Chapter 6

Discussion

In response to calls to better understand educators' experiences with inclusion (Salend, 1999), this study was conducted to consider the following research question: How have general elementary education teachers who are currently teaching in inclusive settings perceived that they learned to teach the wide heterogeneity of students in their classrooms? Data from this study have shown that there were four emerging answers to this research question. Each answer suggested that teachers were motivated to learn new information on inclusion, disabilities, and special education as students with disabilities were placed in their classrooms. Furthermore, teachers reported that their initial feelings of fear and nervousness seemed to lessen as they learned new information on teaching students with disabilities while learning to work alongside other adults in their classrooms. Coinciding with informational learning, data indicated participants' perceptions of disabilities, inclusion and themselves seemed to change as they gained experience teaching in inclusive classrooms. Data analysis revealed that through this perspective change, some teachers might have experienced a transformative learning process defined by Mezirow (1991). In light of previously conducted research on inclusion, these findings lead to a discussion and interpretation of how participants of this study learned to teach in inclusive classrooms.

Participants' Teaching Contexts

For this study's findings to be meaningful, it is important to understand the participants' teaching contexts in relation to previously studied teachers' contexts so data can be appropriately compared, contrasted and synthesized. The participants of this study

were ten general elementary education teachers of grades one through five in three different elementary schools from one school district. Through analyzing the participants' contexts of teaching in inclusive classrooms, it became evident that their teaching conditions included three of four components that previous research deemed necessary for successful inclusive practices. Specifically, participants of the study had (a) small class sizes; (b) support from special educators and teaching assistants; and (c) opportunities for consultation and collaboration with staff members while teaching in inclusive classrooms. The fourth component research deemed necessary for successful inclusive practices, teacher training on inclusion, was lacking from all participants' teacher preparation programs and on-going professional development. The following chapter includes a discussion of (a) participants' teaching contexts in light of previous research; (b) emerging findings suggesting answers to the research question; (c) implications of this study's findings; (d) limitations of this study's design; and (e) recommendations for future research.

Scruggs and Mastropieri's (1996) review and synthesis of 28 studies on inclusion found that teachers believed that they needed a class size with fewer than twenty students to be successful teaching in inclusive classrooms. Half of the participants of this study represented such classrooms. Specifically, 5 teachers taught in classrooms that with fewer than twenty students, 3 teachers had twenty students and 2 teachers had twenty-one and twenty-two students each. Therefore, half of the teachers in this study worked in inclusive classrooms with class sizes that Scruggs and Mastropieri's findings suggested. Trump and Hange (1996), Harrington (1997) and Smith and Smith (1999) also found that teachers believed class size to be important and suggested that the ratio of teachers and

support staff to students was an important factor for successful inclusive practices. Data from this study indicated that teachers had an average of three additional adults that they worked alongside throughout their teaching day. Some staff provided half-day support while others provided full-day support in each classroom. Table 3 illustrates the support staff that general educators had in their inclusive classrooms. Data indicated that teachers in this study believed that they had adequate support staff needed to teach in inclusive classrooms. When considering class size along with the ratio of teacher and support staff to students, participants of this study were unlike most previously studied teachers in that they expressed a belief that they had the class size and necessary support staff that they needed to teach in inclusive classrooms. Therefore, data suggested that teachers of this study had the above working conditions that were deemed favorable for facilitating successful inclusive education practices (Trump & Hange, 1996; Harrington 1997 and Smith & Smith, 1999).

Mundschnek and Foley (1997) cited that general and special educators who combine their skills equally when teaching exemplified the collaboration necessary for successful inclusive education practices. Studies conducted by Bennett et al. (1997), Downing et al. (1997) and Hammill et al. (1999) revealed findings that supported Mundschnek and Foley's assertions regarding teacher collaboration as a critical component to inclusion. Likewise, this study found that teachers believed that the collaboration and communication with special educators and additional support staff was instrumental to their success with inclusion. Specifically, teachers from this study reported that the communication that they had with special educators facilitated their learning about disabilities and better understanding inclusive practices. While all

participants believed that their collaboration was effective, some participants highlighted time concerns. That is, some participants commented that they needed additional time to meet and plan with other adults who worked in their classrooms. This finding paralleled the time concerns that Hamre-Nietupski et al. (1999), Olson et al. (1997), Salend and Duhaney (1999), and Smith and Smith (2000) found through their research. However, data from this study revealed that although teachers believed that they needed more time for collaboration and communication, they utilized their own personal time either before or after school to consult with special educators and teaching assistants. Therefore, while teachers commented that they needed additional time for collaboration and communication with other staff members built into their teaching day, they often resolved this concern by entering school early or staying after school to engage in conversations they considered necessary.

General elementary educators' belief that they need more training to teach in inclusive classrooms has been a well-documented research finding (Bennett et al., 1997; Buell et al., 1999; Petch-Hogan, 1999; Salend & Duhaney, 1999; Scruggs & Mastropieri, 1996; Smith & Smith, 2000). Nevertheless, regardless of lack of training or expertise, general educators have been increasingly assigned to teach in inclusive classrooms (Buell et al., 1999). Despite this fact, little has been learned regarding how, without formalized education or training on inclusion, general educators have learned to teach in inclusive settings. This study provided insight into how such educators have learned to teach in their classrooms and offered some understanding into their new knowledge acquisition.

Similar to the findings of Smith and Smith (2000), participants in this study felt that they were unprepared and lacked the training necessary for teaching in inclusive

classrooms. In addition, Smith and Smith (2000) found that teachers believed their training needed to be practical and relevant to their own teaching contexts. Likewise, Hamre-Nietupski et al. (1999) and Kontos and File (1993) found that teachers believed that the information they needed on inclusion had to be individualized for the particular circumstances in which they worked. While this study revealed similar initial findings, this study extended previously known knowledge by discovering that teachers self-initiated and carried out their own learning on inclusion when assigned to teach in inclusive classrooms. Specifically, teachers (a) initiated independent reading and research; (b) learned information from students; (c) reflected on teaching practices; and (d) learned from special educators. Table 4 compares and contrasts teachers' use of each of these practices.

Cross-Analysis of Findings

While Chapter Four highlighted four findings that suggested how general educators learned the information they deemed necessary for teaching in inclusive classrooms, comparing and contrasting participants' data within each finding revealed additional findings worthy of further attention. After all four findings had been developed and analyzed for validity, a cross-analysis was conducted to consider common characteristics particular to groups of teachers who were located within or missing from each theme. This particular cross-analysis provided information worthy of inquiry and discussion. For example, as Table 8 indicates, the single practice that all teachers used to learn information on inclusion was to consult special educators. Data indicated that regardless of the number of years experience teachers had in inclusive classrooms, teachers depended on special educators to provide information on disabilities specific to

the students they taught. Data analysis revealed that teachers continued to solicit special educators' assistance each year that they taught in inclusive classrooms because yearly knowledge gains only included information specific to the disabilities and needs of students they were assigned to teach. This finding suggests that teachers' knowledge gaps may vacillate from year to year depending on variables including specific students' needs and particular teaching contexts. Smith and Smith (2000) suggested that information most useful to teachers in inclusive settings would be specific, practical and relevant to their own classroom contexts. Data from this study seems to suggest that teachers have learned such information from special educators as they were working in their inclusive classrooms.

Table 8 illustrates that all but one teacher in the study used independent reading and research to learn information on inclusive education. Although teachers mentioned that they initially researched and read information they believed would assist them in learning new information, some participants claimed that their reading did not make much difference to them until they were teaching in inclusive classrooms. This finding may suggest that researching and reading information on inclusion might be most meaningful to teachers if they can associate and situate new knowledge within specific teaching contexts that they have experienced. Findings also showed that as educators' experiences of teaching students with different disabilities increased, more reading had been done on disabilities specific to the students that they taught. This may mean that as some teachers gained experiences teaching different students with dissimilar disabilities, those same teachers may have made broader knowledge gains on disabilities than those teachers who taught students with similar disabilities.

Data from teachers who were in their first year in inclusive classrooms indicated that they only utilized (a) special educators' assistance and (b) independent reading and research to learn new information on inclusion. That is, although this study found that some teachers learned to teach in inclusive classrooms by learning from their students and from critically reflecting on their teaching, data revealed that no first year teachers used these practices. As such, findings that were generated from first year inclusion teachers were remarkably similar to each other. This may mean that despite differences in classroom demographics, first year inclusion teachers might have some similar experiences. As teachers gain more experience teaching in inclusive classrooms, they find more diverse ways of learning the information they deem necessary. In addition, data revealed that regardless of the years experiences teaching in general elementary classrooms there seemed to be no relation to ways that teachers learned information on inclusion. In other words, regardless of the wide range of years of experience teaching in general education classrooms (two to twenty nine years), data indicated that when in their first year teaching in inclusive classrooms, they each utilized the same ways to learn information on inclusion. This finding may indicate that novice inclusive education teachers may utilize similar ways of learning information on inclusion.

Like first year inclusion teachers, nearly all teachers with more than two years inclusion experience also utilized the same aforementioned ways to learn to teach in inclusive classrooms. However, teachers with more than two years' inclusion experience also learned teach in inclusive classrooms as they (a) interacted with and learned from their students and (b) critically reflected on their own teaching practices. These findings revealed that teachers with more than two years' inclusive teaching experience may have

been more inclined to interact and learn from their students with disabilities than teachers with less experience. It may be that the more years' experience teachers had in inclusive classrooms, the more willing they were to have and learn from their interactions with students. Teachers who had more than two years inclusion experience may have also been more inclined to critically reflect on their teaching practices because they no longer needed to focus on the contextual change of general to inclusive classrooms that first year inclusion teachers may encounter. Additionally, since these findings were concurrent, this may indicate that teachers with more than two years' experience used their student/teacher interactions to learn how students learn best while concurrently reflecting on their own teaching. One might posit that as teachers gain more experience in inclusive classrooms, their foci might shift from learning about inclusion to contemplating students' learning in their classrooms.

Previous research indicated that general educators lacked formalized education on inclusion and on teaching students with disabilities (Buell, Hallam, and McCormick, 1999). Findings from this study revealed ways that general educators learned about inclusion and on disabilities specific to the students that they taught. While teachers' informational learning provided some insight into how they learned to teach in inclusive settings, data analysis suggested that some teachers might have also experienced a similar learning process while teaching in inclusive classrooms.

Transformative Learning Theory: A Model for Discussion

Figure 1 offers a model of the transformative learning theory defined by Mezirow (1997) that outlines particular phases of learning adults may experience when confronted with a "disorienting dilemma". Through data analysis, comparisons were made to

determine whether participants in the study had experienced some or all of Mezirow's transformative learning process. Through studying each participant's experiences, their descriptions of their learning processes seemed to correspond well with the components of Mezirow's learning theory. After analysis, visible differences were noted between some teachers' learning processes. Initially, data revealed that all teachers had commonalties in their frames of reference and habitual ways of thinking about schooling students with and without disabilities. For example, regardless of years' experience teaching, all teachers claimed that childhood experiences had facilitated their belief that schools where places where students with and without disabilities were educated separately. During analysis, teachers' processes of understanding concepts of inclusion were superimposed onto Mezirow's Transformative Learning Theory (1997). When superimposed, widespread differences were noted between novice (<1 year experience) and veteran (> 4 years experience) inclusive elementary educators. While all participants experienced early phases of the transformative learning process, data indicated that novice inclusion teachers did not yet assume a transformation in their perspective on inclusion. Refer to Figure 1 for the following discussion. All participants had experiences including: (a) a similar originating paradigm/ frame of reference where students with and without disabilities were schooled separately; (b) a new experience/ event of teaching in an inclusive classroom; (c) a questioning point to consider their new inclusive experience; (d) an experience that did not fit into their existing framework (disorienting dilemma); (e) a feeling such as fear and/or nervousness; and (f) a reflection on the disorienting dilemma. Differences in teachers' learning processes were located where the model's spiraling reflection interweaves emotion and conversation about the disorienting

dilemma. Teachers who had less than four years experience in inclusive classrooms were found to be circling within the spiraling reflection of the model. Data from two teachers, one with eight years and one with 11 years experience in inclusive classrooms indicated that they had progressed passed the recursive, spiraling reflection in Figure 1 and had taken on concepts of inclusion as a new personal perspective or "habit of mind".

Data suggested that the teacher who had the most experience in inclusive classrooms (11 years) revealed that she had reflected on her new perspective and transformed her habit of mind to include a different, more inclusive viewpoint on schooling students with and without disabilities together. Findings such as this may indicate that as teachers gain experience in inclusive classrooms, they have more opportunities and time necessary for the spiraling reflection that the transformative learning process might require. Findings also suggest that novice inclusive education teachers who have an initial frame of reference on schooling similar to the participants in this study may experience similar learning processes. From the analysis, it appears that, as teachers gained experience teaching in inclusive classrooms, their learning process may have offered more opportunities for reflecting on, learning about and consequently accepting the notion of inclusion. Mezirow (1997) has stated, "Becoming critically reflective on one's own assumptions is the key to transforming one's taken-for-granted frame of reference" (p. 8). In this light, findings suggest that teachers' disorienting dilemmas and associated emotions might have provided an initial impetus for their perspective transformations. This may mean that a critical point in teachers' learning about, understanding and acceptance of inclusive education is during the spiraling reflection phase indicated on Figure1.

Implications

While this was a small scale, descriptive study, findings suggested possible implications for the field of inclusive elementary education. Findings indicated that general elementary educators learned much about inclusion through self-initiated actions and "on the job" experiences. While this study pointed to emerging answers that addressed how general elementary educators learned to teach in inclusive classrooms, findings suggested that teachers experienced two different and distinct types of learning. One type of learning was informational learning where teachers sought out ways to gain factual knowledge on topics specific to inclusive education. Woven within teachers' active informational knowledge gathering seemed to be an undisclosed learning process that teachers might have experienced while working in inclusive classrooms. Therefore, while the initial research question sought to explore issues of how teachers were learning to teach in inclusive classrooms, answers that emerged pointed to (a) factual knowledge gains and (b) personal belief changes. Studying teachers' narratives through both perspectives seemed to provide a wider, more comprehensive lens that allowed for thorough understanding of teachers' learning. This suggests that, while previous research indicated that general educators' knowledge on inclusion was limited (Salend & Duhaney, 1999; Scruggs & Mastropieri, 1996), it may be important to deconstruct teachers' "needed knowledge" into sub-categories for more understanding on what is needed. Findings from this study suggest that two such categories should include (a) the need for informational knowledge and (b) the need for personal perspective awareness on inclusion.

Limitations

Limitations of this study pertain to three different aspects of the research design including (a) sample size and nature of the sample; (b) narrow scope of the study; and (c) potential researcher bias. Foremost, the sample size is ten general elementary education teachers in one school district. This sample is too small to generalize findings to other general elementary educators. However, the intention of this study was not to gather data that could be widely generalized for all general educators. Rather, this study was to better understand ways that participants with criteria specific to the study's design learned to teach in inclusive classrooms. Therefore, findings should be interpreted as experiences specific to the participants in the study and may be of most interest and relevance to general educators who might be in teaching circumstances similar to those studied.

The second limitation of this study was this study's narrow scope. Participants of the study were similar in that they were all (a) women; (b) working in elementary schools less than five miles from each other; and (c) employed by the same suburban school district. In addition, participants were only interviewed four times within a four-month duration. Rather than using the findings to create misleading overgeneralizations, this small qualitative study would be utilized best by examining the research question and findings to develop similar inquiries to guide future research in the area of inclusive education.

The third limitation to this study is that only one researcher collected and analyzed all gathered data. This limitation provides a conceivable concern of researcher bias. This study addressed this concern by (a) audiotaping and transcribing all fieldnotes verbatim to ensure accuracy; (b) supplementing interviews with participant observation to

limit false interpretations of data; and (c) utilizing a member-check system (Bogdan & Biklen, 1998) to review and confirm findings with participants. Data was analyzed from different perspectives to allow multiple ways to report findings. Analyzing qualitative data in multiple ways helped to provide a holistic perspective of findings and their implications (Bogdan & Biklen, 1998).

Recommendations

Findings of this study can benefit many key stakeholders in the field of inclusive elementary education. Recommendations regarding this study's findings can provide suggestions that apply to all persons involved with inclusive elementary education.

Recommendations for General Elementary Educators

General elementary educators could benefit from all findings of this study because understanding what best helped other teachers learn how to teach in inclusive classrooms may be perceived as relevant and practical information worthy of their implementation. Findings revealed that teachers believed that their reading about topics pertaining to inclusion made more sense while teaching in inclusive classrooms. Therefore, recommendations for general elementary educators include creating small literature groups with other teachers to discuss readings on information about inclusion while making relevant connections to their own students. Teachers could then provide lists of educational literature that made an impact on their own learning to other colleagues in inclusive classrooms. Educational literature that general educators identified as helpful when teaching in inclusive classrooms could be viewed as worthwhile in assisting teachers who have little time to locate literature and discern its practicality and usefulness to practicing teachers.

Findings suggested that general educators learned information that they deemed most important from special educators. Implications from this finding included special educators taking on roles as teachers for general educators. Creating collaborative teams with special educators has been found beneficial to general education teachers. In this study, both general and special educators have distinct information on teaching and learning that can be shared with each other. Sharing this information can be helpful to general and special educators' perceived knowledge gaps. Collaborating on teaching practices has the potential to benefit students with and without disabilities in inclusive classrooms. Another suggestion includes general educators gaining perspectives from special educators outside of their own building and/or school district. Attending conferences on special education and inclusion may prove beneficial because other special education colleagues could provide alternative perspectives on topics that are specific to their needs. General educators need not rely solely on their own special educators for assistance in learning information on teaching students with disabilities. Other special educators can be sought out to create more wide-spread collaborative teams to assist in learning about teaching students with disabilities in inclusive classrooms.

Findings from this study also suggested that general elementary educators believed that they learned how to teach in inclusive classrooms by individually interacting with their students. Therefore, general educators should find time to individually meet with and socially interact with students in their inclusive classrooms. Creating learning centers in classrooms can provide times when students can work in small groups or individually so general educators can meet with students one-on-one. When general educators take time for this interaction, it is possible to learn what

interests, concerns and needs students may have. This information could be used to create lessons to best meet individual needs of students while making learning meaningful to students.

Working one-on-one with students can provide time to identify individual skill gaps in students' learning. Identifying skill gaps that might go otherwise unnoticed during large group instruction is an outcome that can be achieved when meeting with students individually.

Stereotyping disabilities and differences in learning styles may lessen if teachers take time to know students as individuals. When students are labeled and/or identified as having particular disabilities, teachers may believe that it is important to first understand the characteristics of disabilities rather than understanding the students themselves. For example, one participant in this study believed that it was important to "read up" on autism when a student with autism was going to be in her classroom. After teaching and interacting with this student, she realized that "kids with disabilities are really like any other kid." Therefore, suggestions for general educators include taking time to get to know students as individuals. This suggestion has far reaching implications for students' achievement because teachers can use gained information for planning, teaching and interacting with students in the future.

Teachers' learning how to teach in inclusive classrooms seemed to experience a learning process. Therefore, it is important that general educators understand that they will not know everything that there is to know about inclusion prior to teaching in inclusive classrooms. Findings of this study suggested that teachers attempted to gain new knowledge on inclusion prior to teaching in an inclusive classroom. However,

teachers' early efforts proved to have little impact on their learning because they could not predict specific information they needed to know. Therefore, teachers need to understand that they will discover new information as they teach students in inclusive classrooms. Understanding this may lessen anxiety that novice inclusion teachers feel as they begin teaching in inclusive classrooms. Rather than believing that they need to know everything there is to know about particular disabilities, novice inclusive teachers would benefit by understanding that their learning is a process, very much dependent on the specific needs of the students who are in their classrooms.

The practice of reflection was another key finding in this study. Recommendations for general educators regarding reflection include practicing reflecting -in and -on their teaching practices. Teachers can reinforce their practice by creating reflection circles for teachers to come together to share their reflection processes and identify moments where their reflection changed their teaching while assisting students' learning. General educators are recommended to use reflection journals to document their reflections on instruction and students' learning after teaching. Videotaping lessons can be used as a reflection tool for general educators. Videotapes can be viewed privately or with other colleagues to identify key reflection-in-action moments of their teaching. Studying when and/or why teachers reflected-in-action may prove to strengthen and increase reflection incidents during instruction time. This process could be used to strengthen novice and veteran teachers' awareness and use of reflection techniques.

General elementary educators should also reflect on any preconceived notions about special education programming that may have originated in their childhood. Findings of this study indicated that teachers initially believed students with disabilities

should be taught in special education classrooms separate from general education classrooms. It was through reflection that previously held beliefs and assumptions such as these were reconsidered. Reflecting in such a way could provide teachers insight into possible limitations that personal convictions might have on their own teaching.

If teachers have little or no understanding of their own preconceived notions of segregated special education schooling, then they may fail to realize that students with disabilities are often offered inequitable schooling practices. Since many general educators have not themselves seen or interacted with students with disabilities in general education classrooms, they might fail to question the rationale and effectiveness of such a schooling practice. If this initial questioning does not happen, teachers might also fail to recognize that their own early experiences of a separate schooling culture could be extremely limiting to all students in school settings. Failing to question the notion of segregating students with disabilities into special education classrooms can lead to failing to realize the social injustice associated with separate schooling practices. Teachers must understand that they can begin to create classrooms that are socially just by being willing to take a risk to think beyond previously established understandings of what they think that schooling should look like. Holding too tightly to schooling patterns that have marginalized students with disabilities from the schooling of their non-disabled peers has long range damaging consequences for students, teachers and society. Teachers must realize that they can be instrumental in beginning to design a world where students are educated in schools that promote social justice in their policies and practices.

Recommendations for Teacher Educators and Teacher Preparation Programs

Findings from this study allow for many recommendations for teacher educators and for teacher preparation programs. Recommendations include information on professional literature on inclusion, reflection, collaboration, and on the understanding and use of Transformative Learning Theory.

Teacher preparation programs should be designed in a way that allows preservice teachers to be actively teaching in inclusive classrooms while reading professional literature that corresponds with their experiences. Teacher educators should assign literature readings on theoretical and practical information on inclusion specific to preservice teachers field experiences. Literature on topics specific to particular field placements may prove to be meaningful to preservice teachers because they could link theoretical and practical literature to their own experiences. In this way, teacher educators should reconsider using one common list of assigned readings for preservice courses. That practice implies that a predetermined list of books will meet the needs of all preservice teachers in varied field placement settings. Rather, teacher educators should work with cooperating teachers to learn about the student demographics in field placement classrooms. Then, teacher educators should propose a variety of literature choices for cooperating teachers to select for preservice teachers' reading pertaining to their particular teaching contexts. Cooperating and preservice teachers then could cooperatively read literature relevant to their particular inclusion classrooms. In this way, readings on issues about inclusion would be specific to individual classrooms while offering a facility for preservice and inservice teachers to learn together.

Scholars designing teacher preparation programs should consider when preservice teachers should be introduced to educational theory and pedagogical content knowledge. Findings from this study indicated that front-loading preservice teachers' field experiences with too much literature and theoretical discussion regarding teaching may have little impact on their learning. Providing educational case-studies that offer teaching vignettes of educators teaching in particular contexts would offer a valuable shared experience for a class of preservice teachers to discuss teaching techniques. Case-studies can be used to study actual teaching circumstances while students are still in university and college classrooms.

Findings from this study also implied that teachers learned most through their experience teaching in inclusive classrooms. Recommendations include having teacher preparation programs designed for preservice teachers to begin having experiences in inclusive classrooms as early as their first year in college or university settings. Waiting until preservice teachers' junior or senior years to place students in the field indicates a significant amount of wasted, potentially experiential time considering the findings from this study. If preservice teachers had earlier experiences with different inclusive classrooms and schools, topical discussions on inclusion in college and university classrooms may have more meaning because preservice teachers could make strong and meaningful connections to real-world situations.

Teacher educators should be aware of the value of offering practice for preservice teachers to reflect -in and -on their teaching. Using a variety of reflection models may help to assist more preservice teachers than one model would offer. Therefore, recommendations regarding reflection include the use of journal entries, videotaping and

teacher study groups to reinforce and strengthen reflection practices. Journal entries provide a private way for preservice teachers to reflect on their own teaching to consider their actions and speculate ways that lessons could be taught differently to best meet the needs of all learners. Videotaping lessons can assist preservice teachers because the tape can be viewed to recall moments of reflection-in-action or locate moments during teaching that students' learning might have increased had reflection-in-action been used.

It is imperative that teacher educators provide time for preservice teachers to reflect on previously held beliefs regarding segregated schooling for students with and without disabilities. This study's findings indicated that as teachers had more time to reflect on the theory of inclusion, their understanding and acceptance of teaching students with disabilities alongside students without disabilities changed; veteran inclusion teachers indicated that they were more willing to accept the notion of inclusion than novice inclusion teachers. Therefore, teacher educators should provide time for preservice teachers to recognize their beliefs about schooling and have opportunities to discuss these beliefs while reconsidering assumptions that were held as truths. Providing time for preservice teachers to shed light on any beliefs about segregated schooling may assist them learning how to teach in inclusive classrooms.

Findings from this study provided some insight into the possible learning processes that general educators of inclusive classrooms might have experienced while learning to teach in their heterogeneous classrooms. Preservice teachers are often at a young adult age as they begin to gain experiences in host classrooms. As such, they will have predetermined beliefs regarding teaching and schooling practices for students with and without disabilities. Teacher educators must realize that preservice teachers should be

considered adult learners in their classrooms because they often have fixed positions and beliefs stemming from their own schooling and lifetime experiences. If preservice teachers are understood as adult learners, teacher educators must be aware of the very specific needs that preservice teachers have. Teacher educators should study adult learning theories to become informed of the very particular learning needs of their college age students. In particular, educators of inclusive teacher preparation programs should realize that their college students might experience an adult learning process when learning new information. Studying Mezirow's Transformative Learning Theory (1997) may provide insight of preservice teachers' knowledge acquisition as they gain experiences in inclusive classrooms.

Teacher educators should also find time to ensure collaboration between general and special preservice teachers. Teacher preparation programs that prepare general and special educators separately should provide time for all general and special preservice teachers to collaborate and share knowledge particular to their fields of study. Without this time, general and special preservice teachers may not realize the valuable information they could learn from each other.

Teacher preparation programs that offer dual degrees in general and special education programs also need to provide time to understand the collaborative interaction necessary for teaching in inclusive classroom teachers (Buell, et al., 1999). Preservice teachers need to understand they will likely work with many colleagues in inclusive classrooms. Understanding that communication and social skills play an important role in a successful collaborative team, teacher educators need to offer preservice teachers many

opportunities to cooperatively complete assignments and collaboratively teach in inclusive classrooms together.

Recommendations for Staff Development Specialists

Staff development specialists could benefit from three different findings from this study. Findings on teachers' learning through experience, reflection, and collaboration can assist staff developers when creating programs to assist novice and veteran inclusive education teachers.

Teachers asserted that they learned how to teach in inclusive classrooms "on the job". Staff developers should realize that general educators will not know all information needed to teach students in their inclusive classrooms prior to beginning their teaching assignments. Learning how to teach in inclusive classrooms was found to be situational. Therefore, it would be beneficial for staff developers to understand that teachers' learning needs are specific to the students' needs. As such, it is recommended that staff developers focus their efforts on providing learning opportunities specific to educators' teaching contexts. Staff developers need to ask general educators to define what information they need and provide ways for general educators to learn it in a timely, practical manner.

General educators stated that they learned most important information from their special educators. Providing time for teacher collaboration is a must if inclusive classrooms are to be successful. Staff development specialists need to allocate time for teachers to meet and collaborate on lesson plans and teaching practices often. Findings of this study indicated that general educators believed they needed at least one hour a week to collaborate with special educators. Therefore, it is recommended that staff developers recognize collaboration time as one component of teachers' professional development.

Finding ways to redesign students' daily schedules to allow for general and special educators to have at least one hour of shared collaboration time would greatly assist in general educators' knowledge gains.

Recommendations for School Administrators

While some special educators may know pertinent information on special education, analysis of findings from this study suggested that general educators speculated that special educators' beliefs about inclusion could be reflected in school inclusive education programs. Therefore, while general elementary educators can indeed benefit from learning information on disabilities from special educators, recommendations to school administrators who are implementing inclusive education practices includes initially understanding special educators' perspectives on inclusion. It is important for school administrators to realize the influence that special educators may have in schools and classrooms regarding where and how students with disabilities are taught. Understanding special educators' positions and perspectives on inclusion may help to gain insight into the support or opposition to inclusive practices that special educators may elicit.

School administrators are also recommended to provide support to general elementary educators who are working in inclusive classrooms. Whether a novice or veteran inclusive teacher, participants of this study indicated that they benefited from support from their school administrators. School administrators should have time available to listen to general educators' comments regarding their learning process of understanding inclusive practices. Findings suggested that teachers experienced a process of acquiring information on inclusion while simultaneously reconsidering their

previously held beliefs of segregated schooling practices. As such, teachers' learning was found complex and should be well understood so school administrators can best support teachers undergoing this learning process.

Recommendations for Education Policymakers

Understanding how teachers learned to teach in inclusive classrooms needs to be thoroughly understood by education policymakers. Perhaps one of the most promising findings from this study for education policymakers was the linkage made between general educators learning about inclusion and Transformative Learning Theory. Inclusive education can offer opportunities for policymakers to create schools that are more socially just by ensuring that segregated special education practices are eliminated. While this in and of itself holds promise of students with and without disabilities viewing each other in more equitable ways than segregated special education schooling implies, associating Transformative Learning Theory to teachers' learning processes hinted at opportunities for adults to transform previously held beliefs on segregated schooling. Policymakers need to understand that they, too, might have preconceived notions regarding schooling practices and need to reconsider their understandings to create inclusive classrooms and school communities.

Education policy makers must realize that all people involved in education decision making must critically question separate schooling practices for students with disabilities. Eliminating separate schooling practices and creating inclusive classrooms and schools can be an impetus to creating a more socially just society. Education policy makers must study schools and teachers that have been found to be effective with inclusive education practices and provide ways for other schools and teachers to

implement similar teaching practices. Education policy makers must recognize that they are in positions of power and can shape the culture of the school system based on policy choices regarding inclusive schooling. Education policy makers need to create a structured plan of action to deliberately develop socially just inclusive practices. They need to provide time for teachers' training in the are of inclusive education as well as provide time and personnel support structures so general education teachers can meet the needs of all learners in their classrooms.

Findings from this study indicated that teachers felt that their schools had the necessary support personnel for successful inclusive practices. School policymakers need to ensure that school districts are allocated the necessary funding for staffing inclusive education programs. General elementary educators cannot teach in inclusive classrooms alone. Without adequate support from special educators, teaching assistants and aides in inclusive classrooms students may not receive assistance necessary for their learning. For inclusion programs to be successful in all educational contexts, education policymakers need to provide adequate funding to school districts so administrators can employ qualified teachers along with necessary support personnel to fully staff inclusive classrooms.

Recommendations for Future Research

As described in Chapter Two of this study, general elementary educators' perspectives on inclusion have been thoroughly researched (Salend & Duhaney, 1999; Scruggs & Mastropieri, 1996). Nevertheless, results from this study suggested that some insights can be gained from studying general educators' experiences of teaching in inclusive classrooms. In particular, this study pointed to a lack of understanding

regarding how general educators are learning to teach in inclusive classrooms and the subsequent learning processes that they undergo when learning such information. Therefore, findings from this study implied that further research should be directed towards discovering more about the learning processes of general educators who teach in inclusive classrooms. In particular, findings indicated that teachers' learning processes might depend on their ability to critically reflect on, discover and implement necessary changes to their teaching practices to best teach in inclusive classrooms. Further research on understanding how and in what ways teachers are using critical reflection to learn to teach the wide heterogeneity of students in inclusive classrooms would be beneficial to teacher educators, staff development specialists, and elementary education teachers.

Considering findings indicating that teachers searched for and read literature on students' disabilities and on inclusive education suggests that further research in understanding precisely what literature was read and how teachers made sense of their reading can be pursued further. Data revealed that nearly all participants appeared to have read literature for necessary knowledge gains on inclusion. However there was varying opinions about how much the literature actually assisted with their learning. This finding pointed to the importance of further research to investigate how literature on inclusion could be most beneficial to general educators.

This study contained information on Transformative Learning Theory (Mezirow, 1997). Associating this adult learning theory to general educators' learning processes has suggested that general educators may undergo some similar successive experiences when learning to teach in inclusive classrooms. However, the applicability of such a learning

theory to similar general educators' cannot be determined without further research. Therefore, additional research is needed to explore the likelihood of the Transformative Learning Theory applying to general educators outside the perimeters of this study.

Finally, this study pointed to a finding in the data that appears to have great relevance for inclusive teacher educators. Results of this study showed that all general elementary teachers relied heavily on special education teachers for learning information on disabilities and on the concept of inclusion. In particular, general educators referred to special educators as the most valued and most necessary resource for learning information that they lacked. Implications are that general educators' knowledge gain depended on special educators' knowledge on disabilities and on inclusive education practices. It would be valuable for continued research to investigate how general and special educators' negotiate this knowledge exchange as they teach in inclusive classrooms. Since findings revealed that general educators relied on special educators as mentors and teachers for such knowledge gains, research should be done to better illuminate the experiences that special educators have in such roles. Findings also suggested that on-going communication between general and special educators assisted general educators on a daily basis. Therefore, it would be beneficial for further research to explore how such teacher-pairs communicate to foster general educators' learning when teaching in inclusive classrooms.

Findings suggested many directions that could be taken when designing a future study. As a researcher, I would like to use the findings from this study to inform subsequent research to better understand ways that other general elementary educators' learning about inclusion may pertain to the Transformative Learning Theory. Promoting a

learning model such as this may have far-reaching advantages to inclusive teacher preparation programs. If a connecting link could be made between general elementary educators and Transformative Learning Theory, teacher preparation programs could be designed in a way to facilitate preservice teachers' learning processes, leading toward greater understanding and acceptance of inclusion. Teachers assuming an inclusive perspective toward education could have expansive implications for schooling and for our society. If teachers could realize the potential long-ranging consequences that might be associated with assumptions regarding segregated, special education schooling then teachers may also begin to conceptualize inclusion as a larger, social justice issue.

Conceptualizing inclusive education practices as a necessary social justice in school settings is critical to educational reform. After contemplating some of the findings from this study pertaining to Transformative Learning Theory, I am compelled to undertake future studies that attempt to further explore the connection between general educators learning about inclusion and Mezirow's learning theory (1997). It is imperative that further research be done in this area to better impact the learning of teachers and the field of education. To create a society that is socially just, it is urgent that research be conducted to better understand teachers' learning experiences in inclusive classrooms. Findings from such studies can be used to assist other general educators learning and positively impact the learning of students educated in inclusive classrooms.

My future study would begin with the findings generated from teacher Lynn Kelso who had eleven years experience in inclusive classrooms. Probing yet deeper into her insights and perspective shifting about inclusive education would provide a bridge to study teachers who had similar years' experience teaching in inclusive classrooms.

Studying general elementary educators who have taught in inclusive classrooms for at least ten years, could further explore the possible connection between teachers' experiences and perspective shifting regarding the theory and practice of inclusive elementary education.

General educators experienced disequilibrium between what they thought about inclusion and what they experienced when confronted with teaching students with disabilities. This disequilibrium created grave emotional tension and teachers in this study subsequently changed their point of view regarding teaching students with disabilities and their own beliefs about inclusive educational practices. Thus, the relationship between reflection on teaching and the associated emotions is an aspect of teaching that must become a central part of teacher education as well as teachers' professional development. The initial disequilibrium that general educators experienced seemed to illuminate an imperative moment in teachers' learning that could possibly become a focus for systemic change. I propose that it is the jarring tension between teachers' "not knowing" about inclusion, their subsequent experiences teaching in inclusive classrooms and their associated confounded emotions from such experiences that is the catalyst for general educators to learn and grow as inclusive educators. Therefore, it is imperative that educational stakeholders understand that educators' personal beliefs play a critical role in creating inclusive classrooms, schools and communities.