

# INTRODUCTION

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The population of the United States is becoming increasingly multicultural. In education, students of color make up 40 percent of the students in U.S. schools (Garcia, 1994). Since 1981, the majority of students in public, central city schools have been African American and/or Hispanic (U.S. Department of Education, National Center for Education Statistics, 1993a). With this increase in students of color in schools is documentation showing that students are treated differently, and that the cultural background of the student is often a reason for this differential treatment (Cazden, 1986; Jackson & Corsca, 1974; Morine-Dershimer, 1985; Sadker & Sadker, 1985). For example, Sadker and Sadker (1985) found that teachers tend to interact with, call on, praise, and intellectually challenge white, male, middle-class students most and reprimand black, male students most. Morine-Dershimer (1985) found that minority students' contributions to discussions received less attention when compared with those of majority students. Unfortunately, the research in this area has so far been limited to behavioral indices, with a minimal attempt made to understand why (that is, to uncover the underlying thinking processes) teachers treat students of color differently. Only after understanding teachers' cognitive processes and products can we more fully answer the question Cazden (1986 p. 447) asks: "Is this helpful individualization or detrimental bias?"

Of equal importance is documentation showing that the number of teachers of color is substantially small: 13 percent of all teachers are nonwhite (U.S. Department of Education, National Center for Education Statistics, 1993b). One fear resulting from

this disparity is that Euro-American<sup>1</sup> teachers will not reflectively and critically question the social, political, historical, or cultural tradition of their own educational experience and will thereby replay the “hidden” curriculum taught to them, which might serve to “colonize the mind” of these students of color. The hidden curriculum, Eisner (1985) suggests, includes messages about individual students (for example, in using more wait time, the teacher expects the student to come to the right answer and thus sees the student as capable), about how students relate to each other and authority figures (in allowing students a say in the classroom rules, the teacher expects students to participate actively in a climate of democratic decision making), and about the society in general (in portraying Mexican-Americans only as farm workers, no matter how positively, the teacher implies that farm work is their only “place”). Thus the failure to think through fully the social, cultural, and political implications of teaching in cultural contexts will undoubtedly ensure that opportunities for the advancement of students of color will continue to shrink.

With the increase in students of color, then, comes a corresponding need to understand teachers’ cognitive processes and products with respect to the culturally diverse classroom. The purpose of this book is to shed light on current research on teacher thinking in cultural contexts and to identify promising practices in teacher education that take the most salient contextual variables into account. The purpose of this chapter will be to provide a brief overview of the nature of teacher thinking and its relationship to cultural contexts. In explicating the schism between traditional (positivist) approaches to teacher thinking and the need to understand that thinking in a cultural context, it will summarize an alternative research paradigm (interpretive) that serves to bridge this gap between thinking and context in the following chapters. Finally, before highlighting the chapter contributions, this chapter will detail the critical questions that are the focus of this volume.

## TEACHER THINKING: AN OVERVIEW

An expanding body of research has focused attention on teacher cognition.<sup>2</sup> This research breaks from the dominant behavioristic paradigm of understanding teaching (such as the process-product orientations of Brophy & Good, 1974) by attending to the mental processes of teachers as a potential influence on their activity in classrooms (Jackson, 1968; Macmillan & Garrison, 1984). This

move is informed by and parallels advances in cognitive psychology. Cognitive psychology rests on our knowledge of how information is processed (transformed, reduced, elaborated, stored, recovered, and used) (Neisser, 1967). From this, three interrelated principles of learning have emerged that guide work in the area of cognitive psychology:

First, learning is a process of knowledge *construction*, not of knowledge recording or absorption. Second, knowledge is *knowledge-dependent*; people use current knowledge to construct new knowledge. Third, learning is highly tuned to the *situation* in which it takes place (Resnick, 1989, p. 1).

With this new move toward exploring cognitive processes comes interest in understanding the *origins* of teachers' actions as well as their consequences. This interest rests on the assumption that teachers are thoughtful practitioners not unlike other professionals (doctors, lawyers, architects, etc.) (Argyis & Schon, 1975; Schon, 1983; Shulman, 1986). Thus scholarship in this area suggests that teachers' cognition (beliefs, theories, and knowledge) play a powerful role in their behavior. The connection between teacher thinking and action, mediated by how one interprets what one sees, is of critical importance (Argyis and Schon, 1975; Borko, Cone, Russo, & Shavelson, 1975; Clark & Peterson, 1986; Mandl & Huber, 1982; Wittrock, 1987). For example, Leinhardt and Greeno (1986) suggest that because teaching is such a complex and demanding task, mechanisms for processing information and making rapid-fire decisions become the hallmark of effective teaching. Thus teachers' thinking serves as an "attention selection" device as well as a mechanism for chunking information for later recall and use. The belief, then, is that teacher thinking guides what teachers pay attention to and remember; this, in turn, triggers "routines of action," habitual ways of acting in the classroom (Calderhead, 1983; Kaplan, 1964; Lavelly, Berger, Bullock, Follman, Kromrey, & Sawilowsky, 1986; Leinhardt & Greeno, 1986).

In contrast, this connection between teacher thinking and action has been questioned. For example, Morine-Dershimer (1979) found a degree of incongruity between belief and action in the classroom. Indeed, many factors outside of the teacher's control work to constrain behavior in ways that make for incongruity

between thought and action (Duffy, 1977). Pearson (1985) advanced the notion that although some specific beliefs were incongruous with classroom action, the bulk of those beliefs (and especially the most critical beliefs) were congruent with action. He concluded by suggesting that teacher thinking is hierarchically structured, with certain beliefs, points of knowledge, and theories being more salient (and congruous) with action. Likewise, Tabachnick and Zeichner (1986) advance the notion that teachers move toward greater consistency between thought and action over time (either by changing thought or by changing action). Perhaps Munby (1984) was most accurate in suggesting that teacher thinking (beliefs and principles, specifically) is a significant part of a teacher's *context* for making choices in behavior.

One attempt to resolve the thought-to-action debate has been to focus on teachers' practical knowledge (beliefs, habits, and knowledge) that helps them to do their job. It is time bound, situation specific, personally compelling, and oriented toward action. As Elbaz (1981) explains it, teacher knowledge is held in relationship to practice and shapes practice.

A second characteristic of teacher cognition is that it is multidimensional (Calderhead, 1983; Elbaz, 1981; Leinhardt, 1990; Peterson, 1988; Shulman, 1987). Generally, it includes an individual's beliefs (see, for example, Pajares, 1992) and knowledge (with several kinds of knowledge of special interest, including discipline content, curriculum content, pedagogical content, and knowledge itself; Shulman, 1987). Other approaches linked to understanding the "what" of teacher thinking include the schema theory approach, the practical argument approach, and the concept-mapping approach. Alternately, instead of focusing on content (*the epistemological stream*, Solas, 1992), some researchers have chosen to conduct their research on the processes of thinking (*the psychological stream*; Solas, 1992), including how teachers plan (preactive and postactive), how teachers make decisions in the course of interaction (Clark & Peterson, 1986), and how teachers develop implicit theories (Clark, 1985; Copa, 1984; Kelly, 1955). Consistent with this latter stream is research linked to the reflection-in-action approach.

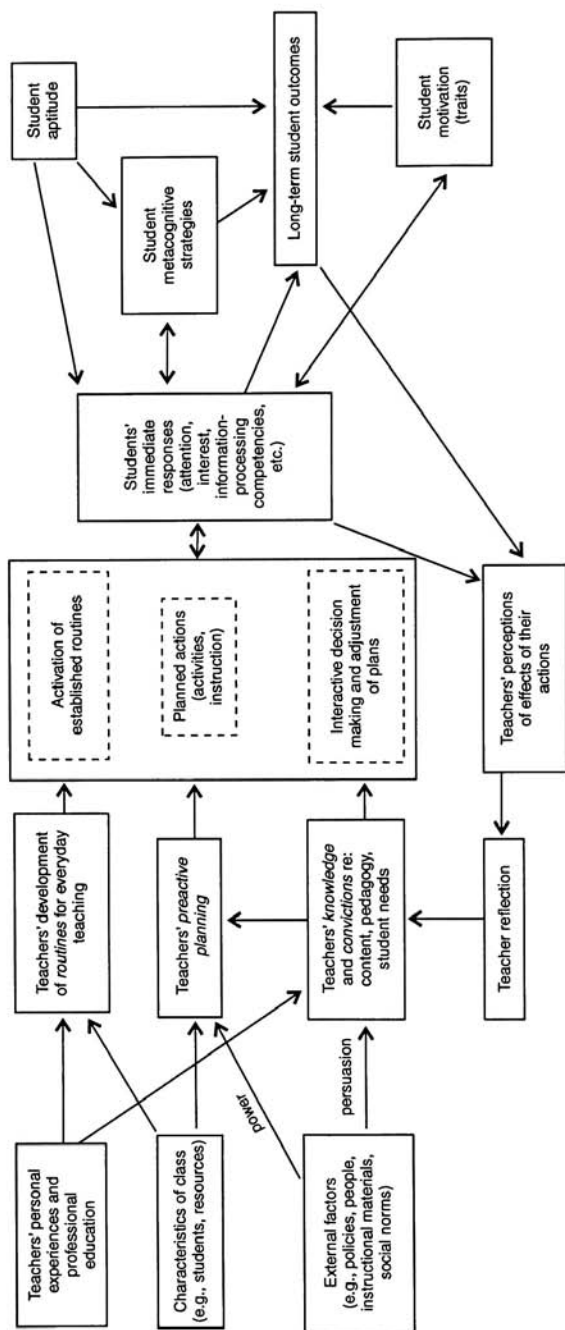
Another characteristic of teacher cognition is that it is not static; rather, it is fluid and dynamic (Anderson-Levitt, 1984; Schon, 1983). It is continually affected by contextual constraints and opportunities (Clark & Peterson, 1986) as well as by student actions. As teachers act on their thoughts, they are continually

receiving feedback from their students (and/or colleagues). This feedback establishes a loop that provides valuable information and that has the potential to affect their thinking.

Although teacher cognition is located in the individual's psyche (such as in beliefs, values, biases, prejudices, and generalizations drawn from personal experience, "rules of thumb," etc.; Clark, 1988), it is critical to recognize the socializing power of the culture of teaching on one's thinking (Feiman-Nemser & Floden, 1986; Zeichner & Gore, 1990). Briefly, research in this areas suggests that there exists a shared "teaching" culture and that this culture of teaching imposes beliefs about appropriate ways of acting on the job. When most individuals share these beliefs, they become norms of actions (expected ways of interacting).

Teachers' thinking is shaped by the culture of teaching through a complex and extended process of socialization. Stephens (1967), for example, argues that all individuals have a degree of spontaneous primitive pedagogical tendencies that have evolutionary and survival value. Wright and Tuska (1968) provide a psychoanalytic explanation that suggests that the teacher-student relationship is a replica of the parent-child relationship with all its implications. Yet the most powerful force on teacher socialization before formal training is the thousands of hours each individual spends watching teachers in action throughout her or his educational experience, in what Lortie (1975) calls an "apprenticeship of observation." Additional socialization factors include the kind of university or college the preservice teacher attends, what courses she takes (general, subject matter specialty, and education course work), the student teaching experience, the classroom environment, and finally, how the teacher herself actively constructs the meaning of these socializing demands and her response to them.

Even though scholars have begun to describe the characteristics of teacher cognition, fewer scholars have advanced a theoretical structure of teacher cognition. Of note then is the model advanced by Clark and Peterson (1986). In 1988, Porter and Brophy expanded the model to show more clearly the complex, multidimensional nature of teacher cognition (see the figure below). In this model, background, classroom, and external factors influence teachers' knowledge, planning, and routines for instruction. Teachers' knowledge, planning, and routines influence how teachers teach. This instructional activity influences the students' responses to that activity (which is influenced, in turn, by their



Porter and Brophy's Model of Factors Influencing Teachers' Instruction in Particular Contexts (from *Educational Leadership*, 45[8], p. 76; used with permission.)

aptitude, motivation, and metacognitive strategies) as well as potentially having a long-term effect on student outcomes. This model also demonstrates how teachers modify their instruction *when they reflect* on students' reactions (and outcomes), thus leading to potential changes in the teachers' own knowledge and future instructional actions.

Although this model is an attempt to describe a hidden process (teacher thought), it is not without limitations. One difficulty with the Porter and Brophy model is that it assumes that the individual is equally aware of and equally influenced by the characteristics in each "box" (for example, by the characteristics of the class, personal and professional experiences, external factors of the school, etc.) of the model.

A second difficulty is that it assumes that individuals are rational and logical when it comes to interpreting events and identifying a course of action. What's lacking in their model is the role of affect, prejudice, bias, desires, needs, self-serving tendencies, and so forth. For example, one must consider all the logic and reasoning used to undertake preservice and inservice training that takes place around preparing teachers to teach in culturally and linguistically responsive ways; it often comes up short because of the "resistance" to thinking about teaching in more inclusive ways. This resistance is not always rational, but it is very real. All these elements (affect, resistance, prejudices, etc.) are as critical to the sense making and decision making that take place in teaching as are those elements Porter and Brophy identify. Thus, beyond searching for scholarship that seeks to understand teacher thinking in context, we must also search to capture the greater complexity of teacher thinking that goes beyond rational sense making.

A final limitation of this model is that it focuses exclusively on the dynamic interaction between teacher, student, and curriculum. What is missing is contextualizing this dynamic in the school, community, and nation-state with an eye on the sociocultural and sociopolitical context.

In sum, our understanding of teacher cognition is continually expanding (for a more complete literature review, see chapter 1). We are aware of some of the elements that make up teacher cognition and are aware of the interdependency of cognition and action. We know that teacher thinking affects teacher action, which in turn affects teacher thinking. For the most part, what is missing in the research base on teacher cognition is the connection be-



tween teacher thinking and issues raised by our expanding interest in questions of diversity. Thus, even when teacher thinking is made explicit, the context in which this thinking exists is usually not the subject of specific discussion.

### THE CULTURAL CONTEXT<sup>3</sup>

Without a doubt, the context in which teachers operate has a salient effect on how they think. Indeed, any competent professional needs to be aware of the particular contextual variables that pertain to a specific setting (Montero-Sieburth, 1989). Historically, however, mainstream educational researchers exploring teacher cognition have ignored contextual variables such as the students' cultural background or the degree to which changes in the curriculum influence their thinking (Shulman, 1986). "Good teaching" is what is advanced if educational problems are to be alleviated irrespective of the environment. Contextual variables may be ignored because they provide researchers with greater power to generalize findings across contexts and to describe teacher thinking in nearly universal terms. The negative result, however, is an inability to document teachers' thinking in specific contexts. A concomitant inability is demonstrating opportunities for reconstructing knowledge that take that thinking into account. What is needed, according to Montero-Sieburth (1989), is:

viewing . . . teachers' implicit and explicit knowledge not in a vacuum but in relation to students, to the curriculum, and, most importantly, to the culture of the school and its socioeconomic, family, community, societal and institutional structures. Understanding how urban teachers' knowledge becomes enhanced or constrained by oppositional institutional and instructional contexts is central to the processes of producing, distributing, and regenerating that knowledge. (p. 342)

Indeed, a teacher's knowledge is socially constructed; accordingly, a teacher will automatically shape subject matter to account for ethnic or economic factors that influence or are held to influence students (Elbaz, 1981).

Without doubt, there is an increasing need for ways of thinking about issues of diversity with greater "cognitive sophistication." Simply putting teachers in situations that require them to think



about issues of diversity is important but not sufficient for fostering this sophistication. For example, McDaniel, McDaniel, and McDaniel (1988) found that relying on experience alone was not sufficient because the need exists for a “cognitive modality” in learning that emphasizes abstract thinking, scientific and logical reasoning, and sense making of experience. This conclusion was further supported by a review of the literature on interventions designed to affect the thinking of preservice and inservice teachers with respect to issues of diversity (Grant & Secada, 1990). Among their findings are the following:

1. Programs that combine academic training with exposure to different ethnic groups (via fieldwork) were most effective for changing attitudes and improving teaching over those with just fieldwork or just academic training.
2. Based on the individual’s thinking, different interventions may be required.

One particular approach to looking at what this cognitive sophistication may mean in terms of teacher thinking comes by way of the expert-novice research paradigm (see, for example, Artiles, this volume; Chi, Glaser & Rees, 1982; Larkin, McDermott, Simon, & Simon, 1980; Voss, Greene, Post, & Penner, 1983). Basically, this research approach attempts to understand differences between experts and novices in thinking and behaving. Based on this literature, we would expect that the most expert teachers might do the following:

1. Make more accurate inferences than novices.
2. Hierarchically structure knowledge so that there are greater connections among concepts.
3. Focus more on implicit states and conditions rather than explicit, surface features of the context.

Lavelly et al. (1986) would add that expert teachers will have more knowledge than their novice counterparts. Therefore, we can assume that teacher experts who understand and account for the cultural context in their thinking will be more knowledgeable about student diversity and multicultural education, see beyond the surface-level features of the classroom environment, and see the connections between the teacher-student relationship and the

broader social and institutional structures. These all help teachers achieve greater inferential power.

THINKING ACROSS INTERDISCIPLINARY LINES:  
SEARCHING FOR NEW QUESTIONS

The intent of this book, then, is to explore the relatively recent scholarship which attempts to pay attention to teacher cognition (content and/or processes) as it is developed and influenced by variables of race, ethnicity, and culture or by the movement toward a multicultural curriculum in classroom and school settings as they are understood from broader sociocultural, sociolinguistic, and/or sociopolitical perspectives. Fortunately, this task is made considerably easier by advances in other disciplines such as anthropology, sociolinguistics, and sociology as they have been applied by those who are cognitive psychologists and curriculum and instruction specialists. The result has been a move away from the positivist research paradigm and toward the interpretive paradigm (Erickson, 1986; Shulman, 1986).

On the surface level, the differences in these research paradigms are obvious. For example, the positivist research tradition applies quantitative methodologies via the cataloging of observable features of the classroom (such as teacher behavior exemplified in the amount of wait time provided students after being questioned) as they correlate with some quantitative measure of student academic achievement (such as scores on an achievement test). Classic to this approach is process-product research (for a comprehensive review, see Good & Brophy, 1986). On the other hand, the interpretive paradigm applies largely qualitative ethnographic techniques to get "thick critical descriptions" of classrooms (such as field notes carefully documenting what happens in a particular setting). Consideration is given to the context (schools and communities) and to "the intuitive sense of relevant research questions and of conclusions which emerge by induction" (Erickson, 1986, p. 139), such as analytically reflecting on those field notes and reporting conclusions using the field note descriptions as a source for demonstrating *plausibility*.

Since research paradigms are driven by the goals they seek to attain, it becomes evident that these two approaches have differing objectives. The positivist approach is *etic* (it assumes all human beings are all alike; Sue & Padilla, 1986) as it searches for *laws* about teaching, learning, and so forth (Shulman, 1986). It is,

in short, a research paradigm in search of answers. The interpretive research approach is *emic* (it assumes human beings are all different according to culture; Sue & Padilla, 1986) as it searches for the *meanings* constructed by participants as they seek to make sense of what they encounter in classrooms (Shulman, 1986). The result, for the interpretive researcher, is not to search for answers but rather to search for a source of criticism and the generation of new questions.

Since the reader may not be familiar with the interpretive research approach, since the interpretive approach is open-ended enough to capture more fully the complexity of teacher thinking, and since nearly all of the studies reported in this volume follow it and thus require some background knowledge (schemata) for understanding them, a brief description about the belief system upon which the interpretive paradigm rests is in order.

Central to the interpretivist perspective is the belief (a) that classrooms are socially and culturally organized environments, (b) that teaching is mediated by the sense the learner and teacher make of the social context of the classroom situation (since, it is argued, this is the level at which the "hidden" curriculum plays itself out), (c) that events occurring at any system level (such as ability group, classroom, school, community) must be seen at the next higher and next lower system levels, (d) that the thoughts, attitudes, perceptions, and so on of the participants are a critical source of data because personal meanings are the focal point of inquiry, and (e) that a critical focus has to be on the specific difficulties encountered by those who are relatively powerless in educational contexts, such as ethnic minority students (for a comprehensive review, see Erickson, 1986; Shulman, 1986).

As an example of the power the interpretive paradigm has to reshape the way we think about teaching and learning, consider the influence that sociolinguistic researchers have had on our understanding of why students of color have failed to attain parity in levels of academic achievement with Euro-American students. Earlier presage-product research found a correlation between ethnicity and academic achievement. The result was that explanations focused on genetic and/or cultural deficiency. As sociolinguists began to observe in classrooms to understand the dynamics of communication interactions between students of color and their nonminority teachers, and compared those to the communication interaction styles they observed in the home and community context of those minority students, it became evident that there were

considerably different patterns of interaction taking place between the school and the home and community. These differing patterns of interaction caused misunderstandings between teachers and their students, with a concomitant result being negative attitudes about the "other." As teachers were retrained to communicate in ways that resembled the communication patterns of their students in their homes, student academic achievement increased (see Cazden, 1986, for a review of classroom discourse research). Thus failure was not attributed to the "victim" but to the dynamic interaction of teachers and students in a specific context.<sup>4</sup>

None of this is to suggest that the interpretive paradigm is faultless or that it should replace the positivist paradigm (Erickson, 1986; Shulman, 1986). Indeed, the approach researchers may be best advised to take should be one of including multiple perspectives, multiple research approaches, multiple conceptions of problems, and multiple foci on events. A research project is enhanced when the proper balance between qualitative and quantitative, emic and etic, search for laws and search for meaning, and so forth, can be attained.

#### CRITICAL SCIENCE: BEYOND THE POSITIVIST AND INTERPRETIVE PARADIGM

While it is essential to understand the philosophical and methodological frameworks that dominate educational research, it is equally essential to ask: for what purpose do we do this work? Indeed, some do such work for the tangible personal benefits it may bring (e.g. tenure and promotion). More hopefully, some do such work because they are interested in uncovering the laws (causes and effects) of teaching and learning which, when uncovered, can be generalized to other situations for the improvement of all situations (such as attempts positivism). Some do such work because they wish to uncover, in its entire complexity, the meanings people make and the purposes they pursue which, when uncovered, can provide context specific improvements as well as an appreciation for complexity (such as attempts interpretivism).

More recently, attention has been paid to the "critical science" paradigm of educational research (see, for example, McCutcheon & Jung, 1990). Inspired by the work of Freire (1968), it has as its

underlying intent (goals and purposes) uncovering those laws, meanings and/or purposes that support educational practices aimed at social and educational equity and the reduction of cultural hegemony. It is, at its core, focused on understanding the “oppressed” and on minimizing the difficulties experienced by those who are powerless.

In this vein, then, research would include the study of phenomena with an eye on the broader social and economic context. In doing this, it is possible to understand why schools are effective for some (the “haves”) and ineffective for others (the “have nots”). Thus it is posited that schools are inherently structured unfairly so that there remains a subordinated unskilled labor pool to be exploited and/or a permanent underclass (caste) of people (Ogbu & Matute-Bianchi, 1986). These purposes are rarely made explicit since the “system” works more effectively by providing an illusion of fairness. Thus attention is given to those unintended actions in the support of oppression as enacted by those who are blind to ways in which they oppress.

Beyond understanding the (unjust) status quo, it also seeks to understand how academic achievement and student behavior in school is influenced by feelings of injustice and powerlessness (Cummins, 1986) when students and their caregivers come to understand their oppressed condition. It is through reflection, and then action (which Freire, 1968, termed *conscientização*) aimed at understanding, naming, and dismantling oppressive conditions that schooling becomes meaningful and lives come to be filled with hope (Freire, 1994).

It should be noted that a critical science framework can be applied to either positivist or interpretivist research (since either can be undertaken for purposes of social justice). It is, thus, not mutually exclusive. More immediately, understanding this purpose (and the critical science paradigm) will help readers better comprehend the intention and interpretation of the works that appear in this volume.

## TEACHER THINKING IN CULTURAL CONTEXT: OVERVIEW OF THIS VOLUME

The aim of this volume is to uncover some of the meanings teachers construct of students who are different from themselves, the meanings teachers make of a more inclusive curriculum and

instruction embodied in multicultural education, and the ways in which the meanings individuals bring to teaching can be reconstructed (if at all possible). It asks the following questions:

1. In what way do teachers make sense of students who are different from themselves? How do students being “at risk,” the students’ ethnicity, or classroom events influenced by student ethnicity and gender influence the sense teachers make? What sense do student teachers make of these dimensions when confronted directly with these for the first time during their student teaching field-work?
2. In what ways do teachers make sense of multicultural education, especially as it interacts with a specific approach to curriculum, a specific approach to school reform, or as a result of a state’s mandate for teaching in a particular way?
3. In what ways is it possible (if at all) to reconstruct teachers’ understandings of what it means to teach in cultural contexts? Would it make a difference if instruction addressed their concerns, employed a “constructivist” approach during preservice education, focused on the teacher-student relationship as a major dimension of learning, or created a community of learners concerned about addressing the needs of ethnic minority students?

Before exploring these questions, this volume begins by offering a critique of the way in which research in the area of teacher cognition has ignored the connection with the constraints and challenges of teaching in one specific context—the urban context. Through his review of the literature, Alfredo Artilles in chapter 1 points to provocative scholarship that is specific to the urban context. Importantly, he provides suggestions for how research in the area of teacher cognition might proceed in explicitly connecting cognition to context and the direction it might go if it has this focus. Of note is his call for the inclusion of sociocultural models in researching teachers’ cognition in urban contexts.

This volume is broken into three parts. In part 1, the focus is on the sense teachers make of students who are different from themselves. In part 2, the focus is on the sense teachers make of curric-

ulum and instruction embedded in multicultural education. In part 3, the focus is on the possibility of reconstructing teachers' thinking about either of these two dimensions of teaching.

*Part I: How Teachers Understand Students Who Are Different from Themselves*

Teachers' personal experiences and professional education are one dimension affecting their routines and knowledge (Porter & Brophy, 1988). Critical to this dimension as it relates to teaching in cultural contexts is the fact that both personal experiences and professional education are culturally conditioned. Thus the personal experiences of most teachers (who are typically female, Euro-American, and from middle-class backgrounds) and the professional education they have received (which historically and, in many places, currently focuses on "generic" students with nominal attention to student diversity) may be fundamentally at odds with the experiences their students from diverse backgrounds have had, the context of the urban, multicultural schools they might teach in, and what we know constitutes a culturally relevant curriculum (Ladson-Billings, 1992).

In any event, it seems evident that Euro-American teachers have a worldview not shared by teachers or students of color. Yet this worldview plays a fundamental role in the sense the teacher makes of students, instruction, curriculum, community, and so forth in the limited context of the classroom. Equally important, teachers often do not tune into the worldview of their students nor see their work in the larger sociocultural, sociopolitical context of schools. The net result is that many teachers continue to use "deficit" models to explain minority student failure.

To begin this section, Martha Montero-Sieburth in chapter 2 explores the worldview of teachers by focusing on education professionals' knowledge base concerning a school's policies and practices for responding to Latino students who are "at risk." In this regard, her interest is in the "epistemological stream" of teachers' thinking as described earlier. In her chapter, Montero-Sieburth points out that many teachers, counselors, and administrators do not see the specific cultural background of the students (they're all Latinos) and have difficulty identifying the implications of their background for being at risk. For those teachers, however, who have knowledge of and commitment to their students' communities, beliefs and understanding of this interplay



become increasingly more sophisticated, as do the approaches they might use for resolving difficulties these students experience.

In chapter 3, Clara New provides a case study of the connection between teachers' thinking and a specific group of students: African-American male students in urban schools. New focuses her chapter on what the teachers in her study were perceiving and thinking during moments when decision making was important. New's approach is consistent with the "psychological stream" of teachers' thinking. She advances the notion that thinking about students also requires considering implicit theories that explain student achievement, issues of cultural identity, teachers' conceptions of diversity and differential treatment, and their locus of control for success when working with African-American male students. These theories, she argues, are connected to how teachers plan and act in the classroom. African-American students, responding to teacher expectations communicated in action, respond with oppositional behavior. New's chapter ends by exploring the important role of teacher education programs to help teachers in training to uncover these implicit theories and resultant expectations about students so that they do not become "perceptually blind" about students of color.

In chapter 4, Maureen Gillette focuses on student teachers who have never experienced a school made up of an African-American majority. Her work explores the thinking of seven student teachers as they contemplate their students and the resultant curriculum and instructional practices affected by their thinking. Thus Gillette is employing the "practical argument" approach to understanding student teacher thinking. How they acted, in turn, influenced their overall feeling of success or failure in this context. In identifying "resisters, rethinkers, and culturally-relevant" student teachers, Gillette explores differences which result over issues such as the student teacher's locus of control, the foci of planning curriculum, the degree of openness to self-reflection, and theories of diversity. The hope is that by identifying these factors we can help student teachers overcome "dysconscious racism."

In chapter 5, I explore the connection between knowledge and acting embedded in teachers' "principles of practice" in this study of teachers in an urban, multicultural high school. Like Gillette, I focus is on the "practical argument" of teachers' thinking. I identify ways in which these principles constitute implicit theories and serve as a framework for responding to issues of student motivation, student personal difficulties, and challenges to instruction by

students from diverse cultural and linguistic groups. Of note are those principles of practice left out: principles focused on diversity and focused on ways to promote student academic achievement.

*Part II: How Teachers Understand Curriculum and Instruction Embedded in Multicultural Education*

As suggested earlier, a second element in education impacted by our ethnically diverse society is expanded interest in the curricular and instructional implications associated with multicultural education. Shulman (1986) suggests that one of the most serious faults of the interpretive paradigm is its lack of focus on the “substance” of classroom life: on the explicit curriculum and subject matter being explored. Indeed, in the teaching-learning context, there are two agendas being negotiated. Besides the social and interactional curricula there exists the curricular agenda with its focus on the knowledge, skills, and attitudes explicitly being taught. McDiarmid (1991) suggests that it is critical for teachers in multicultural contexts to consider the I-Thou-It triangle, including the sense teachers make of the curriculum (the “it”), the sense students make of the curriculum, and the reciprocal sense making that teachers and students advance of each other.

James Banks (1993) has most prominently begun to address the question of what knowledge is critical to know and teach in a multicultural, democratic society: personal and cultural knowledge, popular knowledge, mainstream academic knowledge, transformative academic knowledge, and school knowledge. Of central importance is that discussion about cultural contexts include the curriculum.

In chapter 6, Dawn Abt-Perkins discusses student ethnicity as it interacts with a teacher’s knowledge of multicultural education and a specific strategy for teaching (writer’s workshop). Taking the “epistemological stream” to teacher thinking, Abt-Perkins identifies both past (personal biographies, social identities, etc.) and present influences on a teacher’s interpretation of content as it relates to specific students from diverse backgrounds and how the teacher “negotiates” these differences. Abt-Perkins also demonstrates how teachers’ *stories* can be used to uncover teachers’ knowledge about the cultural context.

In chapter 7, Mary Lynn Hamilton describes a school that is attempting to reform itself so that students feel empowered (via increasing statements to them promoting self-esteem and self-

responsibility). An additional element of this empowerment is the inclusion of a multicultural curricula. Hamilton is aiming to explore the connection between reform efforts and multicultural education to how teachers think. Thus she is interested in the “epistemological stream” of teachers thinking. Hamilton points out that the latter element did not significantly change the way teachers’ thought, taught, or communicated in symbols. Thus teachers are more effectively *persuaded* to reconceptualize how they think about some aspects of schooling and not about others. Hamilton advances some notions about this differentiation for “persuading” teachers to change their thinking.

For their part, Carmen Montecinos and Deborah Tidwell, in chapter 8, use a cross-case analysis of two secondary language arts teachers who expressed a commitment to multicultural education. Montecinos and Tidwell show how teachers’ responses to state-mandated standards for *infusing* teaching with a multicultural, nonsexist curriculum represent an interweaving of the multiple sources of knowledge that inform practice. They suggest that the diversity in approaches to multicultural education described in the literature can be traced to the level of commitment to the standards; prior knowledge, especially of multicultural education; beliefs about instruction in a specific content area; and personal biographies. Drawing from an information-processing model of thinking, they suggest that when language arts teachers are asked to incorporate multicultural teaching practices into their instructional repertoire, they will adapt those practices to make them fit with their existing understandings about schooling (in general) and reading processes (in particular).

*Part III: How, If at All, Teachers’ Thinking Can Be Constructed and Reconstructed*

The question of how we might change teachers’ worldviews is a weighty one. Much attention has been paid to this issue (see, for example, Grant & Secada, 1990), though Haberman (1991) questions whether we can provide any kind of experiences or teacher preparation that can significantly alter the way these teachers think. If one takes the latter view, then the only alternative is to be more selective about those we let in to the profession (such as, only those who share the students’ worldview or who are sensitive enough to understand it). Yet changing the selection criteria for those entering the profession may be a considerable challenge

itself, since many of the characteristics associated with teaching effectiveness in contexts of significant diversity are difficult to quantify (flexibility, critical self-examination, etc.). Another challenge would be to change the structure of schooling so that individuals are socialized into teaching with a worldview compatible with teaching students from diverse backgrounds.

The last four chapters focus on specific strategies for constructing and reconstructing teachers' thinking about issues of diversity. In chapter 9, Patricia Marshall explores the connection between teachers' personal experiences and professional education as it affects "concerns" these teachers have about teaching in multicultural classroom contexts. These concerns make up part of teachers' "epistemological" considerations. She points out that these concerns are hierarchically structured and are directly related to the differences (absence of synchronization) between the personal and cultural experiences of teachers and their students from diverse backgrounds. Marshall explores her construction of the "Multicultural Education Concerns Survey" and the preliminary findings of certain concerns: familial and group knowledge, strategies and techniques, interpersonal competence, and school bureaucracy. She then applies this construction to the developmental stage differences between novice and experienced teachers. Marshall argues that after the concerns teachers have at different developmental levels are identified, professional education experiences can be constructed to effectively meet those specific concerns.

In chapter 10, Teresita Aguilar and Cathy Pohan propose using a constructivist approach to the multicultural curriculum, since this approach, they argue, challenges teacher candidates' attitudes and beliefs toward issues of cultural diversity and social inequities. In doing so, they explore the connection between salient personal experiences and provocative professional education for changing teachers' thinking. They provide a vision and framework for teacher preparation programs, addressing the role of knowledge acquisition, attitudinal and belief changes, and cultural experiences intended to transform monocultural teacher candidates into multicultural educators. They are, in short, hoping that reflection-in-action will facilitate this transformation.

In chapter 11, the focus moves toward seeing the valuable role of the *relationship* between students and their teachers (in this instance, student teachers) embedded within the context of the student diversity as it impacts Euro-American preservice teachers

in changing their thinking about issues of diversity. Linda Valli discusses the initial perceptions these student teachers held and how being placed in a context of significant student diversity created concern for issues that had not existed previously. In doing this, Valli points out how beginning teachers' beliefs about issues of diversity are impacted by actual experience. Of note is the transformation of their thinking about teaching in cross-cultural contexts and the critical role of personal relations and the value of diversity to that transformation.

Marilynne Boyle-Baise and Judith Washburn, in chapter 12, describe their attempt at using coalition building as a means to sustain change in teachers' thinking. In this sense, they located external elements (namely, leadership and support from others equally committed to issues of diversity) as they connect to teacher thinking (specifically to a vision for diversity and a sense of self-efficacy) for creating teacher-activists committed to responding to diversity. Using a case study of six active members of a grass-roots coalition that was developed to support the professional development of teachers with regard to multicultural education, they focus on the collective thinking of the teachers as they reflect on the work related to their involvement in the coalition. Of note in their chapter is the use of research methods that result in a cognitive map of the collective (cultural) thinking of this group of teachers.

The last chapter of this book, by David Whitehorse, highlights several key themes evident in the preceding chapters. He then describes how these themes extend existing models of thinking in ways that make them more comprehensive. Finally, he offers additional questions and challenges raised as a result of the work described herein and suggests some implications of those questions with respect to teachers' values, to the sense they make in the classroom, and to teaching practice.

### MOVING FORWARD

As you press forward into the pages of this volume, it is hoped that you will see yourself or that which you intend to study reflected in here. Perhaps you may recall your first significant contact with students who were ethnically and linguistically different from yourself. Perhaps you will think about the ways in which you have attempted to make courses address teaching that is culturally or linguistically responsive. Perhaps you will reflect on teachers who

taught with either a monocultural or multicultural perspective. Perhaps your interest rests not in the concepts laid out by these scholars as much as by the methods used for uncovering teacher thinking while remaining sensitive to the cultural context. In any event, it is hoped that this volume will allow you to connect your own experience or interests to that described in these chapters.

Consistent with an inquiry and interpretivist approach to understanding teacher thinking, this book is less about “answers” and more about the generation of additional questions. It is not about finding some universally effective strategies for teaching students from diverse backgrounds or for teaching with a multicultural perspective. Indeed, Cochran-Smith (1993) argues that it is antithetical to the concept of diversity itself, since teachers are asked to remain sensitive to the particular nuances of the student population, the school, and the community. Thus the reader is encouraged to allow for a variety of perceptions (often conflicting) among the chapters and between the writers. Keeping this in mind will help you to remain open to the ideas and methods presented in this volume.

There are other questions which we do not confront in this volume yet which beckon our consideration. Here are just a few questions that this book does not even attempt to ask:

1. What sense do teachers make of other aspects of the cultural context? For example, how do teachers think about socioeconomic differences, learning and handicapping differences, and so forth? How do teachers think about students who are Native American or Asian-American? How does the students' grade level make a difference in how teachers think about the cultural context? How do these factors *interact* to affect the way a teacher thinks?
2. What other elements of the context are left aside that affect how a teacher thinks about diversity? How does the teacher's ethnicity fit into the meaning made of a cultural context? What roles do school policy, discipline plans, school improvement plans, and so on have that either negatively or positively impact the way teachers think about diversity?

Although these questions remain unanswered, this book sets forth an important advance in the area of teaching and learn-

ing (generally) and teacher cognition (specifically). When the specific elements and contexts of interest in teacher cognition are identified, the picture of what and how teachers think, while not complete, certainly comes into greater focus. Likewise, these questions become points of departure for current and future investigation.

It is pivotal that educators and researchers begin to illuminate the ways in which teachers make sense of their increasingly diverse students and the call for a more inclusive curriculum that is sensitive to the specific contexts in which that sense making is taking place. We intend this volume to be a means by which the discussion about teacher thinking in cultural contexts, already begun, can be sustained and furthered.