This report describes the outcomes of a study that examined teacher efficacy in order to generate an exploratory and explanatory theory of teacher efficacy in the context of four heterogeneous fifth and sixth grade classrooms. It investigated how the four elementary teachers identified as being efficacious described the relationships between personal teaching efficacy and teaching and learning. An initial interview, three days of classroom observation and a follow-up interview were conducted with each teacher. Constant comparative analysis was used to concurrently collect and analyze the data. Findings indicated that at the core of the relationship between teacher efficacy and teaching and learning was the teacher's need for continual integration of beliefs and practices. To achieve congruence between beliefs and practices, the efficacious teachers in the study engaged in a continual process of constructing meaning in two essential areas: the quality of teacher relationships (primarily teacher-student relationships) and the effectiveness of instructional practices. The process by which meaning was constructed included creating and sustaining a positive classroom climate, engaging in reflective practices, and continual development of self. The teachers' ongoing use of inquiry and feedback provided the critical link between what meaning was constructed and how meaning was constructed. Contains 20 references. (CR)
Teacher Efficacy in Heterogeneous Fifth and Sixth Grade Classrooms
Weaving Teachers' Practices and Perspectives

Robi M. Kronberg
Together We're Better
Inclusive School Communities in Minnesota/Partnerships for System Change

Institute on Community Integration (UAP)
The College of Education & Human Development
UNIVERSITY OF MINNESOTA
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(612)624-4512

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Abstract

Today's classrooms are becoming increasingly heterogeneous and teachers frequently work amidst complex and sometimes unpredictable situations. The growing diversity of students' backgrounds, abilities, and needs necessitates continual examination of how best to increase the effectiveness of the relationship between teaching and learning. Teacher efficacy is recognized as being a significant contributor to teacher effectiveness and positive student outcomes. Generally viewed as a two-dimension construct consisting of general teaching efficacy and personal teaching efficacy, teacher efficacy is a subjectively held belief that mediates teachers' thoughts and actions. Minimal teacher efficacy research exists that describes how teacher efficacy mediates teacher practices with diverse learners, particularly within actual classroom contexts.

This grounded theory study descriptively examined teacher efficacy in order to generate an exploratory and explanatory theory of teacher efficacy in the context of four heterogeneous fifth and sixth grade classrooms. The research question guiding the study was: In context of heterogeneous classrooms, how do elementary teachers identified as being efficacious describe the relationship between personal teaching efficacy and teaching and learning?

The methodology included purposive sampling of two schools situated in a suburban district of a large midwestern metropolitan city. The subjects of the study were four efficacious fifth and sixth grade teachers. An initial interview, three days of classroom observation, and a follow-up interview were conducted with each teacher. Constant comparative analysis was used to concurrently collect and analyze the data.

Findings indicated that at the core of the relationship between teacher efficacy and teaching and learning was the teacher's need for continual integration of beliefs and practices. In order to achieve congruence between beliefs and practices, the efficacious teachers in the study engaged in a continual process of constructing meaning in two essential areas: the quality of teacher relationships (primarily teacher-student relationships) and the effectiveness of instructional practices. The process by which meaning was constructed included: creation and sustenance of a positive classroom climate, engagement in reflective practices, and continual development of self. The teachers' ongoing use of inquiry and feedback provided the critical link between what meaning was constructed and how meaning was constructed. Findings ultimately suggested that the ongoing construction of meaning allowed the teachers to integrate beliefs and practices and thereby sustain their sense of personal teaching efficacy.
Teacher Efficacy in Heterogeneous Fifth and Sixth Grade Classrooms

Weaving Teachers’ Practices and Perspectives

Education is faced with an urgent and compelling need to increase the effectiveness of the teaching-learning relationship. In attempts to enhance the outcomes derived from this relationship, efforts of educational reform have focused at a variety of levels ranging from the macro level of federal governance structures to the micro level of student proficiencies (Sarason, 1990). Among the plethora of change initiatives, some have focused specifically at the classroom level. The classroom context has been considered by some researchers, theorists, and practitioners to be the most important focal point of school reform efforts (Thiessen, 1992). As noted by Fullen (1991), educational change is ultimately dependent upon what teachers think and do in their classrooms.

Uncertainty frequently exists within today’s classrooms as teachers work amidst complex and often unpredictable situations (Kagan, 1992). Changing demographics have increased and most certainly will continue to increase the heterogeneity of many classrooms (Gay, 1988). This heterogeneity is represented by students with diverse cultural, racial, religious, and linguistic backgrounds; family structures; socioeconomic status; and ability levels. Changing educational initiatives, such as inclusion, have also added to the heterogeneity by increasing the numbers of students with disabilities who receive instruction in general education classrooms. Students with diverse backgrounds and abilities pose new challenges as teachers struggle to meaningfully include and effectively educate all students (Pallas, Natriello, & McDill, 1989).

It has frequently been documented throughout the literature that teacher-held beliefs as well as teachers’ ways of knowing and understanding are essential contributors to how teachers practice. Over a research history that has spanned 20 years, teacher efficacy has consistently been described as one of the most significant contributors to teacher effectiveness and positive student outcomes. Teacher efficacy has been defined and operationalized in a variety of ways. The most commonly used definition asserts that teacher efficacy is the extent to which it is believed that teaching efforts can have a positive effect on student learning.

Research has linked teacher efficacy with teacher practices, teacher attributions of student performance, classroom climate, job satisfaction, parent involvement, implementation of curricular innovations, organizational characteristics, student efficacy, student achievement, and student behavior. While most studies have either examined factors that result in teacher efficacy or factors that result from teacher efficacy, all studies have concurred that teacher efficacy plays a powerful role in mediating teachers’ thoughts and actions (Smylie, 1990).

Results from many studies indicate that teachers differ in their efficacy beliefs and that the differences can be observed in teacher practices as well as student achievement and student behaviors. Relative to the relationships between teaching and learning, studies report strong correlations between teacher efficacy and classroom practices. Various studies have documented that efficacious
teachers (a) are more willing to accept responsibility for student success and failure, (b) are more likely to implement innovations, (c) encourage more student autonomy, (d) have positive attitudes toward students identified as low achievers, and (e) communicate clear expectations to their students (Ashton & Webb, 1986; Ross, 1994).

While there is considerable literature that addresses teacher efficacy, the preponderance of the literature has been built from quantitative measures (specifically, written survey and forced choice response formats) often asking teachers to formulate responses to hypothetical students and situations. Virtually none of the teacher efficacy literature has explored teachers' in-depth descriptions of the contextual relationships between heterogeneous classrooms, teacher efficacy, and teaching and learning.

With the exception of one ethnographic study, the existing literature is silent in its portrayal of how efficacious teachers construct meaning that guides practices within the context of their classrooms. The demographics of diversity combined with gaps in the teacher efficacy literature paint a compelling reason for listening to and learning from teachers who experience a day-to-day context of striving to effectively teach students with diverse needs, backgrounds, and abilities.

### Purpose of the Study

The purpose of the study was to qualitatively explore the meaning and impact of efficacy from the perspectives of efficacious classroom teachers. As an exploratory study, it sought to expand the existing research base to include the perspectives, experiences, and insights of efficacious teachers who were immersed in heterogeneous classroom contexts. This study did not attempt to disentangle the cause and effects of efficacy and teacher and student outcomes, nor did it attempt to measure discrete practices and beliefs present in efficacious teachers. Instead, it was designed to more fully understand and describe how efficacious teachers construct meaning and practice in context of their heterogeneous classrooms. The study intended to honor and heighten the importance of teacher voice in facilitating greater understanding relative to the challenges inherent in teaching in today's classrooms.

The following research question provided the overarching framework for the study: In context of heterogeneous classrooms, how do elementary teachers identified as being efficacious describe the relationship between personal teaching efficacy and teaching and learning? The following specific questions also guided the research process —

- How do efficacious teachers describe their classroom context?
- How do efficacious teachers construct meaning related to students with diverse needs, abilities, and backgrounds?
- How do efficacious teachers describe the benefits and challenges of teaching in a heterogeneous classroom? To what extent do these experiences influence practice?
• In the relationships between teaching and learning, how do efficacious teachers differentiate between their role and the role of their students?
• How do efficacious teachers describe the impact of their personal teaching efficacy on student outcomes?
• What do efficacious teachers identify as barriers and enhancers of their ability to be efficacious?
• What would efficacious teachers like to know about the beliefs and practices of other efficacious teachers?

Definition of Terms

Personal Teaching Efficacy
For the purposes of this study, only one dimension of teacher efficacy was examined — that of personal teaching efficacy. This dimension refers to a teacher’s subjectively held belief that she or he has the ability to affect positive outcomes for all students.

Heterogeneous Classrooms
For purposes of defining the context in which this study was embedded, classrooms identified as heterogeneous were comprised of students with a range of diverse life experiences, backgrounds, and abilities. Diverse backgrounds included cultural, ethnic, racial, religious, and linguistic characteristics, as well as family structure and socioeconomic status. Diverse abilities included students performing within a wide range of academic performance, as well as those students formally identified as needing special education, Title 1, or 504 services and those identified as being at-risk or gifted and talented.

Methods

District Selection
Due to the small sample size and the desire to minimize interdistrict variation in organizational context, one first-ring suburban school district was chosen as the data source for the study. At the time of the study, the district served approximately 6,700 students kindergarten through twelfth grade. As with many suburban school districts, this district has experienced an increase in the heterogeneity of its student population. The district was selected for several reasons: (a) the researcher had a 3-year relationship with the district, assisting in the provision of inclusive services for diverse learners; (b) the district had an ongoing commitment to more effectively meeting the needs of diverse learners; and (c) administrative personnel expressed both interest and willingness to participate in the study.

School Selection
Purposeful sampling was used to select the schools involved in the study. Two schools were selected for participation based upon the following criteria: (a) principal support for involvement in the study, (b) demographic indication that the two school populations represented different types of student diversity, and (c) determination of the potential availability of at least two efficacious teachers at the predetermined grade levels.

The demographics of the first school used in the study included 2% of the kindergarten through sixth grade population who received free and reduced lunch, 11% who received special education services, and 9% of students identified as gifted and talented (identification of
gifted and talented was limited to students in grades three through six). The demographics of the second school included 26% of the kindergarten through sixth grade student population who received free and reduced lunch, 8% who received special education services, 19% who qualified for Title 1 services, and 10% who were identified as gifted and talented. Additionally, this school was unique in its student population as the school attendance area included student housing for a large midwestern university as well as a seminary. Twenty-five percent of the students who attended this school were international students from 38 different countries. These students spoke approximately 25 different languages and dialects.

Grade Level Selection

Elementary teachers were selected as the unit of analysis primarily because the school structure in which they teach allows them to spend a considerable portion of time with one group of students. It was anticipated that the elementary school and classroom context would yield richer descriptions as well as an enhanced understanding of personal teacher efficacy and its relationship with teaching and learning. Elementary school grades were further bounded by fifth and sixth grade. The rationale for this decision was based upon the literature as well as the perspectives of teachers that suggested once students progress to the intermediate grades, expectations for academic performance, appropriate behaviors, and self-directed learning tend to increase. It was speculated that in heterogeneous classrooms, these increased demands and expectations heighten the complexity of meeting the needs of diverse learners.

Participant Selection

Four teachers were selected for participation in the study. The principal in each respective school served as the point of contact in the selection process. In the initial step of the identification process, the researcher met with each principal individually. In this face-to-face meeting, each principal was asked to review a definition of teacher efficacy. Figure 1 (page 9) presents the definition of teacher efficacy used in the study. Both the definition and the list of characteristics used in the instrument were derived from the literature on teacher efficacy. After reviewing the definition of teacher efficacy, each principal was asked to identify specific fifth or sixth grade teachers who exemplified such a definition.

At the first school, four teachers out of a possible pool of six fifth and sixth grade teachers were identified. These four potential participants were then ranked in terms of the degree of heterogeneity present in their classrooms. The principal contacted the potential participants prioritized as first and second in order to assess their interest in the study. Both teachers expressed interest, thereby negating the need to ask the potential participants prioritized as third and fourth. At the second school, two teachers were identified.

Once the teachers were identified, each respective principal made the initial contact, briefly explained the study, and gave each participant a packet of information provided by the researcher. Once the researcher received notice from the participants as to their willingness to participate in the study, each participant was telephoned by the researcher and an initial interview was established. No assumption was made at this point in the selection process that the four identified teachers believed themselves to be effica-
Figure 1. Definition of Teacher Efficacy for Principal Identification

**Definition of Teacher Efficacy:**
*To Be Used in Principal Identification of Efficacious Teachers*

For the purposes of this study, the following definition of teacher efficacy will be used. You are asked to read the definition and identify any fifth or sixth grade teachers who exemplify the definition.

Teacher efficacy has been described as one of the most significant contributors to teacher effectiveness. Teacher efficacy is comprised of two dimensions which can exist independently of one another. This study is primarily concerned with one of the dimensions called personal teaching efficacy.

**Personal teaching efficacy** is a subjectively held belief in which an individual teacher believes that she or he has the ability to affect positive learning outcomes for all students. Teachers who report high levels of personal teaching efficacy tend to engage in the following types of practices and beliefs—

- believe that no student's background prevents him/her from benefiting from learning
- persevere in the face of difficulty or failure
- express interest in and awareness of student accomplishments
- communicate high expectations for student performance
- share responsibility for solving classroom problems
- believe that all students are worthy of a teacher's time and respect
- establish warm and encouraging relationships with students

### Table 1. Description of Participants

<table>
<thead>
<tr>
<th>Participants (Grade Level)</th>
<th>Gender</th>
<th>Years of Experience</th>
<th>Educational Level</th>
<th>Previous Teaching Experiences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brian (6th)</td>
<td>M</td>
<td>3</td>
<td>B.A.</td>
<td>3/4</td>
</tr>
<tr>
<td>Pat (5th)</td>
<td>F</td>
<td>13</td>
<td>M.A. + 45 credits</td>
<td>Special Education</td>
</tr>
<tr>
<td>Amy (5th)</td>
<td>F</td>
<td>5</td>
<td>B.A.</td>
<td>None</td>
</tr>
<tr>
<td>Laura (5th)</td>
<td>F</td>
<td>16</td>
<td>M.A.</td>
<td>1, 3, 4, 6, MS, HS, adults</td>
</tr>
</tbody>
</table>
cious. Verification of their subjective belief as to their own personal teaching efficacy occurred in the first interview. A description of the teachers selected to participate in the study is provided in Table 1 (page 9).

Description of Heterogeneity Represented in the Participants' Classrooms
The first school, in which Brian and Pat taught, was a kindergarten through eighth grade school serving approximately 680 students. Pat’s fifth grade and Brian’s sixth grade classrooms had 26 and 29 students respectively. Since Pat and Brian primarily shared instructional responsibility (via team teaching) for their combined fifth and sixth grade classrooms, the heterogeneity present in their classrooms was described using all 55 students as the context. The heterogeneity was described by the two teachers as reflecting a "very large variety of needs and abilities." The teachers estimated a 13-year range in academic ability among the students. Specifically identified needs included 12 students who received special education services and 8 students who received gifted and talented services. Additionally, 10 students were of a racial/ethnic background other than European-American. The teachers reported less heterogeneity relative to socioeconomic and linguistic diversity.

The second school, in which Amy and Laura taught, was a kindergarten through sixth grade school serving 720 students. Amy’s classroom enrollment consisted of 29 students of which seven students spoke a primary language other than English (all seven of these students received English as a Second Language services). Racial/ethnic diversity was represented by eight students who were of a race other than European-American. No students in Amy’s class were formally identified as needing special education services, although five students were described as being “borderline” in qualifying for services. Two students received Title 1 services and six students were identified as gifted and talented.

Laura’s classroom consisted of 24 students that she described as being diverse relative to ability, socioeconomic level, cultural and linguistic backgrounds, and family structure. More specifically, nine students were from other countries and all nine spoke a primary language other than English. Three students were identified as receiving special education services and six students received Title 1 services. Laura estimated that based on reading fluency, the ability level among her students ranged from second grade to twelfth grade. This estimate excluded two students with very limited English proficiency.
Data Collection Procedures

Interview Process

An interview guide was used in each initial interview for the purposes of facilitating rich and meaningful interaction between the researcher and the participant. The content for the interview guide was primarily derived from the seven supplementary research questions and information obtained from the literature review.

Each interview was conducted at a time and location chosen by the participants. Each interview lasted between two hours to two and a half hours. During the initial interviews, the researcher described the purpose and format of the study, provided a verbal description of the structure of each interview, and reviewed the consent form. Prior to beginning the initial interview questions, each participant was asked to respond to the eight items from the personal teaching efficacy subscale of the Teaching Efficacy Scale (Gibson & Dembo, 1984).

After completion of the subscale, it was set aside and each participant was then asked to review the same definition of teacher efficacy that the principals had used in the initial identification process. The initial interview proceeded once each participant verified his or her subjective belief about personal teaching efficacy. All interviews were audiotaped and notes were taken throughout the interview by the researcher. Typed verbatim transcripts were developed from each interview.

The follow-up interview occurred with each participant after the respective classroom observations had been completed. A minimum of one week prior to the follow-up interview, each participant was provided a copy of the transcript from the initial interview. Each participant was encouraged to review the transcript and make any corrections, deletions, additions, and/or note additional areas to pursue in the follow-up interview.

The follow-up interview was designed to (a) encourage participants to engage in in-depth reflection and metacognitive analysis using researcher reports of observed instructional events and teacher interactions as a catalyst for the reflection and analysis, (b) extend the member checking process to include participant verification of interpretations made by the researcher, and (c) provide an opportunity for both the researcher and the participant to clarify and extend the interview dialogue.

An interview guide, individualized for each participant, was used in each follow-up interview. The content of each guide consisted of a list of emergent categories with corresponding exemplars from each respective initial interview and observation. Participants were also encouraged to describe any themes or categories resulting from their review of the initial interview transcript.
Classroom Observations

A second data source was derived from multi-day observations of each participant in context of his or her classroom.

The richness of this data source was evident each time the researcher observed patterns and relationships between words shared in the interview and actions engaged in the contextual reality of each teacher. The primary purpose of the use of observations involved the opportunity to create a shared, albeit time-limited, set of contextual experiences between researcher and participant from which to structure further inquiry, description, and exploration in the follow-up interview.

The observational sequence occurred for a minimum of three days per participant and lasted the duration of the school day. For three out of four participants, observations occurred on consecutive days. Handwritten field notes were taken throughout each observation. Field notes included detailed descriptions of each classroom environment; notations as to daily scheduling; descriptions of adult roles and activities; descriptions and chronologies of instructional activities; descriptions of interactions between teacher and students, students and students, and teachers and teachers or other adult staff; and the coming and going of individual students or groups of students. Dialogue was often scripted as a part of the description of classroom events and interactions. Throughout the observations, the researcher noted questions and reflective comments in the left-hand margin of the field notes. These margin notes were later used to formulate questions in the follow-up interview or were discussed with the teacher at the end of the observational day.

Data Analysis

Framework for Data Analysis

Grounded theory methodology provided the overarching analysis framework. Given the potential of this study to build upon existing theory as well as create new theory relative to teacher efficacy, the use of grounded theory was deemed to be well suited. Grounded theory is described by Strauss and Corbin (1994) as a “general methodology for developing theory that is grounded in data systematically gathered and analyzed” (p. 272). Analytic procedures used in grounded theory are designed to (a) build theory rather than test theory; (b) bring rigor to the research process; (c) assist the researcher in reducing preconceived biases and assumptions; and (d) “provide the grounding, build the density, and develop the sensitivity and integration needed to generate a rich, tightly woven, explanatory theory that closely approximates the reality it represents” (Strauss & Corbin, 1994, p. 57).

Following an inductive process, the use of grounded theory compels the researcher “to simultaneously collect data, analyze data, and generate theory and to allow those components to exist in reciprocal relationship with one another” (Strauss & Corbin, 1990, p.23). Statements of relationships between concepts take place throughout all phases of the research process.

Essential to grounded theory is the ability to verify resulting hypotheses. Procedurally, this is accomplished through the use of making constant comparisons within and across the data, asking concept-relating questions, utilizing theoretical sampling and systematic coding procedures, and attaining conceptual density.
Sequence of Data Analysis

Open coding was the initial stage of analysis. During the open coding process, the researcher examined the data from each participant’s initial interview transcript and the observational notes in order to locate major ideas and conceptual clusters. Through a repetitive method of comparing similarities and differences of major ideas and concepts, categories were identified and the major ideas and concepts were grouped into appropriate categories (e.g., teacher role, teacher-student relationship, instructional practice). The outcome of this initial stage of data analysis was not to create an exhaustive or a definitive list of all categories and corresponding exemplars. Rather, the purpose was to begin to construct meaning relative to each individual participant’s content and context.

The second level of data analysis occurred as transcripts from the follow-up interviews were completed and then verified for accuracy. A computerized software program called NUDIST (Richards & Richards, 1994) was used to code, index, and retrieve coded data. Text blocks (a single unit of analysis) were often assigned multiple codes to allow for greater ease of examining cross-referenced data. After all 8 interview transcripts and all observational notes had been analyzed, 17 main categories emerged, 15 of which had subcategories. Axial coding was used to further analyze the categories by creating within-category connections. Specifically, axial coding attempted to identify (a) causal conditions, (b) context, (c) intervening conditions, (d) action/interaction strategies; and (e) consequences (Strauss & Corbin, 1990).

Selective coding, the third level of analysis in grounded theory, was used next for the purposes of comparing relationships across categories and engaging in higher levels of analytic abstractions. The final integration from this level of analysis resulted in the identification of one core phenomenon from the study that was broad enough so that its “conceptual label fits the story it represents” (Strauss & Corbin, 1990, p. 121). The core category, called the phenomena in grounded theory terminology, was identified as the integration of beliefs and practices through the construction of meaning. Once this core category was identified and its properties and dimensions described, the previously identified categories were analyzed in relation to the core category. The categories were arranged in the paradigmatic chain so as to provide analytically sound relationships between themselves and the core category. Figure 3 depicts the final delineation of six subsidiary categories and their corresponding terminology and placement in the paradigmatic chain.
Figure 3. Grounded Theory Paradigm Model Applied to Core Category

Paradigm Model of the Core Category
and the Subsidiary Categories

(A) Casual Condition
Interaction between the heterogeneous classroom context and personal teaching efficacy

(B) Phenomenon (Core Category)
Integration of beliefs and practices through the construction of meaning

(C) Context
Teacher relationships
Instructional practices

(D) Intervening Conditions
Inquiry and feedback

(E) Action
Creation and sustainment of a positive classroom climate
Engagement in reflective practices
Continual development of self

(F) Consequences
Integration between beliefs and practices is achieved as evidenced by the growth of all learners
Interaction Between Teacher Efficacy and Heterogeneous Classrooms: Relationships Among Phenomena

- Inquiry / Feedback
- Teacher Relationships
- Instructional Practices
- Creation and Sustainment of a Positive Classroom Climate
- Engagement in Reflective Practices
- Continual Development of Self

What Meaning is Constructed

How Meaning is Constructed

Integration of Beliefs and Practices Through the Construction of Meaning
Findings

The primary research question identified two essential phenomena that bounded the study, namely efficacious teachers and heterogeneous classroom contexts. In the language of grounded theory, these two phenomena ultimately joined together to form the causal condition. This causal condition provided the larger contextual background in which the remainder of the phenomena, discovered through the analysis process of this study, were embedded. The cross-teacher findings suggested that the interaction between heterogeneous classroom contexts and efficacious teachers necessitated the formation and maintenance of ongoing relationships that affected the teaching and learning that took place in the four classroom contexts. Through the use of the paradigmatic chain (previously depicted in Figure 3, page 14) key relational aspects, integral to the interaction between heterogenous classrooms and efficacious teachers, emerged throughout the process of data collection and analysis. A representation of the core phenomenon and the corresponding relationships are illustrated in Figure 4 (page 15).

The core phenomenon identified as the integration of beliefs and practices as achieved through the construction of meaning portrays the story of the study. The four efficacious teachers, who by the very nature of their personal teaching efficacy believed that they possessed the ability to reach and teach every student, were contextually faced with students having a variety of strengths, needs, and challenges. Student diversity, inherently a part of each heterogeneous classroom, created a need for each teacher to construct meaning that would allow her or him to continually assess whether she or he was affecting positive outcomes in each student’s learning.

The construction of meaning occurred relative to a myriad of challenges and questions articulated by the teachers in the study. How do I appropriately pace my instruction so that all students, at varying levels of ability, feel successful? Is this topic of sufficient interest to create an enthusiasm for learning? How can I connect with this student? These questions and many others like them necessitated that the teachers construct meaning in such a way that they were constantly able to assess the effectiveness of their teaching for each of their students.

What Meaning Was Constructed

Clearly emergent in the data was the elucidation of what meaning was constructed. All four teachers constructed meaning around two very specific content areas: (a) teacher relationships, predominantly those occurring between teacher and student; and (b) instructional practices, primarily concerning the effectiveness of instructional practices as those practices related to the needs and expected outcomes of each student.

Teacher Relationships

Data clearly and consistently pointed to the importance of relationships as a pivotal area around which meaning was constructed. Although relationships occurred between each teacher and a variety of other people, the essential relationship around which the majority of meaning was constructed occurred between each teacher and his or her students. All four teachers spoke eloquently and frequently about the importance of relationships between themselves and their respective students. A variety of language was used to convey the interactional quality of such relationships.
Teachers spoke to such concepts as “connection,” “knowing,” “reaching and teaching,” “care,” and “familiarity.” Consistently visible through both words and actions was a prevailing sense of respect that was a part of each teacher-student relationship. The respect was evidenced in the manner in which each teacher spoke of their students, in the ways in which teachers interacted with their respective students, and in the manner in which each teacher spoke to their students.

Also consistent across teachers was agreement as to the purpose served by the teacher-student relationship. As conveyed by Amy, “Fundamentally, I guess I feel if I can reach each of them and make them feel like I’m invested in them, they will put in the effort trying. I work hard to have a relationship with each child.” As stated by Brian, “I think that’s the thing which causes me to be the most effective in teaching — my relationship with the kids.” The teachers used a variety of ways in which to engage students in a relationship and then to nurture that relationship. As expressed by Brian, “I would say that I have a personal relationship with every one of my students and you start on day one. Because that’s my goal in the first month, that’s where I’m building the relationships.”

Instructional Practices
For the purposes of this study, instructional practices broadly encompassed both the instructional processes and instructional strategies that were used to effect learning related to the specific curricula used in the classroom. The predominant meaning that was constructed relative to instructional practices concerned the effectiveness of the instruction for each student in the classroom. Each teacher continually made decisions for the overriding purpose of aligning instructional practices with the varying needs and abilities of the students.

The complex and multi-faceted process of intentional thought and purposeful implementation took different twists for each teacher but ultimately involved three essential properties: (a) the development of meaningful outcomes to be met by the instruction, (b) the implementation of the instruction in such a way as to maximize the learning experience for each child, and (c) the utilization of meaningful mechanisms for assessment and evaluation. One teacher explained her planning process in this way —

I start in my mind and on paper — I start to sketch out where I want to go and then I have to pull in the people, the adults who are going to be impacted by my decisions. I say “This is where I’m thinking about going; this is the information I’ve gathered. How do you see this working for kids?” Then we talk about it — how we’re going to meet the needs of all the kids. While we’re doing the unit, it’s an ongoing reflection and evaluation of what’s working and what’s not working.

Cross-teacher analysis indicated clear consistency as to the intentionality in determining specific outcomes to be derived from engagement in the instructional activity. Outcomes were both
academic and affective. All of the teachers emphatically addressed the need for relevancy of outcomes — relevancy to the interests and outcomes for the students and relevancy of the topic. Much of what was observed and heard concerned the teachers’ focus on the process of learning as much as the products of learning. The focus on the process was evidenced by such things as multiple right answers, pushing to the “so what,” asking students to explain the processes that they used in arriving at an answer, and encouraging students to take risks and make mistakes.

All four teachers used a blend of whole class, small group, and individual instruction. Consistent across teachers was the use of intentional decision-making relative to the assignment of students to instructional groups. Decisions were made about the permanency of the groups, the size of the groups, the instructional needs to be met in each group, the number of groups, and of course, the configuration of students in each group.

Evident throughout the interviews and observations was the diligence by which the teachers individualized for students with different learning needs. Many examples of individual accommodations were captured in the data — some for students with limited proficiency in English, some for students with disabilities, and others for students needing more structure and external organization. As described by one teacher —

The day before the test we had identified, in the study session — the kids had made lists, study guides, facts to take home and study. What we did for Pam was we broke it down on the items that were easiest for her to remember. So instead of giving her 50 facts and saying learn 20, we just concentrated on 20 and broke them down into 5 facts for each category. There were 4 categories. We talked through each one of them with her.

Individualizing for students with different learning needs wasn’t represented as being easy or quick. All of the teachers addressed the challenges in trying to meet the needs of diverse learners. As articulated by Pat —

I think that’s where I struggle as a teacher. You discuss specific ways to individualize, but also, that’s a toughie because when do you say — “Maybe when the majority of the kids understand this you need to move on and then what do you do with the kids who don’t?” And that’s a struggle I face every day in every subject. Do you make that decision that everybody needs to know this so I will extend the others while this group works on it a little bit more? Do I have them come in at another time and go through it? Or do we say — “That knowledge will come up again at a later time, so I’m just going to keep right on moving?”

The teachers demonstrated variability relative to the utilization of meaningful mechanisms for assessment and evaluation. In the school in which Brian and Pat taught, letter grades were not used in the fifth and sixth grades whereas at the school in which Laura and Amy taught letter grades were used. Amy described her process for including a typed narrative report with each student’s grade report —

I do a narrative that’s about half a page typed for each student. I do the grade and then I do a breakdown sheet that explains the grade. Like, what percentage of the reading grade came from literature-based reading that we did, what percentage came from independent reading that the kids did, and then I write comments.
Pat explained the evaluation process she and Brian used —

We do several things. Our report card has a list of objectives that kids are working on. Across the top it says: Displays Strong Performance, Displays Appropriate Performance, or Needs Additional Help and Practice. And we just check them off. And then in the second trimester we will start attaching grades to certain works because sixth graders need to start getting ready for when they get grades in 7th grade. And we talk to kids about this — to show them what grades look like.

All four teachers explained that student evaluation should be purposeful and in some way convey constructive feedback to the student. Teachers achieved this in a variety of ways, using criteria based evaluations, self or peer evaluated assignments, rubrics, portfolios, and individualized methods of providing feedback. Across all teacher’s assessment was an opportunity for teachers and students to share responsibility in the teaching and learning process.

How Meaning Was Constructed

Also emergent in the data was the clarification of how all four teachers constructed meaning. The data clearly delineated three areas that facilitated the process by which the teachers were able to construct meaning: the creation and sustainment of positive classroom climate, engagement in reflective practices, and continual development of self.

Creation and Sustainment of Positive Classroom Climate

This area provided the means by which both teachers and students engaged in roles and expectations that continually shaped their mutual relationships in the teaching and learning process. The classroom climate became the avenue for exploring and learning about self and others within the context of a heterogeneous classroom. All four teachers indicated that building a positive classroom climate was a priority. It was in this classroom setting that the teachers were able to nurture, on a daily basis, that which they perceived to be of utmost importance — the intrapersonal and interpersonal development of their students.

Cross-case consistency emerged as all teachers spoke of the need to develop the classroom as a community of learners. A very clear and consistent classroom ethic of respect, mutuality, and physical and emotional safety existed across all four classrooms. Attention was explicitly paid to the development of positive interdependency and the corresponding feeling that all members of the classroom shared a collective responsibility to create and sustain a classroom climate that provided a respectful, fun, and safe learning environment. As articulated by Laura —
As far as the classroom atmosphere, I have this strong belief that it is always our classroom. Yes, I make some of the decisions to make it as efficient and/or as fair as I can to give all kids opportunities, but I like them to have a say and a way to do some class projects, or have input into a classroom decision, or a class party. I try to organize them cooperatively and structure some positive interdependence with them so that they can feel a sense of ownership with it.

All of the teachers overwhelmingly expressed the opinion that the development of a classroom community increased in importance as classrooms became more heterogeneous. A sense of community was developed in different ways in each classroom. Class jobs were developed, conflict resolution programs were implemented, class meetings were used, informal discussions occurred, and teachable moments were seized. All teachers established a shared set of “community expectations” with their students at the beginning of the school year. Pat described the process of establishing expectations —

We always start the year by talking about beliefs, what we believe we need to be a sense of community, and we talk about in order for a community to be successful what are the beliefs that we all need to share. So we go through an activity where we generate our beliefs. For example we believe that everyone has a right to feel safe in this classroom. Everyone has a right to learn. And so we generate that. That’s published, they carry it with them, it’s posted. We try to set that tone all year.

Directly linked to the development of a positive classroom climate was the clarity of teacher role and student role. Predominant in the clarity of roles were the overarching concepts of teacher as facilitator of interpersonal and intrapersonal growth, shared responsibility for learning, and student responsibility and choice. These three concepts consistently guided how roles were described in the interviews and how the roles were enacted throughout the classroom observations. Relative to teacher as facilitator of interpersonal and intrapersonal growth, Brian articulated —

More than anything it’s teaching them how to deal with people and how to treat people. I want them to feel good about themselves. But more than anything else, I want kids to feel comfortable with who they are instead of wanting to be like someone else. . . . More than anything, I judge how I’m doing as a teacher on how they feel about themselves, how they feel about their learning.

Laura described a similar belief —

As a teacher I want to do as much as I can during the time that I have these children to affect their lives and their learning and their sense of cooperation with each other and their social interactions. That’s almost more important to me than the academics, although I am academically oriented. I really want students to learn how to get along with people.

Cross-case consistency was very apparent in how teachers thought about their role within a context of shared responsibility for learning. All four teachers described their role as being one in which their responsibilities included creating the opportunities for learning to occur but not assuming that they as teachers could “make” a child learn. As described by Amy, “What I tell my kids, I will bend over backwards for you, I will do everything in my power to provide you with the opportunities that you need. But you need to put forth the effort. I can’t make you learn.”
Correspondingly, it was evident in the observations that students also took their roles seriously. In one class, students set learning goals for themselves. In another class, students were asked to describe the learning strategies they used that helped them perform better on a recent test. In yet another classroom, students held themselves accountable for work that was not yet completed at an acceptable level of quality. Additionally, shared responsibility for learning also extended to a role expectation that students would be responsible for supporting the learning of their classmates. This was evidenced in a variety of ways. In one classroom, members of each base group were responsible for maintaining an “absent folder” for a missing classmates. In another classroom, students served as homework partners for each other. In yet another classroom, classmates took responsibility for such things as picking up assignments, explaining directions, and clarifying schedule changes for any classmate who was out of the room at the time something happened that they needed to know.

Woven into the fabric of the classroom climate was the cross-case consistency with which each of the teachers developed and implemented classroom management practices. For all four teachers, classroom management was perceived to be an extension of the beliefs and expectations established for the classroom community. Similar to the other teachers, Pat described the interaction between discipline and the classroom community by stating, “Beliefs are so important, it [discipline] kind of manages itself. If you can establish that right up front — here are the beliefs, here are the expectations, here are the bottom lines, it pretty much takes care of itself...kids pretty much self-manage.”

When the teachers discussed classroom management or discipline, they also talked about respect for children. The word control was not used as either a descriptor of any of the management practices or as a desired outcome of classroom management. As Amy elaborated, “I'm not after control over kids. Classroom management to me should be self-management, it’s community management, it is a sensible management.”

A final component of a positive classroom climate consisted of respect for and recognition of diversity. Once again, the classroom climate provided the setting for both teachers and students to continually construct meaning as to how to co-create a learning environment where students with a variety of strengths, abilities, and needs are recognized as being valued and deserving of respect. Student diversity was recognized in a variety of ways. As Pat explained, “We do a lot of talking with them about each being in a different place...It may look different, the person next to you may not be doing what you’re doing, but you doing what you need to do to be successful.”

Interwoven with the recognition of diversity was the consistent way in which all four teachers described the concept of fairness. Each teacher emphatically articulated that “fairness” did not equate to “same,” but rather equated to structuring opportunities, expectations, and tasks that were individualized, based on the needs of the student. Similar to perceptions that heterogeneity had increased the need to create a sense of classroom community, so too was the perception that the need for fairness was exacerbated by heterogeneity. As described by Amy, “It becomes more challenging. Fairness becomes more of an issue. And so you’re dealing with it more often. It’s brought to the surface more because kids are different and they are seeing and experiencing those differences daily.”
Engagement in Reflective Practice

The second category, engagement in reflective practices, concerned the teachers’ ongoing reflection about the content of the constructed meaning. Through the continual engagement in reflective practice, teachers were able to evaluate their congruency between belief and practice. As a result of reflection, they were able to assess the effectiveness of their relationships and practices, and, when necessary, implement change in an attempt to effect different outcomes. Several clear properties and dimensions emerged in the analysis of teachers’ engagement in reflective practices.

Consistent across the four teachers was a dual content foci of the reflection—teacher relationships and instructional practices. Reflections on teacher relationships were both quantitative and qualitative. The focus of reflection on instructional practices concerned the effectiveness or lack of effectiveness of the instruction and instructional activity.

Cross-case consistency also occurred relative to the temporal dimension of the reflective practices. Each teacher described the end of the school day as being a time of reflection. Although the specific manner in which the teachers engaged in reflection differed, all four teachers utilized time at the end of the day to reflect upon how the day had gone. Pat described her drive home at the end of the day as providing a critical time for her reflective process and spoke of the importance of first processing the “emotional pieces of whatever has happened” so she could then focus her reflection on instructional activities and events and subsequent planning for the next day. In a further exploration, the data revealed that all of the teachers described a tendency for their reflection to dwell on the negative, namely “what didn’t go well” or “what I didn’t get done.” All four teachers indicated a desire to balance the reflections to also include successes and positive thoughts.

All of the teachers described an array of outcomes resulting from their engagement in reflective practices. It was evident through interview data as well as observational data that reflection prompted either an immediate response or a contemplated change to occur at some future point. In an example of a relatively immediate outcome resulting from Laura’s engagement in reflection, she explained, “Sometimes I am really good at spending time at the end of the day just thinking about what are the good things that happened today and I might write students a note thanking them for what they did.”

Continual Development of Self

The third category focused on a somewhat subtle but consistent cross-teacher finding in which all teachers described their need to achieve a balance between their personal and professional lives. Teachers also consistently indicated their need for continual personal and professional growth. While each teacher met this need in different ways, all of the strategies focused on a common outcome of learning, renewal, and change. The desire for continual growth—in both personal and professional domains—was also expressed by all four teachers. One identified it as rejuvenation. Another teacher encapsulated it as a love for lifelong learning. A third teacher clearly communicated that she never taught the same way twice. A fourth teacher conveyed that without change she couldn’t imagine staying in teaching. All of the teachers indicated that without a constant renewal of information and knowledge, their sense of efficacy would be diminished.
The Link Between *What* Meaning Was Constructed and *How* Meaning Was Constructed

**Inquiry and Feedback**

The combined use of inquiry and feedback provided a clear linkage between that around which meaning was constructed and how meaning was constructed. Feedback occurred between the teacher and a variety of people including students, parents, colleagues, and administrators. The source of feedback which emerged as the most important was that which was obtained from students. All four teachers consistently conveyed through words and actions a variety of ways in which student feedback and reflection is initiated, encouraged, and supported. As illustrated by Pat, “It may be just ‘Here is a piece of paper and here is the concept that we worked on three days ago. Walk me through the process. Not to be graded — just here it is to help me’.”

Inquiry and feedback existed in a continual loop between the teacher’s ongoing assessment of the effectiveness of instructional practices as well as the quality of relationships that occurred between teacher and student. Inquiry and feedback were essential in order for the teachers to create and sustain a classroom climate, engage in reflective practices, and participate in the continual development of self.

**Insights and Applications for Practice**

Given the significance of the findings related to how personal teaching efficacy mediates teacher practices, it is clearly evident that applications for practice need to consider the importance of context in the development and sustainment of personal teacher efficacy. Drawn from the findings of this study, the following applications for practice are provided —

1. Integral to personal teaching efficacy is the ability of teachers to develop relationships with students, elicit feedback from students, implement a wide repertoire of instructional strategies, and engage in reflective practices. Attention needs to be focused at a professional development level to support teachers in understanding the importance of such teaching practices and assist teachers in developing and refining these skills.

2. School practices must be designed and implemented in such a way as to recognize the importance of partnerships between teacher and parents and teacher and colleagues. Each type of partnership adds an essential component to student learning as well as being contributive to the sustainment of personal teaching efficacy.
3. Attentiveness needs to be focused on both explicit and implicit areas of curriculum. Central to the development of implicit curriculum is the importance of creating positive classroom communities where teachers and students can co-create authentic opportunities in which to share responsibility for maintaining a learning environment that promotes the growth of all members. It is through this shared responsibility for teaching and learning that students have meaningful opportunities to develop effective intrapersonal and interpersonal skills that will better prepare them to live in an increasingly diverse society.

4. Support provided to teachers teaching in heterogeneous classrooms must take into consideration the perception that ability is often the defining characteristic of heterogeneity. As such, it is important that teachers have opportunities to expand their instructional repertoires in order to become increasingly able to design and implement differentiated instruction. Attention also needs to be paid to the collective classroom effects of heterogeneity and the implications of such group dynamics on the teaching and learning relationship.

5. The classroom context must be honored as an essential component of how teachers define and bring meaning to their work. Professional development must be offered to teachers in such a way as to value the importance of each teacher’s practical knowledge and support the need for teachers to contextualize information in order to produce relevant meaning. Correspondingly, it is essential that teachers be given support for enhancing their ability to engage in ongoing reflection as they continually construct meaning about their work.

Limitations of the Study

The greatest strength of this study may well be perceived as its greatest area of caution. One of the purposes of this research endeavor was to make audible the voices of efficacious teachers relative to an exploration of how each teacher constructs meaning in context of heterogeneous classrooms. It is this very description of voice that causes some researchers to invite caution relative to what is ultimately inferred from the voiced experiences of a few. As stated by Hargreaves (1996)—

Interestingly, the teacher’s voice is frequently represented as the teacher’s voice. This discursive formulation is not accidental. To speak of the teacher’s voice is to speak of a singular voice that is also a representative voice, a voice that supposedly embodies qualities that are generic to all teachers and teaching. It is to speak not of a teacher’s voice as an indefinite article but of the teacher’s voice as a very definite and generically representative one (p. 13).

The purpose of this caution is not to diminish the accuracy or the value of the individual and collective insights and knowledge of the teachers portrayed in this study. It does, however, serve as a reminder that the four teachers in this study speak for themselves, they do not speak on behalf of efficacious teachers in general. Given the significant influence of context on such things as the application of teacher knowledge, the development of teacher-student relationships, and the effectiveness of instructional practices, the descriptive base of information about teaching efficacy is too emergent.
to generalize these findings to all efficacious teachers without regard for teachers' specific contextual realities.

A second caution concerns the time frame in which this research was conducted. First, the study was conducted in the spring by which time in the school year it could be assumed that teachers and students had six months in which to become familiar with respective roles and expectations in the teaching and learning relationship. Second, the interviews and observations took place within an eight-week span of time. Therefore, the contextual experiences of teachers were gleaned from a relatively intense but time-limited span.

A third caution concerns the emergent grappling with the meaning of heterogeneity and heterogeneous classrooms. One cannot infer uniformity in the definition, meaning or implications of such concepts. To date, the literature has predominantly viewed heterogeneity as a composite of many isolated categories of student diversity. Scant educational literature has examined the meaning and subsequent implications of a holistic view of heterogeneous classrooms. This study forges a beginning attempt to better understand how teachers view both the individual aspects of heterogeneous classrooms as well as what one teacher in this study described as the “collective personality” of a heterogeneous classroom. Therefore, caution should be taken in generalizing the results of this study to other heterogeneous classroom contexts.

Suggestions for Future Research

This study begins to expand the existing research base relative to a contextual understanding of the phenomenon of personal teaching efficacy. Additional research is needed to further expand the contextual understanding of how personal teaching efficacy is developed and sustained. Specifically, it will be important to further examine such relationships as those occurring between teacher efficacy and relational knowing, teacher efficacy and classroom climate, teacher efficacy and reflective practice, and teacher efficacy and instructional practices. Further exploration of these relationships in a variety of classroom and school contexts at both secondary and elementary levels will expand existing knowledge as to the interaction between context and teacher efficacy.

Within the suggested classroom and school contexts, it is recommended that research examine teachers who believe themselves to be more efficacious as well as those teachers who believe themselves to be less efficacious or non-efficacious. Further qualitative explorations of personal teaching efficacy might provide subsequent information and clarification as to the soundness of the theoretical relationships suggested by the findings of this study.

Despite the recognition that teacher efficacy has for 20 years been viewed as a significant contributor to a teacher’s ability to be effective, minimal research has focused on how best to increase a teacher’s sense of his or her own efficacy. It will be important that as the literature base continues to expand relative to the contextual understanding of efficacy and its interactional effects on students,
future research also needs to focus on how best to increase teacher efficacy. As a powerful mediator of behavior and practice, it seems critical that future research begin to explore effective ways to accomplish this.

Lastly, given the continued increase in the heterogeneity of classrooms, it is suggested that future research continue to explore the relationships between teaching efficacy and teaching and learning in heterogeneous contexts. While each of the classrooms in this study were reflective of an array of student diversity, the fact remains that this study was conducted in a suburban district. Although many of the issues are similar to heterogeneous classrooms everywhere, the magnitude of the issues relative to certain types of student diversity is dissimilar to that which might be encountered in an urban district.

Conclusions

The interaction between personal teaching efficacy and heterogeneous classrooms provided the contextual basis for this study. Interestingly, personal teaching efficacy was not a term that evoked clear definitional understanding among the four teachers who participated in the study. The teachers often referred to effective or effectiveness as they described their actions and their desired outcomes from teaching. While the term efficacy didn't appear frequently in the teachers' day-to-day vocabulary, the concept was clearly evident in both their language and their actions. Through repetitively spoken phrases such as "All kids can learn," "I would never give up on a child," "All children have gifts," "I just need to find a way to reach her," and "I feel stuck sometimes but I just keep trying," it was clearly evident that all four teachers knew at a very deep and authentic level the meaning of personal teaching efficacy. The daily portrayal of efficacy in their words and behaviors expressed the thoroughness of their understanding.

Each teacher brought individual meaning and description to factors that supported his or her sense of efficacy. Several of the identified supports involved organizational factors (e.g., autonomy to make classroom-based decisions and organizational support for preferred teaching practices). Other supports involved collegial relationships, positive partnerships with parents, and the attainment of a balance between professional life and personal life.

Likewise, all four teachers individually identified factors that caused a diminishment of their efficacy. Identified factors included a lack of parent involvement, trying to balance the significant needs of one student with the needs of all stu-
dents, and incompatible attitudes and beliefs of colleagues. Again, findings indicate the importance of balance. All four of the teachers indicated that a lack of balance limited their sense of efficacy.

Teachers spoke about their personal teaching efficacy as if it existed along a continuum. One end of the continuum was the point of less efficacious. At the other end of the continuum was the point of more efficacious. All four teachers were clear to explain that while their feelings of efficacy ranged qualitatively from less efficacious to more efficacious, their beliefs in their efficacy never moved to a point of feeling non-efficacious.

The second feature of the contextual basis of the study consisted of heterogeneous classrooms. Each of these classrooms was comprised of students representing a variety of diverse backgrounds, life experiences, and abilities. For all four classrooms, these backgrounds were represented by diversity of race, ethnicity, culture, socioeconomic status, and family make-up. For two classrooms, these backgrounds were also represented by linguistic diversity. The heterogeneity of the class context was described by teachers in two ways. The first description indicated that the classroom was comprised of a group of students each having individual cognitive and emotional needs, unique learning styles, and personally constructed beliefs about themselves as learners. The second description indicated that the classroom was comprised of a collective heterogeneity. With varying words and metaphors, all four teachers expressed that heterogeneity was more than just a composite of the diversity of each individual child. They clearly articulated that heterogeneity also expressed itself as a "collective personality."

Both features of the study's contextual basis provided teachers with an ongoing sense of richness and an ongoing sense of challenge. The intentional recognition of the heterogeneity of the classroom was illustrative of the following statement: "To cope seriously with the moral implication of heterogeneity requires classroom time" (Sarason, 1993, p. 32). As the condition in which these teachers engaged in their daily lived experience of teaching, the interaction between personal teaching efficacy and heterogeneous classroom contexts created a continual need for the teachers to assess the congruency between their efficacy beliefs and the needs of students with whom they were inextricably linked.

Congruency between the teachers' efficacy beliefs and the needs of their diverse students was achieved through the continual construction of meaning. It was through this construction of meaning that teachers were able to assess how well their practices — as generally evidenced by student growth or lack of student growth — aligned with their belief that they could affect such growth for all of their students.

Meaning was constructed by each of the teachers through the development and sustainment of a relationship with each student. These relationships provided the teachers with essential knowledge about their students. This student-centered knowledge in turn assisted the teachers in designing effective instructional practices to reach each child and was foundational in conveying to the students that their teacher cared about them, was invested in them, and was interested in their well-being.

The second area around which meaning was constructed concerned instructional practices. Teachers made a multitude of instructional decisions and most of them were guided by the overarching question of, "What's best for my students?" What appeared to be consistent in the process of planning and implementing instruction
was the ongoing meaning that was constructed relative to the diversity of student needs and abilities and how the instruction could be designed in such a way as to accommodate, and in many instances enhance, that diversity. Across all classrooms, instructional practices were intentionally designed to offer differentiated content, process, product, and assessment depending on the needs of the student. Each teacher was observed to engage in a wide repertoire of strategies involving such things as higher order thinking skills, constructivist learning, thematic instruction, and cooperative learning.

In addition to obtaining meaning from teacher relationships and instructional practices, it was necessary for teachers to engage in processes that allowed them to actually construct meaning. The findings suggest that all four of the teachers utilized three pivotal processes by which the meanings obtained from teacher relationships and instructional practices were constructed. The processes involved the creation and sustainment of positive classroom climate, engagement in reflective practices, and continual development of self.

The creation and sustainment of a positive classroom climate provided the dynamic environment in which both teacher and students had continual opportunities to define what it meant to teach and learn in a diverse classroom context. Consistent across all teachers was the need to create a classroom climate that modeled the beliefs and expectations held by each of them. All teachers were emphatic in explaining that their most important role as a teacher was to foster the intrapersonal and interpersonal growth of their students. The creation and sustainment of a positive classroom climate provided the arena in which this affective dimension of learning could be explicitly taught. Similar to what some theorists and practitioners would call a "democratic classroom," the four classroom climates stressed attributes of respect, shared responsibility for learning, shared ownership of the classroom community, and positive interdependency (Apple & Beane, 1995). Guiding the development of these attributes was clarity of teacher and student roles, clear and consistent expectations, a concept of fairness based on principles of equity, involvement of all members in decision making, positive recognition of diversity, and a focus on student choice and responsibility.

Engagement in reflective practices occurred across all teachers. Although differing in form, the function of the reflection was consistent. Engagement in reflective practices existed for the purpose of assessing the quality of instructional practices as well as the quality of teacher-student relationships. Findings indicate that outcomes resulting from the reflection, while occasionally serving to affirm the positive nature of a practice or an interaction, most often served as an impetus to alter some aspect of an instructional practice or a relationship.

Continual development of self contributed in a more subtle way, but perhaps in no less of a powerful way. Each teacher expressed very clearly his or her need for two things to provide sustenance for his or her teaching journey. They spoke to the need for ongoing growth, and they spoke to the need for balance in their lives. It appeared that these two provided an important source of renewal for teaching as well as proving support for their sense of efficacy.
Inquiry and feedback provided the critical link between what meaning was constructed and how meaning was constructed. Feedback occurred between the teacher and a variety of people, however, it was the feedback between teacher and student that was essential. Teachers demonstrated clear intentionality in how they sought and obtained feedback. Inquiry and feedback were embedded in their teaching practices. The practice of eliciting feedback occurred often, it occurred for a purpose, and it occurred within an explicit framework of providing information to both the student and the teacher. Without inquiry and feedback, there would have been no relevant content on which to reflect.

In summary, it is apparent that each categorical part of the relationship was essential in order for the teachers to integrate their beliefs and practices. Findings suggest that without the ability to engage in an ongoing construction of meaning, the teachers could not have acquired the information necessary to sustain their sense of efficacy. At some point in the interviews, each teacher emphatically conveyed their critical need “to know I am making a positive difference for children.” Without that feedback, all four teachers stated that they would be not teaching. Just as the works of Lortie (1975) and Rosenholtz (1989) illustratively depicted the reliance of teachers on their students as their primary source of rewards, so too has it been shown in this study that teachers and students are interdependent in the process of the co-construction of meaning.

Linkages Between the Findings and Current Literature on Teacher Efficacy

This research explored and described the relationships between personal teaching efficacy and teaching and learning, and in doing so examined how personal teaching efficacy mediated the daily practices of four elementary school teachers. Because the existing literature base on teacher efficacy is virtually silent as to information that qualitatively explores the contextual nature of teacher efficacy, significant difficulty exists in the ability to compare and contrast the findings from this study with other studies on teacher efficacy. Unfortunately, the one study that similarly explored teaching efficacy through interviews and observations occurred with middle school and junior high school teachers. This study, although closest in methodology, poses difficulties given the differences in organizational structures between elementary schools and middle/junior high schools. The very small number of teachers involved in this study also presents limitations in generalizing the findings. In light of these difficulties, several general statements will be made relative to key findings.

The literature has been inconsistent in depicting teacher efficacy as either a global or a situational specific trait and existing in either a fixed state or a variable state. Findings from this research would suggest that personal teaching efficacy is a global trait that exists as a variable state. Based on the experiences of the four teachers in this study, their
overall sense of personal teaching efficacy remained intact despite the challenges encountered in their teaching experiences. The teachers did, however, indicate that their degree of personal teaching efficacy fluctuated depending on personal and contextual variables.

Relative to other studies that have quantitatively examined relationships between teaching efficacy and classroom variables, findings from this study would concur that teacher autonomy to make decisions affecting the classroom was identified as a contributor to teacher efficacy. The other notable consistency occurred in the area of classroom management. Findings concur with those found in the 1990 Woolfolk, Rosoff, & Hoy study that reported that teachers who possess a high level of personal teaching efficacy do not favor custodial control of students as a means of classroom management.

Despite the difference in grade level, several of the characteristics demonstrated by teachers with high levels of teaching efficacy identified in the qualitative study done by Ashton, Webb, & Doda (1983) are similar to those identified in this study. These include (a) the establishment of clear expectations and routines for students behavior, (b) increased likelihood to build personal relationships with students to facilitate learning, and (c) decreased likelihood to respond negatively to student behavior. Findings from this study are also consistent with those reported by Bender and Ukeje (1989) in which teachers with high levels of personal teaching efficacy were more likely to implement individualized instructional and learning strategies for students perceived as needing them.
References


Other Together We’re Better Publications. . .

Weaving Tapestries of Inclusion:
Seven Threads to Strengthen School Membership
by T. Vandercook
This booklet describes lessons learned through a multi-year research project that sought ways to weave the tapestry of educational inclusion for students with disabilities in the context of general education reform efforts. It explores seven threads of inclusion: Contribution, Commitment, Complexity, Circle of Influence, Communication, Courage-Consideration, and Collaboration. Through describing these threads and how they were found to be essential to lasting inclusion, the booklet offers a framework and direction for educators seeking to create inclusive school communities in which all students experience belonging. (1999).

Hey, We See It Differently!
by L. Walz, T. Vandercook, L. Medwetz, and M. Nelson
This booklet summarizes the lessons learned on teaming through a collaborative process seeking to create inclusive learning environments in schools. The lessons do not align with conventional wisdom related to effective teaming, so, the authors see teaming differently! (1999).

A Preferred Future Worksheet: A Process for School Teams
by L. Medwetz, T. Vandercook, and G. Hoganson
This worksheet and instruction guide provides a planning tool that can help teams analyze the current situation, identify a preferred future, and create a plan of action. It includes tips for forming teams and facilitating the process, as well as detailed directions for each step in developing a plan for achieving a preferred future in relation to an issue or problem. (1999).

Lessons for Understanding:
An Elementary School Curriculum on Perspective-Taking
by T. Vandercook, L. Medwetz, J. Montie, P. Taylor, and K. Scaletta
A curriculum developed for grades K-5 to increase student understanding and appreciation of different perspectives, leading to respect for diversity and support for truly inclusive school communities. The 24 lessons are clustered in four units: My Perspective, Other Perspectives, Understanding Conflict, and Working Together. The curriculum is designed to be used in classrooms where students with and without disabilities learn together, and suggested adaptations are included. A unique feature is a focus on strengthening home-school partnerships. The lessons make use of 19 storybooks available through most bookstores and libraries. (1997).

Lessons for Understanding:
A Junior High and High School Curriculum on Perspective-Taking
by L. Walz, M. Nelson, and K. Scaletta
A curriculum developed for secondary students to increase student understanding and appreciation of different perspectives, leading to respect for diversity and support for truly inclusive school communities. The 20 lessons are clustered in four units: My Perspective — Understanding Perspectives and Where They Come From; Other Perspectives — Developing Awareness of Different Perspectives; Accepting Others — Developing Skills and Attitudes for Valuing Different Perspectives; and Working Together — Applying Perspective-Taking Skills to Improve Solutions. (1998).

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