn how to develop such a curriculum and assessment and how to teach the curriculum if used thoughtfully. Once, Li Xuemin and I were allowed to look at three one-inch thick notebooks of Teacher Wang Honglian. In her mid-fifties, Teacher Wang taught math for more than ten years at Sanji Middle School. She later became a politics/civics teacher in SMS for some reason that she did not want us to know. She showed her notebooks that organized ten years of High School Entrance Math Examination items when Li Xuemin asked her how to

develop a good test paper for the students. The items that involved one or two math concepts or operations were organized by the concepts (e.g. rational numbers, linear equations in one variable). Those items needing analysis and synthesis were categorized by the procedures of problem-solving (e.g., holistic method-*zheng ti fang fa*, 整体方法，reduction-*hua gui*, 化归，symbolic graphic combination-*shu xing jie he,* 数形结合). She also noted down special test items that involved exploration of mathematical thinking, which she said was the most difficult item for students. From these notebooks, she told Li Xuemin, that she could always pick several items, change their conditions or numbers or not, and use them in quizzes and test exercise lessons in her own class:

> These were typical test items that students may encounter in their high school entrance exam. Categorization of these items and having students practice them can show how rules of applying certain knowledge may repeatedly produce predictable results. If you explain the process of getting the correct answers to these typical items, really clearly, in your class, your students will eventually understand the knowledge, the procedure, and do similar test items correctly. Start from the simple items if your students are still confused by the concepts. And find the connections among the knowledge points using the test items as the examples. Some test items require synthesis of several key concepts, and you can group these concepts together to introduce the connections among them. Do not be afraid to deconstruct your textbook (*da luan ke ben*, 打乱课本)When you review at the end of the semester, this organization of the test items is especially useful since you can have your own framework of the key concepts, accompanied with typical questions for students to practice on your teaching. When you teach new students, your framework can be used to introduce them to make connections to other concepts and caution them of misconceptions that many students may have. I call it Framework Teaching Method (*Kuang Jia Jiao Xue Fa*, 框架教学法"). (Fieldnotes on the conversation during a visit to Teacher Wang's visit, October 6th, 2009)

Teacher Wang's method of "Teaching in Framework" is not equivalent to creating an individual teaching framework from scratch. Her framework was deeply rooted in the prescribed standardized curriculum and examinations. The link between her framework of knowledge for teaching and the prescribed one was the "typical" test items which were regarded as effective in identifying students' common misconceptions about important knowledge points. She, as well as

many of her SMS colleagues, was integrating what was needed to be learned in the curriculum and what needed to be tested in major exams with what was known about particular groups of students' learning in a comprehensive teaching framework. Teacher Xu (Chinese language) advised Hao Chen to organize test items for the annual High School Entrance Exams. Teacher Ren shared her organized test item charts and analysis of Chinese essay writings with Hao Chen and Feng Qian. Teacher Fan and Teacher Ru also shared their experiences alike with Chen Long and Feng Qian. How to organizing test items and teach test exercise lessons seemed to be a craft knowledge embedded in the "professional culture" (Anderson-Levitt, 2002) in Sanji Middle School and in the Chinese education system at large. What is more, this process is likely to help teachers enrich their pedagogical content knowledge.

Research shows that pedagogical content knowledge (PCK) underlies effective teaching (Shulman, 1986, 1987). PCK consists of information about typical difficulties for students' learning; processes students must go through in order to achieve understanding; and sets of potential strategies for helping students overcome the difficulties that they encounter. Shulman (1986, 1987) argued that pedagogical content knowledge is not equivalent to content knowledge plus a generic set of teaching strategies; instead, teaching strategies differ across disciplines. Veteran teachers, like Teacher Wang and Teacher Shan, know the kinds of learning difficulties that students are most likely to encounter; they know how to help students to integrate new information based on their existing knowledge; and they know how to assess their students' progress by using "typical" ones from their own "framework" of test items. This knowledge was accumulated by reading students' tests, and analyzing their common errors; and was actively used in both test exercise lessons and later instructions when the new students were reminded of

the common misconceptions, as it was illustrated by Teacher Wang's "Framework Teaching Method".

When being used under careful guidance of the tutor (s), this set of techniques to organize test items and explain the errors in class helped intern participants to develop their own pedagogical content knowledge. For example, the mentors advised interns to be sensitive to those aspects of the content that were especially hard or easy for their students to master, by having students to do carefully selected test items, according to Han Na, Li Xuemin, Chen Long, and Zhang Qiufang. Analyzing the tests and explaining the errors could help students to clarify the misconceived concepts; and this was the reason that Li Xuemin, Feng Qian, Chen Long, and Zhang Qiufang learned to put a great amount of time into test exercise lessons. However, they were using these lessons in different ways under the influence of the symbolic boundaries they had adopted. In the following, I am going to use examples from Li Xuemin and Chen Long's classes to show how interns composed their own framework of test items and how they helped students learning in test exercise lessons in different ways.

III. "Teaching *through* Assessment": Boundary Reinforcement or Boundary Crossing?

I combine the organization of test items and test exercise lessons described in the session above and call it "teaching *through* assessment". In this process, the teachers attempted to, and the interns learned to, detect what were the important knowledge points through reading and doing a lot of test items; they analyzed what was difficult for their students to grasp by having students do selected questions, and by explaining the errors in a large group or individually; and they eventually adapted their daily instruction to help their new students overcome the common misconceptions in learning. Someone may take this approach as "teaching *for* assessment" for it

seems to focus on those knowledge points most likely to be tested in the standardized exams. It can be used in a limited way and become "teaching *for* assessment", when the teacher only requires mechanical memorization of the knowledge points frequently tested in the standardized exams. The purpose of this limited way would be to have students recall the errors they already made in prior tests or the common misconceptions people most likely have, and carefully avoid them during the exams. Or they may be simply asked to memorize the correct answer in case similar test items occurred again in the major examinations.

However, "teaching *through* assessment" goes beyond that. Teachers using this approach tap into assessment as one of the powerful teaching materials, carefully review the test items and curriculum to identify skills that must be learned and how to learn them, fit assessment in their teaching routine, analyze students' current levels of functioning by reading their test results, and use the test analysis and error explanation to help students learning. To make it short, the "teaching *through* assessment" approach uses the test items to create problems and opportunities for students to apply their knowledge. As a result, the teacher gathered data from students' performance and the "typical" test items to inform their follow-up teaching and to directly address the students' errors in knowledge and in understanding the problem-solving procedures.

During my field work, I observed both the "teaching *through* assessment" and the "teaching *for* assessment" approaches in interns' test exercise lessons. The interns' perceptions about their pupils and the evaluative criteria the interns used to differentiate their teaching played an important role in their decision making on which approach they would take. Consider the following depictions of test exercise lessons respectively taught by Chen Long and Li Xuemin. I use them as examples because Li Xuemin seemed to use the "teaching *through* assessment"

approach, while both "teaching *for* assessment" and "teaching *through* assessment" approaches were used by Chen Long to teach his *putongban* and *shiyanban* students respectively.

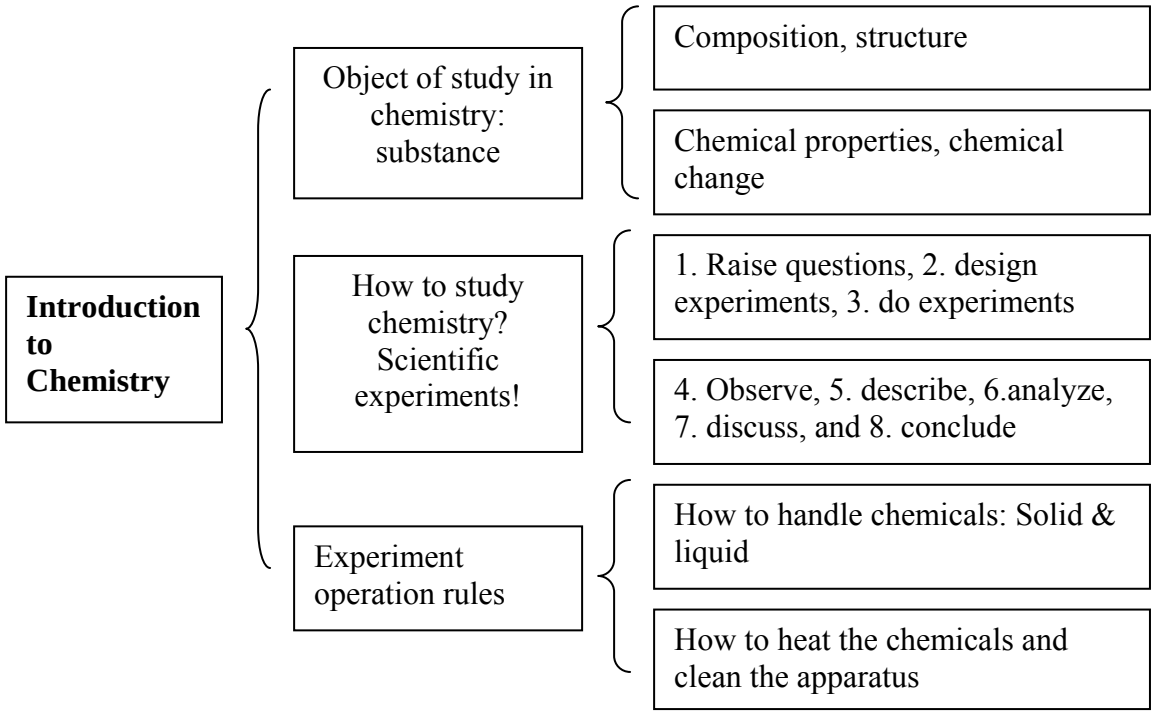
Chen Long

Chen Long explained his test exercise lesson teaching in *shiyanban* as "String knowledge with test items"(*yi ti chuan zhi shi dian*, 以题串知识点), which was the approach to lead students to explore the connection of knowledge points within the test items and have them explain "why" and "how" to solve the problem. He contrasted this approach with what he described as "string test items with knowledge" (*yi zhi shi dian chuan ti*, 以知识点串题), which he usually used in teaching his *putongban* students to review the test items including the same knowledge points.

As Chen Long taught the test exercise lessons following the first unit chemistry exam, I happened to sit in his classes for Class 1 and later Class 5 in the 8th Grade. He was explaining the same test paper with the same lesson plan. The test paper was bought from the Educational Bureau in Pingshan County by the SMS. Although he did not develop his own test paper, he organized and classified the test items according to a framework (illustrated in *Figure 4.1* below) he adjusted from a teaching reference book loaned by his mentor, Teacher Ru：

This framework covers the major topics that the textbook requires students to learn. It also seems to provide a structure of these topics and show students where to look up for explanations of a learning problem. As *Figure 4.2* shows, Chen Long grouped the test items into three thematic categories along with some notes in his lesson plan for the test exercise lesson: 1. What is substance/chemical change/physical change? 2. How to study chemistry? 3. Experiment operation rules.

Figure 4.1 Chen Long's Framework Of Teaching The Unit Of "Introduction To Chemistry"



During his teaching in Class 1, he referred to the framework as he explained the common errors students made in the test item 16, 24, 25, 26, 27 and 28. After explaining these test items, he asked if there was any additional test item in need of further explanation. Students asked about item 26, which was a control experiment to test the differences between the air people breathe in and out. He explained the item again and asked if the students understood the use of the control experiments. He further asked why using the clear Ca $(OH)_2$ solution in the control experiment can differentiate the air we breathe in and out. He then used ten minutes to summarize the test exercise lesson, focusing on the common misconceptions according to his notes and cautioned that students should pay attention to how to convert the observed phenomena in the chemical experiment into the chemical equations.

Figure 4.2 Chen Long's Thematic Categorization of Test Items

Themes	Test items	Notes
What is substance/chemical change /physical change?	Item 1, 2, 9 11, 12, 13	Focus on how to differentiate these two types of changes: whether produce new substances
How to study chemistry? Scientific experiments!	Item 6, 10, 17, 19, 20, 24, 25, 26, 27, 28	Note the controlled group in the experiments
Experiment operation rules	Item 3, 4, 5, 7, 8, 14, 15, 16, 18, 21, 22, 23	Accuracy in the description of the process/phenomena in the experiments

As he taught Class 5, he did not mention the framework, although I found that his students did copy this framework for their prior lesson in their notebooks. He went through the test explaining more test items than he did in Class 1. Many of these additional items were commented on by Chen Long as "easy ones for Class 1 students, but not for Class 5 students". In Class 5, he asked the students to memorize the procedure of conducting the experiment in item 26, which he believed would "have students follow the accurate description of the experiment procedure and how to write a good experiment report". He then referred to item 24 to remind students that burning a candle can produce water and Carbon Dioxide, which was part of the control experiment in item 26. He worried that

> (S)peaking too much and making too many connections in the class [Class 5] may confuse them before they even got an idea of what chemistry is. If I do not push them to start from these basics, they do not even care to memorize the knowledge points. However, in Class 1, students are quick to understand the basics and giving more responses to the teacher so that I am confident—and comfortable—enough to give them more instruction on how to explore using the experiments to test hypotheses. Also it's easier for these students [in Class 1] to understand if I teach them how to make connections among the knowledge point and solve the problem. (Observation and follow-up interview with Chen Long, November 6th, 2009)

In sum, it seems that Chen Long adapted his teaching to different groups of students based on what he thought about his students. Intellectual boundaries ("quick"), cultural boundaries

("giving more responses to teachers"), and moral boundaries ("not even care to memorize the knowledge points") were manifested in his understanding of different groups of students and influenced what and how he presented in the class. He thought that his teaching met different needs and current levels of his students in *shiyanban* and *putongban*, and that his different approaches of teaching could benefit both groups.

Li Xuemin

Li Xuemin, the math intern teaching Class 5 of the 7th Grade, seemed to use both approaches of "Stringing knowledge with test items"(*yi ti chuan zhi shi dian*, 以题串知识点) and "stringing test items with knowledge" (*yi zhi shi dian chuan ti*, 以知识点串题) in her class. By organizing her own quizzes embedded in the review framework, she insisted that her *putongban* students should obtain a thorough understanding, "eating through" (*chi tou*, 吃透), of the basic math concepts as well as beginning to use mathematical thinking to apply math concepts in problem-solving. This approach may be called "teaching *through* assessment", which goes beyond having students get the correct answers for the test items. The goal of this approach is to help students understand what is learned. "Math is not manipulating the equation or just plugging the numbers into formula," she said.

> Students have to understand the concepts when they try to solve the problem. If they are given correct answers to the problem without truly understanding how to get the answer, the error is going to come back to them again later. I have them do a series of test items I collected from textbook, reference books, and High School Entrance Exam. These items test their understanding of one focal knowledge point by providing varied conditions. They have to do several items in a set to strengthen their understanding of the key concept and certain method of problem-solving … During *xi ti ke*, I can address the key concepts and their common errors directly and speak aloud of the thinking procedure by going through the problem-solving process with them. (Class observation and follow-up interview with Li Xuemin, October 29th, 2009)

She did not think that she was using a strategy of "immersing students in a sea of exercise" (*ti hai zhan shu*, 题海战术), which is similar to "rote learning" and has a moderately negative connotation for teaching in spite of the fact that it is commonly adopted in many classrooms in China. "It is not to grab every test item you can find and then have your students do it. They would be tired and waste a lot of time to gain little," She said. "I learned from Teacher Wang to classify test items by the concepts required by the textbook and the High School Entrance Exam. Then, under these big ideas, I found small branch concepts that my students are confused about when I read their test papers. Then I have these." She showed me seven sheets of test items organized by math concepts, such as inverse numbers and rational numbers, as well as classified by problem-solving methods, such as combining like terms and holistic approach (*zheng ti si xiang*, 整体思想):

> These are my test item pool! I collected them from the textbook exercises, students' homework, major tests, and reference books. Jin Junshu loaned me the learning materials exclusively bought for the *shiyanban* students and I copied the easier ones. …… I selected these items based on what I think is the difficult part for my students to master. They show their misconceptions when they do homework or take the tests. I begin to learn to discern these difficult points. Students should do exercises, and teachers should, too! I do these selected items by myself and try to show my way to solve the problem. After I do these items, I kind of know why they made those mistakes and I can use my own solution to help them get around the misconceptions. (Class observation and follow-up interview with Li Xuemin, October 29th, 2009)

As I observed her test exercise lesson class, Li Xuemin explained one item in the test paper step by step, waited for questions raised by students, and then wrote one or two additional math problems for students to solve. These additional problems were drawn from Li's "test item pool" to test the same knowledge points as the explained test item. Here is an excerpt of her explaining a test item about like terms:

> Li: Let's look at this problem closely: If $2X^{3}Y^{5m-3}$ and $3X^{7n+5}Y^{2}$ are like terms, then 10m+14n-2=? Let me ask you what "like terms" are?

Ss: Like terms are terms that contain the same variables raised to the same power.

Li: What does it mean in this expression? Shang Yanqi?

Shang: 7n+5=3, 5m-3=2

Li: OK. Please write it down on the blackboard. What do you think, the rest of the class?

Ss: (silence…some murmuring "right")

Li: How about the numerical coefficients, 2 and 3, in this expression? Some of you wrote $3(7n+5) = 2 \times 3$.

Some students shouted: It is wrong! 2 and 3 are numerical coefficients.

Li: Do you understand the concept, class? The numerical coefficients can be different in like terms. Like items are same variable X and Y and their power. Ok? Think about it. Now look at the blackboard, Shang wrote down these equations. Do you agree with him?

Ss: Correct!

Li: Now get your answers, compare your answers with your peers, and raise your hand if there is any problem.

(After a minute, students exchanged the answer with each other and agreed on the correct answer of n= - 2/7, m=1. During this time, Li Xuemin was writing another problem on the blackboard)

Li: If there is no problem, please look at the blackboard. If $2X^2Y^{3n-1}$ and $-X^{m+2}Y^2$ are like terms, then mn=?
(Observation of a test exercise lesson taught by Li Xuemin, October 29th, 2009)

After this class, Li Xuemin told me that students may not fully understand the concept of like terms by reading the textual description of the concept only. The test item she included in this quiz and the additional one served as examples that could create a moment for students to use the concept of like terms. She called such concept "the eye of the problem" (*ti yan*, 题眼). If the students could quickly identity the "eye" of the test item, they should be able to know how to solve it. In turn, being able to use the concept correctly, they demonstrated good understanding of the concept. She asked Shang Yanhui to answer the question because he was one of the few

students who did not make a mistake. She wanted to have him lead the correct thinking in the class and she thought that students "seem to have a peculiar way to have their peers understand how to solve the problem if they themselves already understand it". The additional test item also addressed another similar misconception that students might have. She said, "My students did not quite understand that the minus sign in front of X refers to a numerical coefficient -1. Some of them move the minus sign in front of the power m+2. It may seem like a very silly mistake to make. But it is understandable. If I do not help them correct it, this misconception will always stick with them." She seemed to be cautious of using repetitive exercises to address one concept. Instead, she tried to use several items that could strengthen the understanding of one concept as well as point to various misconceptions her students may have.

In addition to having students do exercises around key/difficult concepts and ideas, Li Xuemin collected some "difficult test items which requires bridging to an implicit condition in the problem, which requires connecting to another knowledge point". She said that from observing Teacher Shan Junfang's class she had learned that students had to master the connection of more than one knowledge point and correctly retrieve these points to solve the learning problem. She reserved explanation of such difficult items after students practiced a couple simple items, which focused on only one or two focal knowledge points, and were practiced by the students. According to Li Xuemin, using such a difficult test item can be helpful if "students have got an idea of the related knowledge points. In other words, the item fits the students' current level of learning and understanding. It is useless to do fancy difficult problems if they are way beyond students' current level. What we do is to activate what they already learned by using these test items". (Interview following the observation of a test exercise lesson taught by Li Xuemin, October 29th, 2009)

In summary, Li Xuemin was trying to acquaint her *putongban* students with modes of inquiry aimed at real understanding of the math concepts by having them practice organized exercises. It seemed that Xuemin had learned from Teacher Wang Honglian to establish a systematic way of collecting meaningful test items, and to help her students to make sense of problem analysis by explaining the process of problem-solving. This does not mean, however, that Li Xuemin started from her own level of understanding the math concepts. In contrast, she paid careful attention to where students might have misconceptions and built her framework and test exercise lesson upon that. The idea of helping students analyze the test items and organize their knowledge supported by "typical test items" also suggests that students might benefit from models of how teachers approach problem-solving.

In addition, Li admitted that her students might make "silly" mistakes in simple test items. But she learned from Teacher Li Shuqin not to attribute the tendency to make these mistakes to the possibility that her students were unable to reason through the problems. Instead, she worked hard to help students get around the common mistakes. She realized that selecting test items for students' use and the test exercise lesson should be based on students' current understanding of the knowledge. Selecting easy questions for her *putongban* students implied her recognition of the learning gap between *shiyanban* and *putongban* students. She had a good reason to discard the difficult problems that might be currently "useless" for her students. All she did was to figure out what her students needed and could really do at this moment, and to provide opportunities for students to achieve accurate understanding in correcting their own mistakes in the tests. Her teaching had paid off. Her students became more active and engaged in her math classes. Later monthly tests and the final test results showed the average test scores of her students in Class 5 ranked 1st among all *putongbans* in the 7th Grade and had much reduced gap to that in *shiyanban*.

IV. Summary

Interns chose their teaching techniques based on what they think of their students. This chapter depicted how the participant interns differentiated the teaching content, classroom activities, monitoring styles, and teaching pace according to evaluative criteria they applied to their students—cultural, intellectual, and moral boundaries. For students on the preferable side of these boundaries, who were more responsive in class, appearing smart and diligent, the interns tended to give more complex learning tasks, interactive classroom activities, and more instructional monitoring, and they expected these students to spend more time on learning at a fast speed. For those on the other side of the boundaries, the interns tended to give less complicated learning tasks, more whole class instruction, and supervisory/disciplinary monitoring, and they had these students learn at a slower pace or cover the surface content quickly so that they could learn it over again. Thus, symbolic boundaries were used as equivalent of educational evaluative criteria that were believed to serve as the rationale for differentiated teaching.

Although assessment is usually regarded as being explicit education evaluative criteria for teachers to know how their students learn and how to adjust their teaching to improve students' learning, what the interns thought what they knew about the pupils persisted to interfere with this process. The most common teaching adapted to assessment was organizing test items and the test exercise lessons in Sanji Middle School. Which items were selected to test the students? Which items should be explained to students in test exercise lessons? In which way were these items explained? In response to these questions, interns often resorted to their perceptions about students in addition to their knowledge and analysis about the test results. In other words, the interns tried to differentiate their teaching and testing for different students based on students'

assumed categorical differences: smart versus slow, diligent versus lazy, sophisticated versus simplistic. Then my question becomes, "How do we deconstruct the language of difference to allow students to move out of categories and into their full humanity", as has been raised by Ladson-Billings (1999, p.242).

As I look closely at the cases of Chen Long and Li Xuemin, I found two types of differentiated teaching in response to students' differences which provided alternative responses to Ladson-Billings' question. Chen Long's different teaching in *putongban* and *shiyanban* reflected some skewed perceptions about the students, which were rooted in unexamined symbolic boundaries, and they served as the basis for *discriminative teaching*. *Discriminative teaching* takes a static point of view of students from lower groups and excludes them from alternatives, such as more advanced learning tasks, more interactive classroom activities, and guidance to a well-connected structure of big ideas. In Chen Long's test exercise lesson taught to Class 5, he did not bring a framework of knowledge points into discussion while explaining the test items, nor did he require further understanding beyond memorization of the knowledge. This contrasted with what he did in Class 1, where he tried to help students identify the key concepts in the test items, reason through the scientific experiment, and make connections among knowledge points.

Discriminative teaching should be separated from *differentiating instruction*, which stresses providing "multiple approaches to content, process and product" in teaching based on authentic understanding of students' learning readiness levels and modes of learning (Nunley, 2006; Tomlinson, 2001). It may have an equivalent in China, which is traditionally regarded as "teaching according to students' characteristics" (*yin cai shi jiao*, 因材施教). In this study, interns frequently used *yin cai shi jiao* to justify their pedagogical decision making, but might

have easily slipped into *discriminative teaching* without reflection upon unexamined biases about students, as was represented in Chen Long's case. He meant well to help his *putongban* students to start from "where they were", but he was not able to discern that conceptual understanding and accurate problem-solving procedures were needed by and were teachable to slower learners in *putongban*. Thus, he did not give *putongban* students the optimal way to master the skills of problem-solving by delving into the principles and key concepts underlying the test items, which he attempted in his test exercise lesson in *shiyanban*.

By stressing conceptual understanding of the concepts and fluent use of problem-solving methods through practicing and explaining a series of test items, Li Xuemin was trying to use "simple" test items to help her *putongban* students grasp the math ideas and problem-solving in her test exercise lessons. She organized the test items according to students' current learning and model her way of problem-solving in explaining the test items to these *putongban* students.

The contrast formed by the cases above suggest that the "language of difference" (Ladson-Billings, 1999, p.242) can be deconstructed in student teaching by means of separating symbolic boundaries from education evaluative criteria and focusing on using learning tasks that match students' learning levels to achieve conceptual understanding. It can also be reinforced in student teaching if interns used symbolic boundaries to judge their students and inform their teaching. This contrast also leads me to further think about the possible reasons for participants' teaching decision making during *dinggang* internship. What were the resources they appropriated to rationalize their boundary work? How and when did they learn the teaching approaches they chose? In the following chapter, I explore the cultural information and tools that interns used to mediate their thinking and practice in terms of differentiating teaching to different students.

Chapter 5 Cultural repertoire for *Dinggang* Interns' Boundary Work

In Chapter 3 and Chapter 4, I discuss how interns drew symbolic boundaries and enacted/crossed them in teaching. In this chapter, I ask the question "what were the sources of information they appropriated to justify their boundary work".

The theory of *boundary work* holds that a reservoir of cultural repertoire (e.g. conceptual distinctions, interpretive strategies, cultural traditions) plays a key role in "creating, maintaining, contesting, even dissolving institutionalized social class difference (e.g., class, gender, race, territorial inequality)" (Lamont, M. & Molnar, 2002, p. 168) during interpersonal interactions in daily lives (Fine, 2001; Jackson, 2001). In this chapter, I discuss three layers of cultural repertoire that interns used to mediate their thinking and practice in terms of differentiating teaching for different students. I argue that explicit discussion among peers and between mentor and mentees helped pre-service teachers to reflect upon their evaluative criteria for their students and possibly led to changes in using the criteria.

During my field work in Sanji Middle School, I learned that *dinggang* intern participants actively used multiple cultural repertoires available at different levels to draw or dissolve two sets of symbolic boundaries: the ones they made among their students and the ones they made between themselves and their students. Among these cultural repertoires, there are three layers—individual life experiences in the past, interpersonal encounters in the current internship setting, and institutional societal factors. The first layer centers on the individual intern's personal experiences in family and school. This proximate layer is situated in interpersonal and societal features. As Lamont (1992) and others pointed out, "individuals do not exclusively draw boundaries out of their own experience: they borrow from the general cultural repertoires supplied to them by the society in which they live, relying on general definitions of valued traits

that take on a rule-like status" (Lamont, 1992, p.6). The second layer of interpersonal resources that the interns drew on involves people and interactions at the school and the teacher education program. Mentors in Sanji Middle School, pupils, intern peers, and teacher educators all exerted influence upon my participants' boundary work. The third layer consists of a larger cultural repertoire to trace the resources contributing to *dinggang* interns' boundary drawing. I use "repertoire" instead of "maps" or "scripts"[18] because the latter metaphors imply a rigid set of rules for teaching practice. As Charles Frake wrote, "Culture does not provide a cognitive map, but rather a set of principles for map-making and navigation" (1977: 45). Thus, I focus on the shared cultural meanings underlying what is seen by an intern as commonsense.

For the first two layers, past individual life experiences and current interpersonal encounters, in this chapter, I select telling incidents from my observations and quotes from interviews to reveal how interns appropriated the information from these cultural repertoires to make sense of their internship. Since prior individual experiences were already discussed in regards to their identities at the end of Chapter 2, I focus more here on the cultural repertoires the participants made use of from their interpersonal experiences. This involved interactions among intern peers, between mentors and mentees, and between the students and interns. For the third layer of the larger cultural repertoire, I mainly rely on my interpretation of the participants' interviews and the literature about Chinese education, culture, and society.

I. Boundary Work and Cultural Repertoires

[18] Some cross-cultural studies on teachers' instructional practice view teaching and teacher's work as culturally scripted (Hiebert & Stigler, 2000; Stigler, Fermandez, & Yoshida, 1996; Stigler & Hiebert, 1999).

In the interviews, I asked the intern participants where they obtained the information about the differences they claimed among their pupils, or those between urban and rural students. By analyzing how frequently cultural repertoire were mentioned during the interviews, I found that the immediate contacts and discussions with intern peers and school mentor teachers were the most influential and often sought cultural repertoire for intern participants' boundary work. In the meantime, intern peers and school mentor teachers again were the most mentioned factors when I asked the interns about the resources for their changes in perception about differentiating students. Prior individual experiences exserted moderate influence upon boundary work, and institutional/cultural values were relatively more remote resources for interns to appropriate in order to understand their own experiences and their students.

The following Tables 5.1 and 5.2 represent patterns in the frequency of mentioning the cultural repertoire during the interviews about the differences the interns perceived in students. The data comes from the participants' responses to the interview question, "When you try to understand your students and adjust your teaching, what source of information do you use and how? Please specify." This question was asked in each of the three rounds of individual interviews with the eight interns. When the interviewees mentioned a source of the information, for instance, the internet, I coded it as "institutional/cultural-internet" and then coded the intellectual, cultural, and moral boundaries in the follow-up examples that they used to specify how this source of information helped them understand their specific groups of students at Sanji Middle School. When the internet was referred to as a source that contributed to making cultural boundaries among pupils, I marked M-CB (Making cultural boundaries). If it was mentioned for changes in thinking about drawing intellectual boundaries, I marked C-IB (Crossing intellectual boundaries). These sets of codes were mapped together using the query-matrices function in N-

Vivo8 to produce two tables that include the frequencies of mentioning cultural repertoire when talking about making or crossing boundaries. I made minor adjustments to group these resources into three categories—prior individual experiences, interpersonal interactions, and institutional, societal, and cultural values—and made the Table 5.1 and Table 5.2.

In regards to boundary making, SMS mentors and intern peers were the most frequently mentioned information resources, especially when the interns were using moral boundaries as the evaluative criteria. HNU teacher educators were among the least frequently mentioned resources, almost comparable to the remote resources of institutions and policies. Prior individual experiences, especially the interns' schooling experiences, served as fair cultural repertoire for interns to make boundaries. Surprisingly, encountering rural pupils before and during the *dinggang* internship could be used to reinforce the boundaries they drew between rural and urban students as well as among rural students.

The interns always make boundaries. One set of cultural repertoire may have contributed to making one kind of boundary, and at the same time helped to dissolve other boundaries interns had made. For instance, as *Table 5.1* and *5.2* both show, the HNU teacher educators strengthened the moral boundaries interns made, but seemed also to have been used by the interns as a resource to dissolve the intellectual boundaries they had set. Different individuals had their own approaches to jigsaw various cultural repertoire and develop a unique combinations of evaluative criteria for their own use in teaching. As Table 5.2 demonstrates, interpersonal interactions played the most important role in helping intern participants to cross boundaries. Encountering pupils in the rural areas, and learning from peers and school mentors appeared important.

Table 5.1 How Many Times The Cultural Repertoire Factors Were Mentioned When Talking About Making Boundaries?

	Prior individual experiences			**Interpersonal interactions**				**Institutional, societal and Cultural values**			
	Family	School	Encountering rural students	Pupil	Intern peer	SMS mentors	HNU teacher educator	SMS school	*Dinggang* internship	The internet /TV/ book	National policy & Cultural value
IB*	0	3	2	6	9	12	1	2	0	2	1
CB**	2	2	5	6	7	6	0	0	3	3	0
MB***	5	7	2	9	5	11	3	3	2	2	3

Table 5.2 How Many Times The Cultural Repertoire Factors Were Mentioned When Talking About Crossing/Resolving Boundaries?

	Prior individual experiences			**Interpersonal interactions**				**Institutional, societal and Cultural values**			
	Family	School	Encountering rural students	Pupil	Intern peer	SMS mentors	HNU teacher educator	SMS school	*Dinggang* internship	The internet /TV/ book	National policy & Cultural value
IB*	1	2	4	9	12	11	4	1	1	5	2
CB**	3	0	2	6	9	5	1	1	2	3	1
MB***	3	0	5	11	12	13	3	1	2	9	1

(* IB=Intellectual boundaries; **CB= Cultural boundaries; ***MB=Moral boundaries)

The virtual resources online and in the instructional books also stood out as a kind of helpful toolkit from which interns could look for fresh perspectives and effective techniques to cross the boundaries. Among their interpersonal interactions, the teacher educators from HNU were the least influential, according to the interviews with the interns.

Reviewing the tables above leads us to think about the mixed research results about using field teaching in a culturally diverse setting as a method to transform pre-service teachers' perceptions about underprivileged pupils in the United States (Haberman & Post, 1992; Reed, 1993). Simply exposing pre-service teachers to pupils from a socio-cultural background different from their own does not naturally produce changes in their thinking about these pupils. In addition, the data also shows that mentoring from the schoolteachers is deemed important by the pre-service teacher. However, it does not necessarily support pre-service teachers' efforts in shifting or changing the boundaries they made among their students. In the remaining section, I am going to use detailed information to portray how these layers of cultural repertoire contributed to intern participants' boundary making and boundary crossing.

II. Cultural repertoire Illustrated

As I introduced earlier, there are three layers of cultural repertoire that the participants resorted to when they tried to understand and evaluate their students in Sanji Middle School: (1) prior individual experiences; (2) interpersonal interactions; (3) institutional, societal, and cultural values. In this section, I use data from observations as well as individual interviews to provide fuller evidence for how cultural repertoires were used in boundary work during their *dinggang* internship.

1. Prior Individual Experiences

Recall that there are eight participants in this study. Five are from the cities, two are from suburban towns, and one is from a rural village. They have different family lives and varied schooling experiences (see *Table 1.2*, Chapter 1). Both their family lives and school experiences impacted their understandings of themselves as well as their experiences during their internship. As was briefly discussed in Chapter 2, most of the participants were young people born and educated in the city. They referred to their experiences in their families, schools and with school peers to interpret their thoughts and feelings about themselves, and their students, as well as the internship.

1) Family

In interviews, participants mentioned that family as a background for their own identity. Interns from the city mentioned the cultural repertoires they obtained from their family, such as access to the local library, museums, and information about school choice, and which helped them to study in school. They noticed that their pupils at SMS did not possess these resources. Chen Long used an idiom to illustrate what he observed in his own family compared to his peers' families:

> A dragon begets dragons, a phoenix begets phoenix, and those born by mice are good at digging (龙生龙，凤生凤，老鼠的儿子会打洞). Like father, like son, you know. I know my father will find a way for me to get a position in his company. But I just want to be a teacher in a good school in *shijiazhuang*. It might be hard for me since I have to learn how to look like a teacher, how to behave like a teacher in addition to get all certificates, the teaching experiences and good test scores. Those born with parents as the professors in the university may find it easier to become a teacher. They look different in posture, and they have all the access to books, teachers as their guests, and a kind of academic aroma at home. (Interview with Chen Long, August 27th, 2009)

Compared to Chen Long and other interns from the urban areas, Zhang Qiufang stressed that her family experiences pushed her to value hard work as a leverage to get her out of her rural

hometown into college. As already described in Chapter 3, Zhang Qiufang was proud of being a hardworking rural student who was admitted to Hebei Normal University. In the meantime, she was sorry for her brother who did not finish his high school because he did not want to study hard and instead followed his drop-out friends.

As it was stated earlier in Chapter 2, these interns are from different social classes. But they did not simply use socio-economic status to differentiate their students nor drew distinctions between themselves and their rural students. Their social classes influenced their thinking by providing limited or expanded opportunities to interact with people from different backgrounds. For instance, Chen Long and Jin Junshu had very limited experiences to interact with people different from their own. They tended to stick to the moral (working hard) and cultural (polished appearances and manners) boundaries as they evaluated their rural students. Simliarly, coming from a rural village, Zhang Qiufang ensured herself with the belief that only working hard could help rural students learning. Her limited experiences in her rural family might have confined her understanding of rural students from multiple perspectives. With some experiences with rural students before her internship, Han Na, who was from a city, started to realize that rural students differed from each other. Feng Qian and Hao Chen used to attend *shiyanban* or dropped from *shiyanban* to *putongban* in their middle schools. They showed much sympathy for *putongban* students in Sanji Middle School and encouraged their *putongban* students to strive their ways upwards. Li Xuemin and Wang Kun were from the town and had interactions with both rural and urban people. They adopted flexible boundaries when they had to understand the differences among their students.

2) School

School experiences were vital for novice teachers to acquire the practices and cultures of teaching via the "apprenticeship of observation" (Lortie, 2002). As reflected in *Table 5.1* and *Table 5.2* in the beginning of this chapter, school experiences seemed to contribute more to the strengthening than to the dissolving of symbolic boundaries. Different interns had different approaches towards drawing on their school experiences to make distinctions among students in general. Some followed their teachers and carried on what they observed in their own classrooms. Some reflected upon what they had experienced, especially the part that they did not like much, and actively sought change in their teaching. In this process, the evaluative criteria the intern participants used differed as they related their perceptions of teaching in rural Sanji Middle School to their own prior schooling experiences.

For instance, most interns believed that hardworking students could excel and smart children could learn well. As introduced earlier, Zhang Qiufang especially believed in the moral boundaries; that is, hard work helped her excel and get into college, while being lazy made her brother stay in their rural hometown.

In some cases, school experiences helped interns to cross the boundaries. Li Xuemin's transferring experiences and Feng Qian's "fed-up" stories both illustrated this. Li Xuemin was a student in *putongban* in middle school. Once she was transferred to *shiyanban*, she was under tremendous pressure and lacked self-confidence. She finally went through this difficult process and became accepted as a "legitimate" *shiyanban* student thanks to the strong support from her math teacher. She said that this experience made her sensitive to students in the lower academic group.

> These students [in lower academic group] are not stupid or something. They have some problems that hinder them from achieving better. It is the responsibility of the teacher to help them overcome these problems. It is unfair to blame the children, who already suffer from problems. (Interview with Li Xuemin, August 26th, 2009)

By reflecting upon a teacher's responsibility instead of blaming students' lack of confidence and intelligence, Li Xuemin thought of her own teaching as a process to help her low-performing students make progress.

Feng Qian thought similarly, although her middle school experiences were even more unpleasant for her. As an average student in *shiyanban* throughout the middle school years, she thought that she was "suffocated" in the boring atmosphere of the *shiyanban*. Being friends with *putongban* students during her middle school provided her with more understanding of the lower groups:

> *Putongban* students were under-evaluated by the teachers. They got different lessons planned by the same teacher. And they lacked confidence. I think that many of them were quite creative. If their teachers gave them more attention and encouragement, they would do much better, I think.

With this mindset, Feng thought that her *putongban* students in SMS were lovely, clever, and teachable:

> They are quite active in my class. I think that more positive guidance to lead all the students to participate in the class can help them learn. I am their teacher, and I would not give up on giving them help. There are so many of them, I may not give them individual attention all the time. But I will send a message to every one of them that I care about their learning. (Interview with Feng Qian, August 29th, 2009)

In sum, school experiences supported the intern participants' boundary making based on students' intelligence, cultural and moral differences. These experiences were also appropriated by the interns to challenge the assumed evaluative criteria and lead them to seek powerful teaching techniques to help the students in the lower academic group.

3) Prior Experiences Interacting with Rural Children

To some extent, prior experiences encountering rural children both strengthened and weakened the boundaries interns created between themselves and their pupils. Most intern participants from the cities did not have such direct experiences before they came to SMS. Han Na had some experience working with rural children when she taught as a volunteer in a rural village elementary school during a summer. Li Xuemin had rural relatives visit her family occasionally, and most of her understanding of rural education came from the stories told by her parents about these rural relatives. Wang Kun worked as a class advisor (*ban zhu ren*, 班主任) for a fine arts vocational high school in Pingshan County during the past summer. In this school, with a high reputation for sending talented students to some outstanding fine art colleges in Hebei Province, Wang encountered students from both local rural areas and the city. What these intern participants learned from their interactions with rural students could work both ways, either to strengthen or modify their boundary work.

Han Na's experiences made her realize that:

> It was not all the students in the rural areas who were motivated to study hard. I thought that they surely should work hard since getting into college might be the best for their future. The only reason I could think of that makes them achieve low academically was that they had limited resources and had to spend a lot of time doing house chores. But I observed [during the volunteering teaching] that some students did not care to study at all. Their parents did not care either since getting through compulsory education would not change their lives. They found the repeated stories of their elder siblings or children in the neighborhood. Most of them still have to stay in the village or soon become a migrant worker in the city after they are 16 years old. Teachers found it difficult to motivate these students. They just did not learn. I did not know what to do for these students. Most of my time was devoted to those who really wanted to learn. That was the part I enjoyed the most. (Conversation with Han Na, August 31st, 2009)

Before Han Na had this volunteer experience, she recognized the socioeconomic differences between rural and urban families which might contribute to the low academic performance of rural students. The volunteer experiences seemed to make her use a different lens to understand rural students in terms of their aspirations and level of hard work. The boundaries

drawn between the rural and urban students began to shift "inward" and mark the difference within the group of rural students. However, the desirable rural students, in Han Na's mind, were those who had upward aspirations and studied hard to enter the urban world. Further, the moral boundaries of hard work were not interpreted as innate and unchangeable. Based on her observation, Han Na came to the conclusion that limited upward mobility was the main reason for students' lack of motivation, although she tended to favor those hard-working students.

Compared to her peers from urban areas, Zhang Qiufang seemed to have more direct experiences with rural children. As a matter of fact, she was one of these rural students. Again, the moral boundaries were the most salient ones for her with which to evaluate a student. For her, many of her classmates in the rural middle school did not learn well, not because they were not smart or lacked cultural repertoire to catch up with what the teachers taught in the classes:

> Many of them are smarter than I am. I know that they could do much better than I did. They simply did not want to learn and enjoyed playing, having naps during the classes, forming gangs, and getting boyfriends or girlfriends. If they themselves did not want to learn, their parents and the teacher could do nothing about it. (Interview with Zhang Qiufang, August 27th, 2009)

Being hard-working helped Zhang, and she firmly believed that it would help her students at Sanji Middle School as well.

These prior individual experiences influenced the intern participants' understanding of their rural students as well as of their own teaching. However, these are not the sole cultural repertoire that these interns used. During their internship practice, they actively sought and made use of immediate cultural repertoire embedded in their interpersonal interactions.

2. Interpersonal Interactions

Interpersonal factors were vital for the interns to draw boundaries and make sense of their learn-to-teach processes. Pupils at SMS played an important role in shaping interns' understanding of the rural students. The direct interactions with their pupils challenged or consolidated what these interns thought of rural students. During the internship, the most salient interpersonal factors included interactions with peer interns, school mentors, and teacher educators. The interns learned from each other about the additional interpretations of their students' performances and behaviors. This either reinforced the symbolic boundaries or shifted the boundaries they previously made between themselves and their pupils or among their pupils. Mentors at Sanji Middle School (SMS) were another important resource for interns to learn about their students and about their own teaching. Some interns actively sought support from their SMS mentors, some remained passive and took mentors' advice when it was required, and still others became a little resistant to SMS mentors' advice. In addition, the teacher educators from Heibei Normal University also exerted some impact upon student teaching, which was either appropriated or somewhat rejected by the interns. In discussion about these four interpersonal factors, I am going to use some illustrative incidents to show what and how interpersonal interaction was used to enrich interns' boundary work and their understanding of the student teaching.

1) Sanji Pupils

Researchers suggest that effective teaching practice relies heavily on teachers' knowledge about how children of various backgrounds and developmental and intellectual levels learn, and about the influences on their learning (Grimmett & MacKinnon, 1992; Ladson-Billings, 1999). Direct encountering of "others" engenders reworking the prior knowledge about the self and

other people (Roose, 2001). During the *dinggang* internship, most participant interns (except for Zhang Qiufang, who was from a rural village) with limited experiences and knowledge about rural students were exposed to the experiences of a group of children living in a quite different world. In some way, these rural students taught the interns how to re-chart their understanding of themselves and people different from themselves. These encounters were not only classroom interactions, but also included communication after classes.

For instance, Li Xuemin liked to have conversations with her students during the class recess and after school. She used this method to get to know the students and "form a good relationship with them". She learned that rural students were "not different from urban children being interested in conversation about favorite games, TV shows, clothes, and friends." She chatted casually with her students, and more students joined the conversation. One day as I walked her to the classroom, about fifteen students ran to her happily and asked her who I was. It was like a lighthearted chat among friends. Li thought that she got more attention and cooperation in her teaching after establishing a positive relationship with her students.

Feng Qian also learned that Hu Lin aspired to work in the city when she asked Hu to write a personal essay about his dream. Hu Lin was a boy often teased by his classmates because he actively sought the opportunity to respond to teachers' questions in class and he usually gave wrong and funny answers. From Hu's personal essay, Feng found that Hu worked hard but did not learn via a proper method. "It seems hard for him to capture the main idea of the Chinese text." Feng Qian said, "Perhaps he did not read much after class and he seemed not to know how to grapple the textual structure and key words. I plan to give him short essays to read every week and encourage him to write down some notes about what he read … Now he is making progress in reading comprehension."

Some teacher-student interaction happened outside of the classroom. As I illustrated earlier in Chapter 3, Han Na realized that the boy who appeared "imbecilic and does nothing and knows nothing in the class" was more "capable" than his teacher in weeding and other farm related work. She was surprised by this boy and began to "change my perspective to think about these students."

Interns learned to approach the rural students by frequent communication with them. Some changes in students' academic performance, such as more cooperation with the teacher and progress in reading comprehension, seemed to encourage my participants to know more about their students instead of using assumed symbolic boundaries to label them. However, this does not mean that the interns gave up their evaluative criteria in differentiating pupils.

Chen Long, Han Na, and Zhang Qiufang were frustrated when they did not get positive responses from their students. For instance, Chen Long complained that some *putongban* students turned their back on him in class, and he criticized them as "not polite and irredeemably lazy". Han Na was frustrated by her *putongban* students who could not turn in the assignments in time. For her, this showed that these students were "not being able to finish the assignments or just do not want to learn".

In sum, interactions with rural pupils impacted on participants' perception of these students. This shows that these interactions could reinforce the interns' negative opinions about rural students if the interns found the students not making any expected progress or appearing not to be cooperative with teachers. In contrast, working with individual students via individualized writing tasks or out-of-class activities could bring new insights about rural students. Nurturing positive student-teacher relationships seemed to open the opportunity for the interns to dissolve their biases against their students. Further, the interactions between rural pupils and pre-service

teachers were not taking place in a vacuum. I found that how interns interpreted the student-teacher interactions were subject to change depending on with whom they communicated these thoughts and what feedback they obtained.

2) Peer Interns

From the first day of their internship, the interns chatted with their peers, and sharing with each other their feelings and experiences in their internship. The information they shared played an important role in shaping what they thought about the internship and their pupils. Some of their thoughts were echoed and reinforced by these informal conversations. Others were changed and steered in another direction. I found the following discussions about "problem students" among the interns particularly interesting.

There were weekly meetings for the interns to share their experiences. These meetings were usually organized by Han Na, the team leader, and were held in their dorm during the weekends. I was allowed to sit in on these meetings and take notes. These meetings dealt with the weekly assignments imposed by the HNU teacher educator or the *dinggang* internship office, such as doing group projects on action research, facilitating school events, and submitting weekly teaching journals. These formal tasks were usually taken care of within the first half hour, followed by informal conversations of their own experiences in teaching.

It was fascinating to observe the spontaneous discussion of the "problem students"(*wen ti xue sheng*, 问题学生) who usually made trouble in class; and what these interns thought about which students were worth teachers' help. A discussion about such a student, Yang Hao, among Li Xuemin, Hao Chen and Wang Kun is a revealing example:

> Li: I have a student, Yang Hao, who is a big problem in the class. Perhaps I heard too much about him being "*bu xue hao*", hanging out with gangs. He does not want to learn at all. I

never saw him being attentive in my class. And his score is among the lowest. I just do not know what to do with him. Frankly, sometimes I just do not want to pay too much attention to him. If he does not want to be a good student, I do not know who else can help him.

Hao: I talked with him in the beginning of the semester and asked what I could do to help him. He told me that he wanted to study well and desired attention from the teacher. I thought that the conversation could at least make him at peace during classes, and nothing more beyond that was expected. But he amazed me during this monthly exam. He scored 40 in Chinese, twice as much as he could get before.

Li: Maybe his scoring of 20 in math test is because of me. Sometimes, I just feel that I do not like him since he is a bad student.

Wang: He is not that "bad". He looks like my cousin. He surely has his problems, but he is not bad in nature. Like every other student, he may need some extra attention and help. In my [fine arts] class, he is very attentive and active in most activities. Maybe he gets it that I view him as my cousin. (Field notes, October 14th, 2009)

Li Xuemin seemed to learn from this conversation that Yang Hao could behave well and study in class if the teacher could show caring and attention. During my class observation in the following day, I saw Li Xuemin go to Yang Hao's desk after she assigned the whole class the task of correcting their responses to the items of the monthly test. The boy was looking around and chatting with others. He was a little shocked as Li approached. Li asked if he already corrected the mistakes he made in the test paper and offered to work with him to go through a test item. Yang Hao was quiet during the process and quickly learned the correct problem-solving procedure. After the class, Li Xuemin told me that she thought about Hao Chen's comments on Yang Hao and decided to give it a try approaching Yao Hao to figure out how to help him. She was surprised at how fast Yang Hao could understand the correct way to solve the problem. She said, "I thought of him as a student that does not want to learn to be good (*bu xue hao*, 不学好). He disobeys the rules and shows no interest in learning. But Hao Chen reminded me that it might be because that Yang Hao was trying to get attention from the teacher. If I continue to ignore him, his performance is going to be even worse. Today he really surprised me.

He can learn. Definitely he can. I told him that given two months, I will much improve his learning in math." It seems that the prior view of Yang Hao, delineated by a boundary that Li made based on morality—being good or bad—could be changed after talking with peer interns.

Sometimes, such a discussion among the peer interns could also reenforce the boundary making. Here is an excerpt of a conversation during lunch between Han Na and Chen Long about their experiences teaching chemistry to both *putongban* and *shiyanban* students:

> Han: My students in Class 5 (in the 8th Grade) give up on themselves. Their teachers also give up. It is really hard to have them learn and understand the concepts. Their knowledge foundation is so weak. And they do not show any respect to me. When I asked them questions, they answered in their Pingshan dialect. I could not understand and asked them to repeat it. Then they laugh. It is quite a different experience teaching Class 1. Students in Class 1 just focus on learning in the class. The same lesson plan could not be finished teaching in *putongban*, while it may not be sufficient to fill in the time in *shiyanban*. Even though I am a new teacher and am not teaching very well, the students (in Class 1) are engaged in learning. They are fast to grasp the key ideas by themselves. I guess that teaching *putongban* is even more challenging to me.
>
> Chen: Yeah. I feel frustrated while teaching Class 3 and 4 (*putongban* in the 8th grade), too! My students in Class 3 are generally smart and know how to manipulate the teachers. They were so quiet when their own class advisor (*ban zhu ren*, 班主任) came to the class. Immediately after the class advisor left, they started talking and playing while I was right in the classroom. Many of them just do nothing during the schooldays. If they give up on themselves, teachers do not have much to do. I'd invest my time with students that want to learn. (Field notes on September 11th, 2009.)

In this conversation, Chen Long and Han Na exchanged their frustration with *putongban* students and concluded that these students "give up on themselves". They mentioned intellectual boundaries (knowledge foundation), cultural boundaries (respect and interaction with the teacher), and moral boundaries (do nothing) when they responded to each other's opinions. When later interviewed about their different teaching techniques in *shiyanban* and *putongban*, they referred to each other to justify their teaching. "*Putongban* students would not even finish doing one exercise sheet. Chen Long also gave one extra exercise sheet for *shiyanban* students to

do," Han Na said when I asked her why she gave *shiyanban* students two exercise sheets while *putongban* students were assigned to do only one sheet at the end of teaching the same unit.

It seemed that disagreement among intern peers could lead to changes in perception about the pupils. Sharing similar perceptions about students, however, may not challenge prior thinking, especially when working with *putongban* students was deemed as a challenge to the intern's self-efficacy of being a teacher. Teacher efficacy beliefs are "teachers' situation-specific expectations that can help students learn" (Ashton & Webb, 1986, p.3). As in Han Na's conversation with Chen Long, Han Na's lack of confidence in herself as a novice teacher was visible when dealing with *putongban* students since these students were not behaving nor learning as expected. In Li Xuemin's case, however, she seemed to view the challenge from her peers as opening a door to opportunities to improve her teaching and increase her self-efficacy of being a teacher, and "will much improve his learning in math".

3) Mentors at Sanji Middle School

As Wenger (1998) pointed out, culture is networked knowledge situated within communities of practice, and newcomers acquire this knowledge by interacting with the experts. Hence, mentoring is crucial to the development of novices' professional knowledge. According to some cross-national studies on teacher learning, mentoring is a highly cultural practice rooted in different cultural contexts. For instance, in Wang et. al. (2004), the authors argued that the mentor-novice interaction in the US context allows less room for critique and solution while providing more opportunity for questioning and explanation than in the Chinese contexts. In my study, I found both cases happening among interns at Sanji Middle School. Some interns, such as Jin Junshu, adopted their mentors' views about students as well as their teaching techniques,

without much questioning or disagreement. Some, like Hao Chen, tended to defend what they had designed/implemented for the lesson and argued against their mentors. Still others actively sought advice from many SMS teachers, invited a group of mentors to provide suggestions, and picked whatever seemed plausible to them for use in their teaching. The more proactive interns, such as Li Xuemin and Feng Qian, sought mentoring and more resources and information they could access in support of their *dinggang* internship.

The interaction styles between the SMS mentors and the interns vary. As it is shown in following cases, the conversations about teaching covered pedagogy, classroom management, and were substantially focused on subject matter and the relationship between subject matter, teaching, and students. In the meantime, the interns learned from the mentors about how to evaluate and work with different students. In other words, they acquired from their mentors some of the evaluative criteria in addition to the subject matter and teaching methods.

Learning to reinforce the boundaries: The case of Zhang Qiufang

Zhang Qiufang was happy in the beginning when she was assigned to work with a mentor regarded as the most efficient English language teacher at Sanji Middle School. Teacher Yang Yan was in her mid-thirties, tall, with a pair of silver-framed glasses. Instead of using traditional "lesson plan"（*jiao an*, 教案）which aimed at structured teaching, she created the "study plan"(*xue an*, 学案) for her *shiyanban* students to take charge of their own learning n the class for the past three years. Doing this effectively improved their English testing scores. This innovative approach was highly complimented by the local education bureau as it corresponded to the "student-centered" education reform. Due to her teaching excellence and innovation,

Teacher Yang was appointed as the youngest teacher researcher (*jiao yan yuan*, 教研员) in the local education bureau.

Teacher Yang was five months pregnant at the beginning semester of fall 2009 and asked the principal to "send her down" to teach *putongban* this year because "it was less stressful" (Casual conversation with Teacher Yang, September 5th, 2009). Zhang Qiufang was the only English intern in the *dinggang* group, and she was appointed to "assist" Teacher Yang teaching Classes 3 and 4 in the 8th Grade. She started teaching from the first week of *dinggang* internship and hoped that she could be supported by Teacher Yang. Soon she became a little puzzled because Teacher Yang did not share her legendary "study plan", which was regarded as the key for students' academic improvement.

> Teacher Yang said that her "study plan" was stored in a flash drive and she could not find it anymore. I asked if she had a copy in her computer. She said that the computer crashed and everything was wiped out. It is a pity that I cannot learn from her "study plan". Now what she asks me to do is to develop a new set of lesson plans to teach in Classes 3 and 4. Why not teach me how to design the "study plan"? Well. She has her theory. She told me that "study plan" can only be used in *shiyanban* since the students are more self-regulated and smarter than *putongban* students. Instead of having *putongban* students learn by themselves with "study plan", we have to come up with detailed "lesson plan" to walk them through the knowledge points. (Conversation with Zhang Qiufang after her English class, September 9th, 2009)

Zhang Qiufang looked frustrated as she told me that she felt a lack of support as Teacher Yang claimed that she "did not have much experiences to develop the lesson plan for *putongban* students", and most of the work landed on her shoulder. But she seemed to agree with Teacher Yang that *putongban* students need "lesson plans", which were "teacher-centered", instead of "study plans" which were "student-centered". She sought some help from Teacher Jiao, the English teacher for Class 5 of the 8th grade and Teacher Wang for Class 5 of the 7th grade to develop such a lesson plan. But she found herself "too busy to ask them questions or sit in their

classes". Most of her time was spent writing lesson plans, developing tests, talking with her students, and grading. Plus, she was a little worried that seeking help beyond her mentor might irritate Teacher Yang. "She is the best English teacher in the school. What am I supposed to learn from other English teachers in *putongban*?"

Although being pushed to take all the teaching responsibilities, Zhang Qiufang still had Teacher Yang to observe her class once a day and discuss the teaching/lesson plan after observation. Being influenced by Teacher Yang, Zhang began to feel helpless with Teacher Yang's passive view against *putongban* students.

> [Teacher Yang] is quite persuasive. She is correct that many *putongban* students do not want to learn. But some of her words seem too harsh. She said that *putongban* students are stupid or something like that. Teach them like teaching morons and speak with repetition in a slow pace, she said. Some students might be very slow, but I found some are quite smart. They just do not work hard enough, as my brother did in his middle school. The methods she suggested me to do in the class seemed to work sometimes. Well, working to some extent as long as they increase their test scores. But I feel myself unhappy and anxious when I heard myself repeating single words for ten times in a class and having the students copy the correct answer to the test items. Some of the good students get bored as I do, while those students lacking interest in English get even further aloof from it. Why don't they just study hard? (Conversation with Zhang Qiufang after her English class, September 9th, 2009)

Zhang Qiufang was trying to figure out how she could best work with her students based on Teacher Yang's views about the students as well as her feedback on Zhang's teaching. However, given Teacher Yang's opinion of *putongban* students, Zhang Qiufang could not think beyond the boundaries drawn on students' intellectual and moral qualities. She combined the intellect attributes Teacher Yang made with the moral boundaries based on her family experiences, especially how her brother had failed school due to lack of effort.

Learning to Cross the Boundaries: The Case of Li Xuemin

Li Xuemin shared an old wooden desk with her math mentor, Teacher Mu, and another intern in the *putongban* math teacher office. Teacher Mu was pregnant for eight months and took most days off school. Li took over the math classes in Class 5 of the 7th grade from the first week she arrived in SMS. By the fourth week of the semester, Li was already very familiar with her students. Without much mentoring from Teacher Mu, Li found herself baffled at dealing with her *putongban* students. She once sat in my dorm room, crying and complaining about her students cheating in exams, no response in the class, and all sorts of frustrating issues she encountered in her class. Soon after that, she sought help from other schoolteachers, especially Teacher Li Shuqin and Teacher Shan Junfang, who were commonly referred to as the best math teachers in Sanji Middle School. She also approached many other teachers, including a former math teacher, Wang Honglian, who was currently a politics teacher, to seek advice.

Li Xuemin thought that she learned a great deal from Teacher Li Shuqin, especially her positive attitudes and ways to encourage her students. Teacher Li Shuqin taught *shiyanban* for seven years and was recognized as a very efficient math teacher to improve student math achievement at SMS. She began to teach *putongban* this year due to personal health reasons[19] and shared the office with Li Xuemin. In her middle thirties, Teacher Li was a lively small-figured woman, usually in her red coat with a ponytail sweeping her collar as she talked in an energetic voice. Conversations with her were always interrupted with her merry laughter. Li Xuemin requested to observe Teacher Li's class and was allowed to do so as much as she wanted. After sitting in Teacher Li's classes at least once a day for several weeks, Li Xuemin told me,

> She (Teacher Li Shuqin) is always very patient with her students, helping them to figure out a way to solve the problem. You know that it is really hard to get some *putongban*

[19] It was said that teaching putongban was less stressful and required no night shifts to supervise evening study and dorm, which were part of shiyanban teachers' responsibilities.

> students motivated to learn math. But her students in class 5 of the 8th grade are very active participants in her math lessons. I go to observe her class whenever I can and her students surprised me at their interest in solving math problems. They are also making progress in monthly math tests. When some students got 50 compared to prior test score of 20, she sincerely praised them. She told me that even gaining 5 points is a progress worth highlighting. She also told her students that "not being able to learn well is only an excuse for not learning". This is striking to me since I thought that some students could not learn well because they were not smart. If I can get them to study hard, all of them should be able to make progress. I used to scold my students, saying "How come you make such mistakes on simple questions like this!" Now I learned from Teacher Li and begin to tell my students, "It is OK to make mistakes if you already learn from them. Then you will make fewer mistakes next time. " Then I go to details of explaining the problems. (Conversation with Li Xuemin after a math class, September 18th, 2009)

As another role model of Li Xuemin, Teacher Shan was also good at encouraging students. Li Xuemin found the most brilliant aspect in his teaching was the way he guided students to learn the abstract math methods by thinking through the procedure of problem-solving. Although Teacher Shan taught *shiyanban*, Li Xuemin found that this method could be used to help her *putongban* students. In addition, Li learned from Teacher Wang Honglian about how to make math learning an attractive and interesting process and how to pinpoint the most important knowledge points by analyzing examinations.

By learning all these teaching techniques and the methods to encourage her students, Li Xuemin was obviously trying to work with as many students as possible in her class. Learning from Teacher Li Shuqin to cross the intellectual boundaries she made among her students, she became more patient with students in the lower academic group. She also acquired the techniques from Teacher Shan and Teacher Wang to help all the students learn.

Learning or Not Learning: The Case of Hao Chen

Hao Chen was talking with Teacher Ren Yongfen after a traditional Chinese[20] lesson "The Fun Stories in My Childhood (*tong zhi ji qu*, 童稚记趣)" she taught to Class 5 of the 7th grade.

> Ren: You did a good job in preparation and looked very familiar with the teaching materials. But I think that you need to improve the teaching by being more efficient. For instance, you should lead students to read through the text before explaining the meaning of the words.
>
> Hao: This is the second class on this text. I already had them read it through yesterday before I explained the words. Now I continued explaining the rest of the text and then had them read it over again.
>
> Ren: I see. But students tend to forget what they have read. You need to start by reading aloud the text again. In this way, they can grasp the main idea before getting into the details. Teaching traditional Chinese text requires a lot of reading aloud for students to comprehend the overall meaning and appreciate the rhyme.
>
> Hao: Why not have them know what they are reading before reading aloud? These putongban students do not even know these simple words. Isn't it boring if they read without knowing what they are reading?
>
> Ren: I used to teach *shiyanban* students and now I am teaching *putongban* (students). There is not much difference between them in terms of the textual comprehension. The meaning reveals itself as the text is read for many times (*song du bai bian, qi yi zi xian*, 诵读百遍，其义自现). You went through one word after the other in haste. It is useless and lacks efficiency. After all the work, you still have to go through each word again within the text.
>
> Hao: Do you mean that I have to go through each word very carefully again after I have them read the whole text?
>
> Ren: Yes. You may have to do it….
>
> Hao: OK. I will go over the words again….But I already did so in the previous class yesterday.

[20] There are two types of lessons in the Chinese middle school textbooks: modern Chinese lessons and traditional Chinese lessons. The former introduces the simplified modern Chinese language widely used after 1949. The latter keeps the traditional Chinese language and literature (in simplified characters) featuring essays, poems and novels written by ancient Chinese writers, such as Confucian in 200 B.C. and Li Yu in Qing Dynasty in 1800s. Teaching traditional Chinese language usually requires a lot of explanation word by word since the usage and grammar are quite different from the modern one, which is now fully adopted in China.

> Ren: (silence) Come to observe my teaching traditional Chinese text. And you will understand what I meant. (Field notes of a lesson by Hao Chen and follow-up observation of the mentor-mentee interaction, September 10th, 2009)

In this conversation between Teacher Ren and Hao Chen, they were arguing about a teaching technique that Hao used in her teaching. Hao insisted that she was correct to spot the meaning of single words before having students read through the whole text. Based on her own teaching experiences, Teacher Ren thought that it would be even better if Hao Chen could have students read aloud the whole text to achieve an overall comprehension of the text before going to the details of understanding word-by-word.

As I was present during this debate, I was a little shocked about how Hao Chen dared to challenge a senior mentor who was highly respected in the SMS. However, this 19-year-old girl did not seem even a little intimidated by the Teacher Ren's criticism. It might be because the young generation of Chinese is more audacious and straightforward than the generation of their parents. It may also be because these young interns trained in a college were confident when they faced the different opinions from the rural schoolteachers who merely held an associate degree from local teachers' schools. The teacher educators in Hebei Normal University quickly noticed this tendency to look down upon the rural schoolteachers, and they cautioned the student teachers, "You are college students with solid knowledge foundations. But you do not have much teaching experiences. Rural schoolteachers are experts in their classes even though they do not have a college degree. You need to be humble when you learn from them. " (Field note during the orientation for the student teachers in the English Department of Huihua College, on June 15th, 2009) Although Hao Chen was not considered arrogant in this vignette, she was not humble to accept the advice from her mentor. After this conversation, she told me that Teacher Ren

should not have criticized her if she observed the prior lesson when Hao did have the students read aloud throughout the text. Stressing that her teaching was judged by a snapshot, Hao resisted the rich information included in Teacher Ren's suggestions all at once. What was implied by Teacher Ren was not only a method to teach reading, but also the perception about students in the lower academic group.

If we look further into this debate from the lenses of differentiation, we may also be able to tell that Hao Chen was not quite sure if her *putongban* students understood the meaning of the words in the traditional text. Teacher Ren was trying to let her know, based on her experiences teaching both *shiyanban* and *putongban* students, that a reading comprehension technique could help students from both groups. However, Hao Chen did not quite understand it, at least during this conversation.

Researchers argue that novice teachers learn best when they are personally invested and are actively engaged in the mentoring relationship, receive prompt and comprehensible feedback, and have an opportunity to work cooperatively with their mentors (Wang et. al., 2004; Wang, 2001). In this study, learning from the mentors not only entails acquisition of teaching techniques, but also perceptions of students. An actively engaged mentoring relationship with single or multiple veteran teachers helped Li Xuemin to learn about her *putongban* students in a positive manner and try out techniques to help students move across the social boundaries made by the test scores. In contrast, resistance to mentor's influence may lead to stagnant boundaries based on unexamined assumptions about the students. In Zhang Qiufang's case, without being handed a new perspective about the lower group students with which she totally agreed, she resorted to her prior experiences and family stories to understand her students. In both Hao and Zhang's

cases, it may be that their effort in working with *putongban* students could have been directed in a more constructive way.

4) HNU Teacher Educators

Compared to the mentors at Sanji Middle School, the influence from the HNU teacher educators seemed less significant. As introduced in Chapter 2, due to limited time and transportation difficulties in the rural areas, the HNU teacher educators could not observe the interns' classrooms frequently. Two teacher educators from HNU visited Sanji Middle School at separate times to observe interns' teaching. Both Professor Jin and Instructor Geng were in a haste to visit the classes and drop off a few comments since they had to visit another school in Pingshan County. After Professor Jin's visit, Zhang Qiufang complained about the critical feedback from Professor Jin,

> His comments were too theoretical! I almost went to sleep when he said that I should establish connection among the knowledge points. But how can I do it? He did not notice that my students barely grasped knowledge points yet. I would like to know how to make connection among the points that are not there yet. (Conversation with Zhang Qiufang, October 21st, 2009)

The interns' resistance to the teacher educator's feedback to their teaching was mainly due to their understanding of teaching as a highly contextual activity. Li Xuemin followed Zhang's complaint, "How can he tell if I made connection or not based on observation of one class?" Their resistance was also based on a view of the teacher educators as professors in an academic institution who had all the grand theories in hand. These interns deemed theories about teaching abstract, difficult to understand, and speaking little to the real teaching contexts.

Compared to the short visit and abstract feedback provided by Professor Jin and Instructor Geng, interns tended to look for helpful information from the courses they took and the

textbooks they read in the teacher education program. Not every teacher education course was equally respected. Only those involving practical components were mentioned. For instance, Instructor Lin Yan in the Chinese Language Department was mentioned by both Feng Qian and Hao Chen. Instructor Lin taught the pedagogy course for Chinese language majors both in HNU main campus and Huihua College. She experimented with a "self-composed teacher education textbook to engage student teachers in exploring pedagogy both theoretically and practically" (Conversation with Instructor Lin, October 4th, 2009). Student teachers were quite impressed by her teaching. Hao Chen said,

> What I learned most in Huihua was from Instructor Lin. She led us in designing the mimetic teaching situations, doing some literature research, writing problem-solving plans, and playing a skit in the class to solve the problems. You know, all kinds of problems a teacher might encounter, such as writing a comprehensive lesson plan, teaching a mini lesson, grouping, dealing with an unexpected question from a student, preventing drop out, conversing with challenging parents, and so on. We enjoyed acting like a schoolteacher in her class. Of course she gave us feedback and additional books to read. But most problem-solving approaches were devised by students ourselves. Some of the techniques we come up with were quite useful in my internship. For instance, I knew how to design a sound lesson plan on the first day I teach here [in SMS]. (Interview with Hao Chen, October 19th, 2009)

By giving student teachers opportunities to ponder upon as well as enact teaching skills in her teacher education class, Instructor Lin also helped the student teachers to be cautious of using biased evaluative criteria against pupils. As Feng Qian remembered favorably,

> In Instructor Lin's class of "Art of Being a *Ban zhu ren*", we had quite a few discussions on how to work with children with learning difficulties. What struck me was that she let me realize that everyone can learn. The learning difficulties maybe rooted in teaching problems. (Interview with Feng Qian, October 9th, 2009)

The ideas obtained from Instructor Lin's classes were so powerful that her student teachers kept referring to them during their internship.

In all, the interns negotiated the meanings they make in regards to the understanding of their rural students during the internship. They resisted, puzzled, appropriated, and appreciated the information they were exposed to during the interpersonal experiences. In this process, they learned either to reinforce or to shift the boundaries they made among the students. In the meantime, they held fast to or began to reflect upon who they themselves were during the interactions with people in the rural school. In this sense, they kept working on or re-charting the boundaries they made between themselves and their SMS pupils.

3. Institutional, Societal and Cultural Values

Lamont (1992) argued that the symbolic boundaries that people draw vary with the cultural repertoire that individuals have access to and with the structural conditions in which individuals are placed. "These resources include those made available by national historical traditions and by various sectors of cultural production and diffusion (the educational system, the mass media), while proximate and remote structural conditions include the market position of upper-middle-class members as well as the general features of the society in which they live." (p.6)

She suggested researchers consider the influence of "remote structural societal features" and of available cultural repertoires on boundary work rather than stressing only the proximate features of individual positions. Following Lamont's suggestion, herein I tease out the cultural repertoire residing in the institutions including SMS, *dinggang* internship arrangements, and teacher education program in HNU, as well as societal and cultural features that feed intern participants' understanding of boundaries.

1) Sanji Middle School

Anderson-Levitt (2002) pointed out, "Teachers and other educators generate teaching cultures by improvising with the materials at hand, not freely, but within the constraints and opportunities created by current institutional arrangements." (p. 273) In this study, the institutional arrangements for pre-service teacher learning were policies in Sanji Middle School, the *dinggang* internship arrangements, and teacher education program in Hebei Normal University.

Sanji Middle School was proud of its success in sending many of its graduates to the key high school in the Pingshan city. The graduates' high test scores of the High School Entrance Exam were the goal, and, as a matter of fact, guaranted the school development, the funding from the educational bureaus, and the salary/bonus for the teachers. To ensure that every teacher was doing their best to enhance students' academic achievement, SMS had a weekly teacher appraisal system. At the end of the week, the Director of Teaching marked the score for every teacher on the following items: attendance, lesson plan, teaching, homework, tutoring, testing. Nothing new was marked 0. Ranking excellent in lesson plan, homework, tutoring and teaching by the random classroom observation by the principal or the Director of Teaching would add two points. The unsatisfying performances in these aspects would substract two points. Ranking top in the average students' test scores (separate comparisons for *putongban* and *shiyanban*) in the major examinations (e.g. monthly exams, mid-term, finals, etc.) could add up to five points. Remaining in the last place in the average testing scores meant minus five points. The scores on each item as well as the overall score were displayed on the blackboard in the front of the teachers' conference room where all the teachers were summoned by the principal for a weekly meeting. The scores were not directly tied to teachers' salaries, but "it is a matter of face and

reputation" (Teacher Wang Hairong) since everyone compared the scores during the teacher meeting.

The interns' names were added to the name list on the evaluative blackboard. For them, it was not only because of saving their "faces", but also that their intern teaching performance had to be accepted and officially scored by the SMS mentors and the principal. They immediately felt the pressure of competing with each other through their students' average test scores on each examination. Plus, they eagerly sought advice on how to achieve this goal. They targeted the methods they thought could help most of their students learn and get better test scores. For instance, Zhang Qiufang learned that she had to "pay much attention to teach above-average students in *putongban* since they could enhance the average test score of the whole class. Teacher Yang Yan said that teaching *shiyanban* is totally different and you have to attend to lower groups. Otherwise, these students were likely to lower the average score." Other interns also kept average test scores asone of the, if not the sole, most important objectives in their learn-to-teach process. This mindset that stressed scores certainly directed and confined the cultural repertoire they had access to and prioritized.

2) *Dinggang* Internship

As a part of HNU pre-service teacher training program, *dinggang* internship corresponded to the effort in teacher education curriculum reform to (1) formulate a balance between academic and professional knowledge, and (2) respond to new market demands (Mak, 1999). However, a traditional view of "possession of subject content knowledge suffices in teaching" still prevails in teacher education (Song, 2008). As Guo (2005) summarizes, "current teacher education programs are narrowly designed, with rigid curriculum, excessive focus on subject training, and

insufficient emphasis on teaching skills…many teachers arrive in the classroom with little teaching experiences. ” (p.80-1) The new teachers with “high academic knowledge, low professional abilities” (Li & He, 2011, p.53) are not well aligned with the new curriculum in the K-12 setting that requires teachers to have the ability to facilitate students’ active participation or enhance learners’ capacity to solve learning problems.

With the aim of solving this problem, the *dinggang* internship orientation program was sending a strong message about the use of the *dinggang* internship to integrate theory and practice in teacher education curriculum, make student teachers marketable, as well as helping rural education. They cited the increased employment rate of the graduates, the letter of appreciation from the rural schools and personal stories by the *dinggang* interns in the past year. After the orientation, the intern participants, and probably most *dinggang* interns, took *dinggang* internship as an experience to acquire teaching skills for them to be a qualified teacher. This meant that the internship was not only to help underprivileged rural students but also to help young teachers to find decent teaching positions in the city. As Chen Long said,

> Going “down” to the rural school and teaching the students with learning difficulties can challenge myself and become a real teacher. We have learned all the bookish educational theories in Huihua and now we have an authentic teaching setting to test our teaching abilities. The schoolteachers in SMS have rich teaching experiences that I can learn from. There is nothing new or difficult in their textbooks. Maybe it is because I already learned all this set of knowledge. But my own clear understanding does not guarantee that I can explain the knowledge clearly to the students. I do not know much about rural children. Their teachers do. It is said in the orientations that veteran schoolteachers were experts with their students. I do find that some of their advice can help me convey the knowledge I learned in the college to the middle school classroom. (Interview with Chen Long, September 1st, 2009)

Thus, by promising a better future in the market, the institutional arrangement of *dinggang* internship worked as a legitimate resource to direct Chen Long when actively seeking advice

from local teachers. He, as well as other interns, was encouraged to make use of local teaching resources to reduce the gap between their urban heritage and rural contexts.

3) Books, Internet and Television

As *Tables 5.1* and *5.2* show, books and the internet were important cultural repertoire. Intern participants often resorted to books and the internet for teaching techniques since these resources were accessible, ready to use, and comprehensive. Although SMS only provides the internet access in its remodeled offices, interns tended to search for tips for writing lesson plans, dealing with difficult students, developing quizzes, and so on. They also borrowed books, including the teaching reference books and teaching journals, from the schoolteachers to look for new ideas about teaching. Almost all interns talked about the internet and books when being asked where they typically find solutions for teaching problems. Some of them specifically talked about how they work through their perceptions about their students based on what they read online or from books. For instance, Li Xuemin treasured a thick book borrowed from her mentor, Teacher Mu, "The Collection of Thesis by Middle School Teachers in Hebei Province".

> I got many ideas and techniques from this book. These short essays shared the experiences and teaching stories by many experienced teachers. They cover almost any aspect of teaching that I can think of. One article from this book shared a teacher's experiences of working with a rebellious student. He did not attend the class, nor did he do homework. He fought with other students and broke every rule in school. The teacher did not give up on him. On the contrary, she approached him with patience, visited his family, and got to know why he behaved so wild and angry. She also assigned him special homework to assist him in making progress step by step. This boy looks like some difficult students in my class. I was in despair working with such students until I read this article. (Interview with Li Xuemin, October 22nd, 2009)

Li Xuemin was not the only one who benefited from reading. Jin Junshu, Feng Qian and Chen Long all talked about how they learned from the internet and books. Soap operas on TV and on the cyber network were also resources for interns to know about rural students.

In addition, the HNU *Dinggang* Internship Office set up a blog site for the interns to post their written reports about their teaching and the short stories they would like to share with one another. Although most of these postings were reviewed by the HNU mentor teacher educator before being posted online and hence might have reduced the variety of the topics and opinions, the interns still found some helpful suggestions from peer interns in other placement schools.

In the meantime, the internet, books and television could also provide resources for making distinctions among students as well as between the interns and the rural students. For instance, some of the portrayal of rural areas and people were based on what the interns watched on TV. "These rural students are like what I saw on TV, plain, simple and hardworking," Hao Chen said on the first day of internship although she quickly realized that her students had a richer world than she thought based on the TV soaps. Chen Long also learned from reading news on the internet that rural students chose to drop out to work in the city and described some rural students as "not valuing school education and sacrifice their future for limited money".

4) Educational Policy

The SMS school policy and the *dinggang* internship requirements were situated in a larger setting of educational policies. As briefly introduced in Chapter 2, top-down educational reforms and policies in China in the past decade require teachers to implement the "New Curriculum" that can invite students' active participation and develop their ability for acquiring new knowledge, solving problems and effective communication (Zhou & Zhu, 2007). In the meantime, the strict examination system remains untouched and the test score is still the major evaluative standard for learning outcome and teacher efficiency. Chinese teachers are under

enormous pressure to meet both ends of the policy requirement—student-centered exploratory learning and teaching for academic testing.

In Sanji Middle School, teachers are clearly under the pressure to meet such challenging demands. On the one hand, teachers are asked to provide their students with an engaging learning environment, aimed at developing creative thinking, process learning and problem-solving. On the other hand, they are also required to produce adequate examination results that will be used as a yardstick for the learning outcome and their teaching performance. For many teachers and students, teaching and learning for tests is much more meaningful and rewarding than learning via experiential discovery, individualized teaching, and acquisition of life-long skills. What follows is a conversation between Teacher An, a Chinese language teacher in the 9th grade, and me that illustrated how SMS teachers perceived students' learning.

> Teacher An: The goal of teaching is to improve students' quality (*su zhi*, 素质).
> Jiang: What is the quality of a student?
> Teacher An: (thinking…) um… Now it is still based on the test score.
> (Conversation between Jiang Heng and Teacher An on September 21st, 2009.)

Intern participants grasped the idea and recognized the most important task was for them to increase students' test scores in spite of what they had learned in the teacher education program about the innovative teaching techniques in accordance with the New Curriculum Reform. For instance, Han Na questioned the group work she had learned in her teacher education course:

> Maybe this method can be used in some classes in the city. I have 50 students here, looking up to me to get a better score in the monthly exam. I am not sure how to use the group work and individualized task to get all of them improved in standardized tests. In the end, what is most valued is a good test score in the finals and in the High School Entrance Exam. (Interview with Han Na, September 26th, 2009)

On the one hand, Han Na did not feel well prepared to use the group work instead of whole-class instruction in her class. On the other hand, she was pressed to choose the whole-class lecturing, which was more familiar to her and seemed more effective to meet the testing

requirements. Chen Long also felt pressed to follow his mentor teacher's advice and ask his *putongban* students to memorize the correct answers so that they "could get more scores on the easy test items". In contrast, for his *shiyanban* students, as it was shown in Chapter 4, he attempted to lead them tp explore the scientific thoughts in teaching.

Thus, the split teaching goals embedded in the educational policy tended to reinforce the boundaries between *putongban* and *shiyanban* as the pre-service teachers seemed to have *putongban* students learn for testing while encouraging *shiyanban* students to explore learning since getting a good test score was less pressing for them than *putongban* students. Pre-service teachers also learned to dissolve the boundaries between *shiyanban* students and their counterparts in urban schools since learning how to explore the knowledge by themselves and with peers would, in Chen Long's words, "prepare them to adapt to teaching and learning in the key high schools in the city after they graduate from SMS."

5) Cultural Values

Looking beneath the teacher education institutions, school and educational policies, shared cultural values were powerful resources for intern participants to make sense of their students and their own teaching. I follow Anderson-Levitt's (2002) opinion and believe that culture includes explicit knowledge which people can express at ease and implicit meanings that people find difficult to articulate or barely recognize their existence. In this study, it seems that a "culture of perfectibility" is likely to be used for crossing or dissolving the boundaries interns made while the interns tended to draw on a "culture of excuses" to reinforce the boundaries they made among students.

Culture of Perfectibility

As the vignette and analysis about moral boundaries in Chapter 3 suggest, there was a strong belief among the intern participants in the value of hard work. Most of them agreed, to varying degrees, that students could learn as long as they work hard. As Li Xuemin quoted Teacher Li Shuqin, "People say that there is no chicken born from the stone. I do not buy into it. Teacher Li told her students to hatch chicken out of the stone and surprise people with their learning achievement. I am saying the same thing to my students and they looked encouraged. They know the saying that the iron stick can be turned into a needle with much effort." (Interview with Li Xuemin, October 22nd, 2009). This belief is rooted in the "culture of perfectibility" in China. Stevenson and Stigler contrast the Confucian belief in human perfectibility with Anglo-Saxon assumptions about fixed and innate ability. The one, they say, leads to the emphasis on effort, which in their view characterizes Chinese schooling, the other to what they claim is an endemic American educational fatalism and tolerance of low levels of effort and hard work. They argue that the Confucian view claimed that intelligence is not fixed (Stevenson & Stigler, 1986, p.94).

In addition, there is a cultural commonsense in China that childhood is for hard work, not just for fun. Following this logic, not studying hard fails to fulfill the students' responsibility and can be deemed as withholding from self-perfection. Most participants viewed that working hard was the bridge for rural students to achieve better and enter key high schools in the city.

Culture of Excuses

I borrow the term "culture of excuses" from Robin Alexander's (2001) *Culture and Pedagogy*. He cited former Prime Minister of England, Tony Blaire, who accused the culture that

"tolerates low ambition, rejects excellence and treats poverty as an excuse for failure" and claimed that this culture caused low teaching performance. This view was based on a deficit view which "attributed children's relative educational success to the power of 'good' and 'poor' homes rather than to the efforts of either the children or their teachers" (p. 357-358). This culture of excuses is not unique to English education, as this study shows that intern participants in SMS found security in such excuses and avoided blaming themselves for the students' low academic performances. Some intern participants remained passive in adopting the view that students in lower groups could not learn or conveniently claiming that migrant working parents could not tend to students' learning. For instance, Han Na once said, "I have worked so hard to prepare the lesson. Students in the back row of the classroom (class 4 of the 8th grade) never listened to me. Some of them were not disciplined well at home since they live with their grandparents while their parents are working in the city. Some of them are just not smart. They cannot get the point. If they wanted to do their own things or take a nap, I'll just let them be as long as they do not disturb the rest of the class. They do not learn at all. It is their problem. Not mine." (Interview with Han Na, October 9th, 2009)

It was interesting to observe that there was a challenge to the "culture of excuses". Li Xuemin repeatedly said during one interview "There must be something wrong in my teaching. If my students cannot learn well, the first thing I can think of is my mistake. It is useless, and unfair, to blame students" (Interview with Li Xuemin, October 22nd, 2009). We can also trace this thought in a sentence Teacher Li Shuqin gave to her students, "If you want to study hard, there is always a way to do it. If you do not want to study, there is always an excuse for it (*xiang xue zong shi you ban fa, bu xiang xue zong shi zhao jie kou,* 想学总是有办法，不想学总是找借口)." Supported by such a challenge to the "culture of excuses", a teacher may always attempt

to improve professionally to meet students' different needs instead of using differences in the students as an excuse to withdraw attention.

III. Summary

In all, the interns were actively constructing understandings using multiple cultural repertoire, interacting in many ways with what Geertz (1973) describes as webs of meaning, "whose filaments are continuously spun and linked by participants in complex latticework." (Cited in Anderson-Levitt, 2002, p.xii). Their prior individual experiences, current interpersonal interactions, immediate institutional settings, and remote policy and cultural values mingled and mixed in ways that helped the intern participants justify their use of certain evaluative criteria and decision-making in their teaching practices. Interpersonal interactions between school mentors and mentees and those among peer interns were most frequently used to both strengthen and weaken the intellectual boundaries and moral boundaries. Individual interns' boundary making was embedded in the school and national educational policies, as well as being confined by the arrangements of *dinggang* internship. These institutional settings tended to raise student teachers' consciousness of unexamined assumptions about rural students, especially those in the lower academic group. However, individual interns can creatively use these resources in both ways—strengthening the boundaries or dissolving them. The internet and books could also be helpful resources for interns to reflect upon the unexamined evaluative criteria. Finally, the implicit cultural values of "perfectibility" or "excuses" played a subtle role in directing interns' effort to help students different from themselves.

Thus, *dinggang* internship formed a professional setting for pre-service teachers to make use of multiple layers of cultural repertoire to make sense of their students different from

themselves. Interpersonal interactions among peers and between mentors and mentees stood out as the most influential sources for participants to understand their rural students. As Florio-Ruan (2001) termed as "education at the point of contact" (p.148), this internship placed in a rural setting in China illustrated teacher learning as social interaction that has implications for the professional development of teachers in professional learning communities.

Specifically, I found that when interns were engaged in an "explicit conversation" with their mentors and their peers they could directly address their perceptions about students and possibly lead to reflection upon and changes to the biases against a group of/individual students. The explicit conversations are meaningful communications aiming at understanding and solving problems encountered between people concerned in a specific context. This kind of conversation targeted on the specific problem and served as the activator of the cultural tools to solicit certain actions. In this study, the explicit conversations happened among interns, between mentor-mentees and even between the researchers and participants. The topics of the explicit conversations were usually about how to deal with specific groups of students, how to teach effectively, and how to improve students' academic performances. It could guide interns to search for direct suggestions and resonance in their reservoir of cultural tools.

This seemed to suggest that teacher education program needs to enrich students' reservoir of cultural repertoire by providing access to various information and effective pedagogical techniques. What is more, it is important to establish strong rapport during internship and encourage interns to communicate the problems they encounter. In this way, interns may less likely to rely solely on their own assumptions about students different from themselves and open to changes in their perceptions.

Chapter 6 Conclusion and Implications

How do interns decide who is a good and worthy student, and what consequences flow from their decisions? What are the criteria of evaluation? This study intends to answer these questions by examining how a group of interns raised or educated in urban settings understand their student teaching and their students in a rural middle school in Hebei Province in northern China. By identifying the symbolic boundaries that these interns marked among their students as well as between themselves and the students, I draw attention to the unexamined intellectual, cultural and moral boundaries that interns constructed and learned to understand their rural students. I argue that the interns used symbolic boundaries to guide their teaching and learned to reshape these boundaries in a professional supportive setting. By professional supportive setting, I specifically refer to the positive guidance provided by the school mentors, the meaningful communication among intern peers about their teaching, and the teaching opportunities Sanji Middle School and the HNU teacher education program provided for interns to learn to teach. In this study, not all participants are in the same professional setting although they were placed in the same school. Only those who obtained positive and frequent support from their mentors and peers experienced reflection upon their perception about rural students as well as growth in teaching efficacy while working with their students.

I found that the professional supportive setting in which these boundaries are situated influenced the interns' boundary enactment as well as their effort to cross the boundaries they had previously made. In doing so, I challenge the assumption that the ascribed characteristics and socially constructed meanings associated with social class preclude teachers from effectively teaching students different from themselves. In this concluding chapter, I summarize the main

findings, rethink the use of boundary work as an analytical tool, and consider implications of the study.

I. Social Class Differences and Symbolic Boundaries in Learning to Teach Rural Students

As it was introduced earlier in Chapter 1 about the socio-economic differences between urban and rural areas in China, when the interns from the city meet with pupils from a rural village, they encounter the questions of how to teach children from a social class background different from their own. It seems that the grand social structure of class is not sufficient to explain how the individuals understand social class differences. In this study, the participants are versatile in thinking about social class differences when they draw, navigate, enact, and shift the symbolic boundaries that they use to evaluate rural students and guide their learn-to-teach process. Further, in spite of this versatility of drawing boundaries, without strong mentoring and self reflection, the interns may have reproduced the social classes by favoring rural students with desirable traits while limiting attention and resources for students on the downside of the moral, cultural and intellectual boundaries.

1. Social Class Differences and Symbolic Boundaries

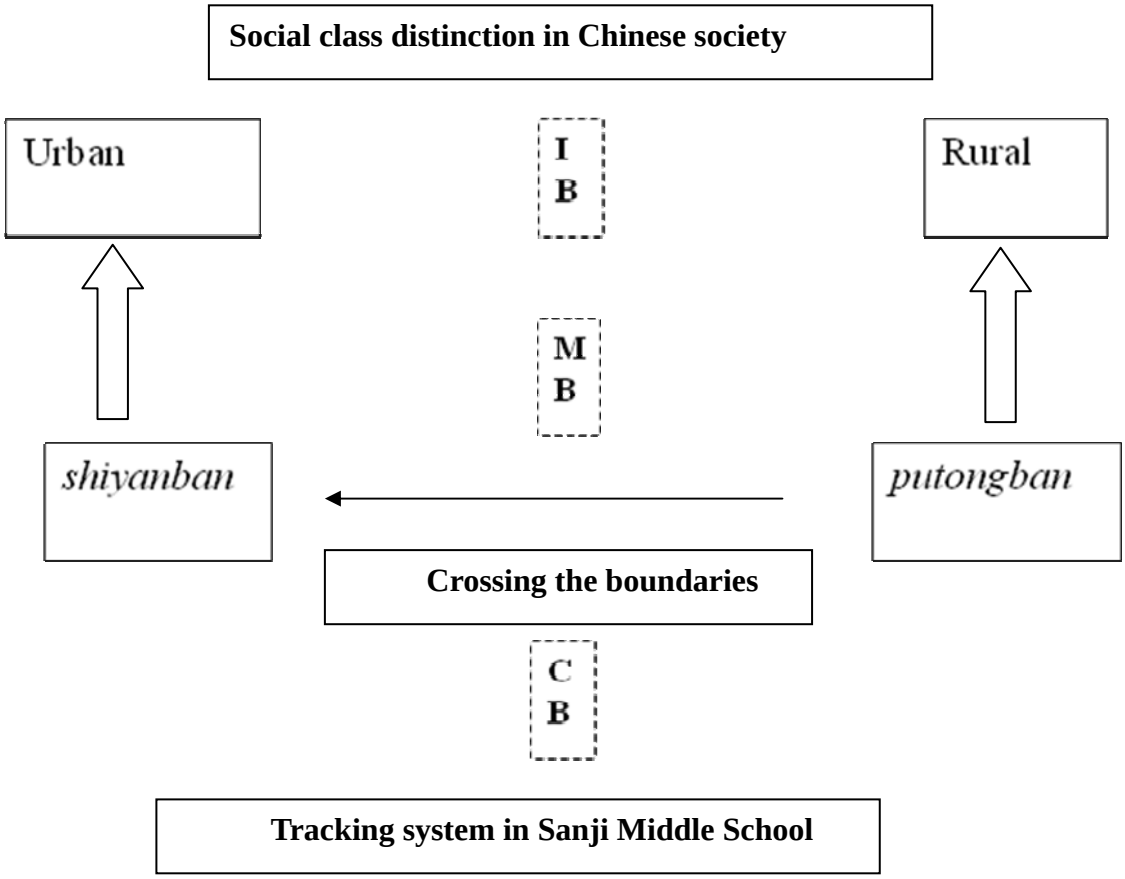
In the face of social class differences in urban and rural areas in China, the intern teachers in this study learned to interpret and understand differences based on the daily interactions with their students, their mentors, schoolteachers, and their peers. The process is not only rational, but also emotional, cultural and social. It is rational because it requests interns' thinking about the causes for the differences in students' academic performance. It is emotional because it involves interns' likes and dislikes towards the pupils. It is cultural because the evaluative criteria the

interns used to make distinctions among pupils are rooted in implicit cultural schemes the interns had long adopted. It is social because the interpretation and understanding are shaped by the social relations in which the interns' learn-to-teach process is situated. While learning to teach, the intern participants went through these emotional, cultural and social processes to understand their students. They had goodwill and meant to adapt teaching to their students. However, without careful reflection or guidance, interns often used unexamined symbolic boundaries to evaluate their students. As it is illustrated in the following *Figure 6.1*, in the context of the social class distinctions between rural and urban areas in China, the symbolic boundaries the interns marked among their students could be translated back to the social boundaries between rural and urban residents, and hence reproduced the social class distinctions between the rural and the urban. In the meantime, some interns were able to cross the symbolic boundaries they themselves previously made and to provide support to all students.

Specifically, I described, in Chapter 3 and Chapter 4, how three sets of symbolic boundaries—intellectual, cultural, and moral boundaries—were constructed, enacted, and/or dissolved by the participants to evaluate their students: intellectual, cultural and moral boundaries. In the placement school, Sanji Middle School, the tracking system of *putongban* (general education classes) and *shiyanban* (experimental or advanced classes) laid a natural setting for interns from the city to find similarities between themselves and *shiyanban* students. Generally speaking, *shiyanban* students were deemed by the interns (as well as many schoolteachers in SMS) to be smart, sophisticated in interpersonal interaction, and hardworking, which made them deserve more advanced learning tasks, more interactive classroom activities, faster pace of learning deeply, and instructional monitoring. They were expected, and in many

ways supported, to excel academically, later to get into a key high school in the city, and eventually to become college students or even employers and residents in the city.

Figure 6.1 Social Class Differences in China and Symbolic Boundaries Sanji Interns Made



In other words, for some interns from the city, *shiyanban* students would become one of "us", people in the city. The interns from cities may have found the affinity in the "urban identity" they ascribed to the future urban residents, the *shiyanban* students. In contrast, *putongban* students were described by the interns as "typical" that demonstrated assumed common characteristics of rural children, hardworking but not competitive, simple, and less

confident than their *shiyanban* peers. They were not expected to excel in learning or later get into a key high school in the city. Generally, the schoolteachers and interns predicted that most *putongban* students would work after graduating from middle school, on the farm or become migrant workers in the city who are not legitimate urban residents[21]. Both groups of students were boxed into different social identities which seemed to predetermine their future. The distinction between them started from the once-for-all entrance examination score, got elaborated into symbolic boundaries, and eventually became reinforced or challenged by teachers' differentiated teaching. Although both patterns, maintaining and crossing boundaries, were found in this study, they were not equally demonstrated. Some interns, such as Li Xuemin and Feng Qian, learned to work with lower achieving students more effectively and offer them cognitive demanding knowledge. However, other interns, were limited to their own sense of honor as someone from the cities (as with Han Na's and Cheng Long's cases) or confined by their mentors' negative comments against the lower achieving rural students (as with Jin Junshu's and Zhang Qiufang's case). These interns learned to relegate putongban students or lower achievers in shiyanban to lower demand and restricted learning tasks. In this sense, they might have played the role to reproduce the life cycle of the lower achieving rural students and hold these students back from more educational opportunities.

2. Boundary Fluidity, Cultural repertoire and Differentiating Instructions

Some interns preferred to use one set of the boundaries more often than other sets. For example, Chen Long tended to use cultural boundaries, while Jin Junshu favored intellectual boundaries. All interns have their own choices. Some interns used one set of boundaries at one

[21] Because of the "*hukou*" (residency, 户口) policy in China, it is very difficult for the migrant workers from rural areas to get a "*Hu Kou*" and become a resident in the city.

time and used another set in a different situation. It all depended upon whether these boundaries made sense to rationalize their teaching in a particular context. For instance, comparing herself with her drop-out brother, Zhang Qiufang stressed that working hard, as a moral boundary, was vital to differentiate students worthy of more attention from less worthy ones in her class. When trying to understand why the girls worked particularly hard without satisfying achievement, she attributed it to "not being smart enough". The moral boundary was replaced by the intellectual boundary which directed Zhang to assign easy tasks to these "slow" students.

Not only was the use of these symbolic boundaries malleable, so too were the ways that they were defined. For instance, Li Xuemin used to withdraw her attention from students who "did not learn to be good (*bu xue hao*, 不学好)" in her class. She drew a moral boundary between these students and their peers, followed by practices such as ignoring them. After several conversations with her peers and mentor teachers, she changed her perception about these students and learned to observe that "their nature is not bad and they deserve attention from the teachers, too." Thus, moral boundaries were once defined by the behavior (acting out in class and hanging out with gang members), but later re-defined as the quality and nature underneath these behaviors.

Therefore, symbolic boundaries that the interns used were not fixed. They were fluid. There were multiple symbolic boundaries for the interns to appropriate and the meanings of these boundaries could be modified. As I have shown in Chapter 5 talking about cultural repertoire that the interns drew on to make and enact symbolic boundaries, the boundary work was influenced by interns' prior personal experiences, shaped by the "explicit conversations" within the professional community, and deeply rooted in the "perfectibility" orientation in Chinese culture. Interns obtained their initial thoughts about their own identities and the perceptions about their

students from their personal experiences at home, in the school, and in other social settings prior to *dinggang* internship. During the process of "deliberate conversation", the interns communicated their thoughts about the students with their peer interns and mentor teachers. As a result, they were reflecting upon their use of symbolic boundaries and chose to either reinforce or change their original thoughts about their students. The "perfectibility" in Chinese culture tended to lead interns to believe that a student could be changed and teachers' effort for such a change could pay off.

However fluid these symbolic boundaries were, they provided criteria for interns to start evaluating their students and mark distinctions among their students: *putongban* students versus *shiyanban* students, and good students versus bad students and double backward students in one class (*ban*, 班). Interns made these symbolic distinctions among their students and followed up with differentiated teaching practices, as shown in Chapter 4. Interns tended to give complex learning tasks, use interactive learning activities, and employ instructional monitoring to work with students on the preferable side of the symbolic boundaries, that is, students who appeared smart, interactive, and hardworking. By contrast, interns provided easy learning tasks, used direct instruction, and attempted supervisory monitoring in teaching students on the other side of the symbolic boundaries. For instance, interns were often engaged in learning to teach a particular type of class, Teaching Exercise Lessons (TELS), in which they learned how to differentiate their teaching for different students. Some interns learned to enforce the symbolic boundaries they started with and conducted "discriminative teaching" to exclude lower groups from deeper knowledge and complex problem-solving techniques, as Chen Long's case showed. Some interns, however, learned to challenge their prior assumptions about the pupils and use

"differentiated teaching" to adapt instruction for students' educational readiness, as Li Xuemin's case demonstrated.

The fluidity of the boundaries allowed Li Xuemin and a few other interns to adopt reflective and flexible approaches in learning to teach different students effectively. However, it also contributed to, in Chen Long's case, the blurring of the distinctions between symbolic boundaries and education evaluation which should be based on students' learning readiness and needs.

In summary, social class difference were not revealed as differences in socio-economic status only, but implicitly existent in student teachers' perceptions about their rural students in the form of symbolic (intellectual, cultural, and moral) boundaries. For the interns, the varied levels of students' academic achievement were attributed to these distinctions in intelligence, culture and morality, which in turn lead students to cultivate an "urban identity", get higher education in the city and eventually become mainstreamed in the urban areas. Under the influence of multiple cultural repertoire—individual prior experiences, interpersonal encountering, and institutional/cultural values—the interns learned to view these distinctions either as fixed or as fluid and changeable. In the former case, the interns would use "discriminative teaching" to reinforce the boundaries they started with. In the latter case, the interns would use "differentiated teaching" to attend to students' learning readiness, and therefore challenge the static boundaries and devise pedagogical techniques to suit students' different needs.

II. Fluid Boundary Work as an Analytical Tool

Boundary work is the process of social differentiation in which people establish their identities by comparing and contrasting themselves to other people (Lamont and Fournier 1992). Cultural sociologists have long investigated how people make sense of their social life by drawing all kinds of boundaries. In Lamont's book *Dignity of Working Men* (2000), she analyzed the segmentation between "us" and "them" as respondents drew moral, racial, and class boundaries. She found that morality, as a symbolic boundary, defined a person's value and functioned as evaluative criteria to differentiate the self from others. Whereas the ability to live according to one's principles was crucial for the French upper middle class, the American workers were concerned with "interpersonal morality", or being a responsible and caring spouse and parent.

Boundary work does not only suggest symbolic distinctions between "us" and "them", but also lays foundation for action aiming at exclusion and inclusion. Lacy (2002) found that middle-class blacks managed their daily interactions with their white neighbors to assert a "suburban identity", which was consistent with "individualism". Anagnostopoulos (2006) also revealed how teachers used moral boundaries to justify the reduced teaching resources to "true demotes", the students who were deemed undeserving because they did not work hard to complete their assignments.

Thus, symbolic boundaries and enacted boundaries can help us understand how people think of the social class differences in their daily encounters, what hinders people from proactive interaction with each other, and how such boundaries could be reinforced or crossed. In this study, boundary work is found to be fluid in a particular setting when the interns interact with each other, with rural pupils, and schoolteacher mentors. As this study shows, the boundary work was constructed and prone to be modified by the interns in the interpersonal interactions. Direct

interaction with rural students and "explicit discussion" with professional peers and experienced mentors could increase such awareness and provide alternative thoughts to modify the symbolic boundaries if the interns did not believe that these boundaries were fixed and if their peers and mentors presented an open attitude towards low academic achievers among rural students. This interpersonal interaction echoes what Vaisey (2008) labeled as "relational context" that can contribute to the symbolic evaluation process. Shafar (2011) further claimed that relational context can blur the moral evaluation. He found that "*relational context*—the immediate features of important social relationships—is one such experiential factor that provides opportunities for people to construct or refine value judgments (Schafer, 2011 p.62).

That is, interpersonal interaction not only increases people's awareness of the symbolic boundaries, but also has the potential to countervail these symbolic boundaries in action. As this study shows, some interns, such as Feng Qian and Li Xuemin, learned from their peers and mentors to challenge their precepts about rural students and eventually came to actively seek teaching techniques to help their *putongban* students learn. However, not every intern made such a move. How the interns construct their own understanding out of multiple information resources is hard to portray. As DiMaggio (1997) argued over a decade ago, much remains unknown about how influences stemming from disparate experiences, relationships, ideologies, and situations together work to shape belief and action. This study shows that boundary work is contingent on the professional supportive setting, which in this study involves teaching in a disadvantaged rural school under the guidance of veteran schoolteachers. Boundary work is continuously in the making and getting crossed in such a professional supportive setting where actors directly address the encounters with people different from themselves and deliberately seek understanding. As rural pupils changed Han Na's perception of students' inability, and Wang

Kun and Hao Chen changed Li Xuemin's bias towards students with behavioral problems, interns were exposed to enriched life stories and different perceptions. Teacher Shan, Teacher Li, Teacher Wang, Teacher Ru, and Teacher Xu guided Hao Chen, Li Xuemin, Feng Qian, and Chen Long to go through the process of test exercise lessons and opened them to effective teaching techniques as well as positive perception about rural pupils. Although this study cannot be generalized to other settings, it shows, at least in Sanji, a group of interns learned to navigate among different symbolic boundaries in a professional practice encountering students different from their own, being supported by their peers and school mentors.

In a word, professional supportive setting matters and it may meaningfully influence student teachers' boundary work and understanding of students from different backgrounds. This idea of boundary work in the making within a professional supportive setting may be helpful for expanding Lamont's (1992, 2000) theory of boundary work, which has yet to explicitly consider the issue of boundary work in action and in change. The findings herein suggest that boundary work shaped by the professional supportive setting allows the opportunity to counterpoise the precepts and biases against people from different backgrounds.

III. Implications for Teacher Education Practices in the U.S. and China

Although the findings of this study are of interest in a Chinese context, they might be able to raise questions as well as offer implications for teacher education practices both in China and the U.S. since this study addresses the common concern of how to prepare pre-service teachers to teach underprivileged students, as it was already introduced in Chapter 1. The findings may not be transferable in a different national and cultural context, but they may provide alternatives for further understanding of the shared concerns.

1) Pre-service Teachers as Resourceful Learners in a Professional Supportive Setting

Lowenstein (2009) pointed out that there is an unexamined conception in the US suggesting that most White teacher candidates are deficient learners who lack resources for learning about diversity. She claimed that "just as we want teacher candidates to view their K–12 students as bringing resources to their learning, teacher educators must also view teacher candidates as bringing resources to teacher preparation" (Lowenstein, 2009, p.165). Following Lowenstein's work, this study challenges the assumption of pre-service teachers as monolithically insensitive to the disadvantaged pupils' learning needs. It demonstrates that interns mobilize multiple symbolic evaluation criteria based on various cultural repertoires to understand their students in a rural middle school. Their learn-to-teach experiences in the field are rich, meaningful and carefully interpreted by themselves.

Further, simply exposing interns /to the field experiences may not naturally lead them to reflectively use their cultural repertoire to understand and teach students different from themselves. All these participants conducted their internship in the same school. However, only a few of them developed the specific understanding and skills to work with rural students expected by the teacher education program. As Chapter 4 and 5 showed, interns' experiences of learn-to-teach were mediated by intern teachers' sense-making during classroom teaching and filtered through their collegial interactions. Meaningful mentorship and deliberate discussion among interns in the professional setting functioned as the catalyst to activate the use of cultural repertoire for teacher candidates to better understand and teach their rural students.

Further, I also noted that not all mentorship and discussion among peers were helpful in forming a fuller understanding of rural students. For instance, Zhang Qiufang was not satisfied

by her mentor, Teacher Yang's, biased view against the *putongban* students, and felt trapped in Yang's negative perspectives. Researchers in the US already found that a mentoring relationship could become a conservative force that helps reproduce the existing culture and practice of teaching instead of transforming it (Cochran-Smith & Lytle, 1999; Cochran-Smith & Paris, 1995). This implies that mentors in the school may need to be trained or selected prior to guiding the interns. The specific ways of supervising the interns and providing the scaffolding to student teaching should be carefully designed. In addition, Li Xuemin's approach to learn from many schoolteachers show the possibilities in a supervising practice that includes a few mentor teachers for one intern.

The teacher educator's role in mentoring was not salient in this study. It might be that the remote rural areas were difficult for the teacher educators to visit and observe student teaching. But the teacher educators may have to consider how to modify the teacher education curriculum to meet the practical needs of the student teaching in the rural areas as well as providing necessary theoretical resources.

2) A Model of "Teaching *Through* Assessment": Pedagogical Implication

In China, pre-service teachers' beliefs and teaching about social class diversity issues are seldom addressed, although a few researchers have empirically examined teachers' beliefs about different learners in terms of ability, interests, and knowledge (Correa, Perry, Sims, Miller, & Fang, 2008; Liang & Chen, 2007; Semmel & Gao, 1992). In the United States, many teaching strategies and methods have been proposed for preparing pre-service teachers to teach diverse disadvantaged learners (Barrett, 1994; Garmon, 2004; Gomez, 1993; Houser & Chevalier, 1996; Irvine, 2003; Ladson-Billings, 1994; Sleeter, 2001; Mansah, 2009, Xu, 2000). However, many of

these strategies have not explored the crucial interplay between teachers' beliefs and actions regarding diversity (Goodman, 1998), nor do these studies address beliefs of student diversity and assessment strategies.

My study provides a possible pedagogical choice for the "learning question" (Cochran-Smith et al., 2004) , which refers to "how in general teachers learn to teach for diversity and what, in particular, are the pedagogies of teacher preparation (e.g., coursework assignments, readings, discussion) that make this learning possible" (pp. 39–40). Organizing "typical" test items which can identify the common misconceptions that students have, and relating these test items to the curriculum in explaining these items during "test exercise lessons" could help interns develop knowledge of students' learning readiness and learn how to present the curriculum with the application in the tests. I call it the "teaching *through* assessment" approach.

This approach may also contribute to Chinese teachers' profound conceptual understanding of the content knowledge. Ma (1999) found that some Chinese teachers had what she calls Profound Understanding of Fundamental Mathematics; none of the American teachers participating in her study had this. With it, she says, teachers understand the connectedness of underlying concepts. In my study, interns learned from the experienced teachers to use "typical" test items to re-chart their framework of curriculum and establish connections among knowledge points. By doing a lot of typical test items themselves, teachers learned to recognize problem types in particular knowledge domains, retrieve relevant knowledge fluently from the curriculum, deepen their understanding in application to solve the problems raised by the test items, identify the common misconceptions students may have, and later model their thoughts in problem-solving during the process of explaining the test items to their students. During this process, my

hunch is, the interns learned to develop their "profound understanding of fundamental knowledge" in the subject matter they taught.

IV. Limitations and Future Research

Several limitations of this study and implications for future research must also be mentioned.

1) Building from the findings of the current study, questions for further investigation should focus on how teacher education programs can devise a carefully guided and mentored field teaching experience for pre-service teachers to better understand and teach disadvantaged students. What kind of mentors should be selected for the pre-service teachers? What are the effective mentoring schemes? Limited data in this study does not fully show how teacher educators from the university could have played a mentoring role during *dinggang* internship. In addition, the partnership between the teacher educators and the mentor teachers in the school was not fully explored. For instance, some interns mentioned that teacher education curriculum was somewhat helpful, it is not clear how such a help could be implemented systematically along with the internship.

2) Going beyond the immediate empirical concerns of this study, future work is needed to extend the idea of how different cultural sources together shape symbolic boundaries. Following DiMaggio's (1997) perspective, a key challenge in this aspect is to explain "the interaction between two distributions—of the schemata that constitute people's cultural toolkits [e.g., value system to draw from], and of external cultural primers that act as frames to evoke (and, in evoking, exerting selection pressures upon) these schemata." (p.274) What happens when

information from different cultural repertoire stand in opposition to one another? What social conditions make participants choose one instead of another? Although this study finds that positive mentoring and peer collegiality could elicit changes in interns' thoughts about rural students, how they reacted differently in sorting and choosing from competing ideas remains unknown.

3) As this is an ethnographic study with a small group of participants, it is not my intention to generalize the findings of this study to other settings. We should be cautious not to overstate the value of "teaching *through* assessment" approach without considering the context for its use in this study. Sanji Middle School teachers and interns usually organized the test items based on the "common misconceptions" of the students, and taught "test exercise lessons" in a whole class within a tracked system. This approach is likely to achieve full effect if most of the students are at similar level of learning. SMS teachers and interns certainly gave complex problems for more advanced students, but explaining test items in a whole class could be challenging if there were huge gaps among students' learning levels. Nonetheless, this should not be the reason to hold back from using "teaching *through* assessment" for diverse learners. Its focus on improving students' conceptual learning can grant teachers a powerful tool to teach students effectively. Future studies investigating how to adapt such teaching to small groups of students in a particular setting could further our understanding of how assessment could be used for teaching disadvantaged students.

APPENDICES

APPENDIX A

INDIVIDUAL INTERVIEW PROTOCOLS

1) **First interview**:

The first individual interview was conducted in the beginning of the internship. It consists of 11 questions that address several issues, such as your understanding of *dinggang* internship, previous experience working with low SES students, reasons for entering the teaching profession, perceptions about low SES students, and reflections on the teaching methods to diverse learning styles that they have learned from their teacher education programs. Each interview lasted about 60-90 minutes.

First interview with the intern	
Areas and goals of inquiry	**Interview questions**
Background information: *(1) Get acquainted with the interviewee* *(2) Provide information about interviewee's self identity and prior experiences*	1. I would like to know more about you. Where are you from? What do your parents do? Tell me about your friends. What do your friends do now? Which qualities do you have in common? What do you mean by____ (specific quality they raise)? 2. Where did you get your own education? What was your middle school like? Do you remember anything particular about your teachers? 3. When and why did you choose to be a teacher? What is your major? Why are you interested in teaching this subject matter? Did you work with K-12 students before? Under what circumstances? Please describe.
Perceptions about teaching in the low SES areas: *(1) Get information about their perceptions about low SES students and dinggang experiences* *(2) Provide information on how their perception of teaching low SES students*	4. What do you think as the valuable traits for a good student? What do you mean by____ (specific traits they raise)? Why do you think that they are important? 5. Do you believe that any person who is willing to work hard has a good chance of succeeding? Why or why not? What are the factors do you believe that are important for getting ahead in life? 6. Could you please compare students from rural areas and those from urban areas? How do you characterize these two groups of students (in terms of ability, behaviors, interests, aspiration, background, etc.)? What questions do you have about rural students? 7. Do you expect certain teaching approaches to accommodate rural students? In what ways?

	8. What have you learned about *dinggang* internship? What is expected? What do you think about the requirements of *dinggang* internship? How do you feel about the upcoming *dinggang* internship? What excites you most? What concerns you most? 9. When you try to understand your students and adjust your teaching, What source of information do you use and how? Please specify. 10. How do you characterize schoolteachers in the rural areas? How do you characterize your role as a teacher during *dinggang* internship?
Aspirations	11. What is your plan after graduation? Do you plan to teach in the rural areas after graduation? Why?
	Do you agree to be observed during the internship? Yes_____ No_____
	End session by asking if the PT has any questions.

2) **Second individual interview**: The second individual interview was conducted in the middle of the internship. All interview questions are intended to be open-ended. The interview lasted about 2--2and ½ hours.

Second individual interview with the intern	
Areas and goals of inquiry	**Examples of possible interview questions**
Connect to entry interview, get general impression of the community and *dinggang* internship	1. I see that you were interviewed by us last month. Can we talk briefly about some of your answers to the interview questions? (Ask questions about information obtained from the first interview if it is necessary) 2. What have you found most interesting, rewarding or surprising, challenging so far in *dinggang* internship? 3. How is the community similar to and different from the community you grew up in? 4. What were your expectations before you started *dinggang* internship? Why do you have these expectations? Do these expectations fit what you are experiencing now? Please explain.
Everyday teaching experiences: *Provide specific information about student teaching experiences*	5. What do you teach? Do you work as a class advisor in the meantime? What are the main responsibilities of a class advisor? 6. Please tell me about a typical day for you during the first few week of the *dinggang* internship. 7. What do you do in the community in addition to teaching during *dinggang* internship?

Understanding of *dinggang* internship: *Yield data about PTs' perception of their students and rural schoolteachers*	8. Please describe your students. What are the factors that help them learn well? What barriers can you identify that prevent their academic success? What might be helpful teaching strategies for them? 9. Please compare your own experiences in middle school and your pupils' school experiences. Can you give me concrete examples? 10. Which characteristics do your pupils have in common? What is special in some students? What do you mean by____ (specific characteristics they raise)? Any examples? 11. Given the students' characteristics you have identified, what is the teacher's role in working with these students? How do you characterize the role played by the rural schoolteachers you have observed and worked with? How do you characterize the role you play as a student teacher in this school?
Beliefs and attitudes about working with low SES students: *(1) Obtain data about pre-service teachers' tacit assumptions of low SES pupils' characteristics and how they learn.* *(2) Explore how these assumptions affect their perceptions of teaching* (3) *Connect to data from observation*	12. What is the most difficult teaching situation you have encountered so far? Can you describe it? If you encounter similar situation again, what would you do? What led you to this idea? 13. Here is a vignette from your teaching video. Can you tell me_____? *(I will raise specific questions about this vignette associated with pre-service teachers' perception of the pupils)*
Social support and community involvement in *dinggang* internship	14. When you try to understand your students and adjust your teaching, what source of information do you use and how? Please specify. 15.What kinds of information, support and resources do you have from HNU and the local school during internship? Please specify. 16.Who are the most helpful people during the internship? What kinds of help do they provide? Please give me concrete examples. 17.In which ways do you need more help? From whom? Why? 18.What do you think about the community activities you involved in *dinggang* internship? How do these activities contribute your understanding of teaching and working with local students?
	End session by asking if the pre-service teachers have any questions.

3) **Third individual Interview:**

The third individual interview includes 9 questions designed to have pre-service teachers reflect upon their *dinggang* experiences and its influence on their teaching, their perceptions about low SES students, and their future career plans. The interview will last about 60-90 minutes.

Exit interview: Interns; one month after their internship	
Areas and goals of inquiry	**Examples of possible interview questions**
General reflection upon *dinggang* internship	1. What have you found most interesting, rewarding or challenging in *dinggang* internship?
Get information about pre-service teachers' perceptions about rural students; corresponds with the entry interview.	2. What do you think as the valuable traits for a good student? What do you mean by____ (specific traits they raise)? Why do you think that they are important? 3. What have you learned about your students from rural areas? How do you characterize them (in terms of ability, behaviors, interests, aspiration, background, etc.)? 4. What are the effective teaching approaches that you used to accommodate these students? In what ways? Any examples? Where did you learn about these approaches?
Get information about pre-service teachers' perceptions about rural schoolteachers	5. How do you characterize schoolteachers in the rural areas? How do you characterize your role as a teacher during *dinggang* internship? Any examples?
Get information about the cultural repertoire available in community activities that pre-service teachers' use to make sense of their internship	6. What do you think about the community activities you involved in *dinggang* internship? How do these activities contribute your understanding of teaching and working with local students? 7. When you try to understand your students and adjust your teaching, what kind of resources do you usually rely on? Who do you usually turn to? Why? Please specify.
Yield data about what pre-service teachers think that they have learned from dinggang	8. Do you think that *dinggang* internship helps you learn to teach? Why or why not? If it helps, please specify how and give examples. What are the elements in teacher education programs help you to teach in *dinggang* internship? In which ways do you need more help? From whom? Why?

internship and teacher education	
Future plans	9. What is your plan after graduation?
	End session by asking if the pre-service teacher has any questions.

APPENDIX B

CHINESE TRANSLATION OF THE INTERVIEW PROTOCOLS

第一次访谈：

第一次访谈总共有 11 个问题，访谈者希望通过这些问题了解你对顶岗实习的理解，你从前的教学经历，对农村孩子的看法，从教的原因，你在河北师大学到了哪些教学方法和你会在农村实习使用的哪些教学方法，等等。访谈持续 60-90 分钟。

第一次访谈实习生	
访谈目标	**访谈问题**
了解背景信息：*认识被访者。* *了解被访者的个人信息，自我认同和已有的教学经历*	1. 让我们谈谈你吧。你老家在哪里？你的父母亲是做什么工作的？让我们谈谈你的朋友们吧。你有哪些朋友？你的朋友们现在都在做什么（读书还是工作）？你和你的朋友们在哪些方面很相似？_____（具体相似的地方）是什么意思？ 2. 你在哪里上的中小学？请描述一下你的中学/小学（视他们去中学还是小学实习而定）。你还记得你的中学/小学老师么？记得他们的哪些事情？ 3. 你为什么上师范大学？以后当老师？你的学科专业是什么？为什么要选择学习和教这个专业？你以前教过中小学生么？（如果教过）什么时候教过？请描述一下你的教学经历。
对农村学生的看法: *（1）了解实习生对于农村学生和顶岗实习的看法* *（2）了解实习生对于如何在农村教学的看法*	4. 你认为一名好学生具备哪些特点？什么是_____ (具体特点)? 你为什么认为这些特点很重要? 什么样的学生是坏学生？ 5. 你认为一个人只要努力就能成功么？为什么？你认为什么因素对于一个人的成功很重要？ 6. 你能比较一下农村学生和城市学生么？请你分别描述一下他们的特点（比如说他们的能力，行为，理想，家庭因素，等等）？你不太了解这些学生的哪些方面？ 7. 你计划使用哪些教学方法来教顶岗实习中遇到的农村学生？请详述。 8. 你对顶岗实习有哪些了解？河北师大对顶岗实习的要求有哪些？你怎么理解这些要求？你对顶岗实习是怎么看的？顶岗实习最让你企盼和兴奋的是什么？ 最让你担心的有哪些问题？ 9. 你从哪里获取针对农村学生的教学资料和相关信息？你打算如何使用这些资源和资料？ 10. 你对于农村教师有哪些了解？你在顶岗实习中将做一名什么样的老师？
了解实习生对将来的打算	11. 你毕业后有什么打算？你毕业后计划在农村地区从教么？为什么？

	你愿意参加后续的观察研究么？是_____ 否_____
	让实习生提问

2) 第二次访谈： 2-2 个半小时。

第二次访谈实习生	
访谈目标	**访谈问题**
与实习前访谈挂钩，了解实习学校和周边地区的情况以及顶岗实习情况。	1. 上个月你接受过我们的访谈。我们能接着谈一谈么？(访谈者阅读实习前访谈后如果需要了解进一步的信息，请提出具体问题) 2. 目前为止你觉得实习过程中最有趣/最有收获/最出乎意料或者最有挑战性的方面有哪些？ 3. 实习学校周边地区与你家周边地区有什么不同或相同之处？ 4. 你在实习之前有什么期望？为什么会有这些想法？这些想法和你现在的实习经历相符么？请详述。 5. 你现在教哪个学科？同时担任班主任工作么？平日教学和（或）班主任工作的职责都有哪些？ 6. 实习开始这几周你每天都在忙些什么呢？请介绍一下你每天都有哪些任务和活动。 7. 你在实习期间参加都参加了哪些社会实践活动？
了解实习生对于顶岗实习的理解: *了解实习生对于农村学生和农村教师的看法*	8. 请介绍一下你的学生。你认为都有哪些因素能让他们学习成绩提高？哪些因素妨碍他们学习成绩提高？都有哪些教学方法能帮助他们学习？ 9. 请回忆一下你的中学经历，并和你的学生们的学习经历进行比较。有哪些异同点？请举例说明。 10. 你的学生们都有什么共同的特点？你班上有哪几类学生？分别具有什么特点？你发现有哪些特别的学生？他们都有什么特点？_____（具体特点）是什么意思？能举例说明么？ 11. 基于你学生的这些特点，你认为教师的职责有哪些？你从这所学校的农村教师身上观察到哪些特点？你认为你的职责是什么？
了解实习生对于农村学生的观点与其教学实践的关系: *（1）了解实习生在教学实践中透露出来的对农村学生的态度和观念(2) 了解这些观念和态度如何影响他们的教学。* *(2) 与通过观察获取的数据进行对照。*	12. 请描述到目前为止你在教学中遇到的最难解决的问题。如果你再遇到类似的情况，你会怎样做？为什么要这样做？ *13.* 这是一段你的教学录像。你能告诉我为什么要_____么？ *(访谈者就教学录像的细节问题提问，了解被访者在教学行为中透露的观念)*
了解顶岗实习中学	14. 当你在教学中需要了解评价学生时，你会使用哪些资料/信息？

生从哪里获得支持和资源。	你会找谁帮忙？请举例。 15. 你从河北师大学到了哪些教学方法/信息/支持/资源可以用在实习教学过程中？你实习所在的学校让你获得了哪些信息、支持和资源？请举例说明。 16. 在实习过程中哪些人对你的帮助最大？他们提供了什么帮助？请举例说明。 17. 你在哪些方面需要更多帮助？你最希望谁能提供这些帮助？为什么？ 18. 你怎样看顶岗实习所要求的社会实践活动？这些实践活动是怎样帮助你教学和了解当地学生的？
	让实习生向访谈者提问。

第三次访谈实习生:

实习后访谈总共有9个问题。访谈者希望通过这些问题让实习生反思他们的顶岗实习经历，了解顶岗实习经历对实习生的教学、对农村学生的观点和他们的就业规划的影响。访谈将持续大约60-90分钟。

第三次访谈实习生	
访谈目标	**访谈问题**
了解实习生对顶岗实习的认识	1. 回想一下，你觉得实习过程中最有趣/最有收获/最出乎意料或者最有挑战性的是什么？
了解实习生对农村学生的看法；与实习前访谈进行对照	2．你认为一名好学生具备的哪些特点？请具体说明_____（被访谈者列举的好学生的特点）。为什么你认为这些特点很重要？ 3．你现在对于农村学生有哪些了解？你能描述一下他们的特点么（比如说他们的能力，行为，理想，家庭因素，等等）？你不了解这些学生的哪些方面？ 4．你使用的哪些教学方法对你所教的这些学生很有效？请举例说明。你从哪里学到的这些方法？
了解实习生对于农村教师的看法	5．你认为你所在学校的农村教师具备哪些特点？你觉得自己在实习过程中扮演了什么样的教师角色？请举例说明。
了解实习生都通过那些渠道获取信息从而理解他们自己的实习经历。	6．你怎样看顶岗实习中要求你们参加的社会实践活动？这些活动对你理解教学和当地学生有什么影响？ 7. 当你在教学中需要了解评价学生时，你会使用哪些资料/信息？你会找谁帮忙？请举例。
了解实习生认为都从顶岗实习和河北师大学到了什么。	8. 你现在对教学有什么心得？请举例说明。河北师大为你的实习提供了什么帮助？在哪些方面你还需要获得更多帮助？你希望谁能够提供这些帮助？为什么？
了解实习生的就业规划	9. 你毕业后有什么规划？
	让实习生向访谈者提问。

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