Example of a Literature Review on
General Educators' Perceptions of Inclusion
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Consider the following general education teacher's description of being notified that she will be teaching students with disabilities in the near future:

> They [the administration] put a note in my mailbox in June telling me I was to have students with special needs [disabilities] in my fall kindergarten class. I had no training, no warning, knew nothing about students with disabilities, and didn't know what kind of support I would have. We did meet for two weeks during the summer; but it was hardly enough to prepare me for eight students, five of whom had severe disabilities (Salisbury, Palombaro, & Hallowood, 1993, p. 79).

The perspectives of general educators who do not believe that they have sufficient training to teach students with and without disabilities in inclusive classrooms have been frequently cited in the literature (Salend & Duhaney, 1999; Scruggs & Mastropieri, 1996; Semmel, Abernathy, Butera, and Lesar, 1991; Smith & Hilton, 1997; Wolery, Werts, Caldwell, Snyder, and Lisowski, 1995). If attempts to educate students with and without disabilities together are to be successful, then general education teachers need to be understood because they can offer insight into the perceived needs of inclusive classrooms. Furthermore, those who are making classroom placement decisions for students with disabilities ought to consider the pertinent preparation of general education teachers. What are the perspectives of other teachers in similar circumstances? What can be learned from their experiences that could contribute to future teacher preparation for inclusive education?

Before answering such questions, it is important to understand the historical evolution of inclusive education. Knowing this information is instrumental in understanding perspectives and experiences of general educators who are preparing to or who currently teach in inclusive classrooms.

Historical Evolution of Inclusive Education

Until the mid-1900s, many children with disabilities were secretly concealed by parents and families as much as possible (Allen & Schwartz, 2001). Parents of children with easily identified disabilities such as Down syndrome were often counseled to commit their children to asylums. In instances when parents didn't follow such counsel, many would hide their disabled children in attics and in back rooms where they wouldn't be noticed by others (Allen & Schwartz, 2001).

The 1960s brought a focus on de-institutionalizing people with disabilities (Dettmer, Dyck, and Thurston, 1996). De-institutionalization was a social change that was supported by The National Association for Retarded Children (currently called ARC, the Association for Retarded Citizens). The ARC's goal was advocating for people with retardation and other disabilities. As one outcome of that advocacy, some children with disabilities began to be educated in public schools (Dettmer et al., 1996).

Legislation and litigation of the 1970s assisted the movement toward ensuring students a free public education in the least restrictive environment. In 1972, a lawsuit questioned how students with mental retardation were being educated. In Pennsylvania Association for Retarded Children (PARC) v. Commonwealth of Pennsylvania, the court determined three factors that contributed to the movement toward inclusion. Court rulings stated that (a) all students with mental retardation were entitled to a free public school

education; (b) general classroom settings are preferred to separate, segregated settings; and (c) school staff should inform parents of students with mental retardation of their students' educational programming. This case "resulted in a consent-agreement between the two parties" (Salend, 1994, p. 18). Also in 1972, the Mills vs. Board of Education of the District of Columbia case determined that students' constitutional rights were being violated if they were not being granted a free public education. Therefore, a judge extended the PARC v. Commonwealth of Pennsylvania rulings by stating that all students with disabilities were entitled to a free public education (Salend, 1994).

Litigation strengthened educational laws that were enacted creating monumental historical changes for students with disabilities in school settings. In 1973, the U.S. Congress approved the Rehabilitation Act (PL 93-112). Technically a civil rights law, it was written to include the commonly referenced section 504. According to Cutler (1993), section 504 "assures that people with disabilities will not be discriminated against by reason of disability by any programs or activities receiving federal funds. This means schools… must provide access with reasonable accommodations to individuals with disabilities" (Cutler, 1993, p. 239; see also Ferguson & Ferguson, 1998). The second change came about in 1975 with the passage of the Education for All Handicapped Children Act (PL 94-142). The act mandated that disabled children be granted a "free and appropriate public education" (FAPE) in the "least restrictive environment" (Dettmer, et al., 1996; Ricciato, 2000; Scruggs & Mastropieri, 1996).

The l980s brought considerable attention to and interpretation of "the least restrictive environment" mentioned in the PL 94-142 mandate. Students with disabilities who were educated in public schools were often taught in rooms separate from their peers

without disabilities, which created a dual education program within one school setting. The dual program consisted of a general education program and a special education program. Teachers' preservice education determined which group of students teachers were certified to educate. That is, because the dual education programs existed to teach students with and without disabilities separately, dual preparation programs offered education courses and job certification to future teachers separately (Semmel et al., 1991).

Concern regarding the number of students being educated in special education classrooms grew as studies revealed alarming special education statistics. Former Director of the U.S. Office of Special Education and Rehabilitative Services, Madeline Will published a position paper stating that many children were being inappropriately identified as having disabilities and were needlessly being separated for education programming (Dettmer et al., 1996). Additionally, there were financial concerns regarding the monetary commitment necessary for educating students in two separate programs (Dettmer et al., 1996). Therefore, there were efforts to merge the two programs into one. This merger (known as the Regular Education Initiative (REI) or, by some, as the General Education Initiative (GEI)) called for students with mild to moderate disabilities to be dismissed from their special education assignments and placed in general education classrooms (Semmel et al., 1991). The REI had many proponents (Biklen, 1985; Gartner & Lipsky, 1987; Stainback & Stainback, 1989). Restructuring schools in this way led to many changes regarding where students were educated and by whom. Studies of the Regular Education Initiative revealed that many general education teachers were assigned to teach students even though they believed that they lacked

adequate training and preparation to do so (Semmel et al, 1991). Advocates of the REI suggested that special education teachers collaborate and consult with general education teachers to assist in defining educational goals for students with disabilities (Dettmer et al., 1996). Collaborative efforts to educate students became an important factor determining the success of many regular education initiatives (Semmel et al., 1991).

In 1990, an overarching law was passed integrating the original Education for All Handicapped Children Act and its successors within special education law. This law, PL 101-476, titled Individuals with Disabilities Education Act (IDEA), served to extend school services to all children from birth through age 21. In addition, this law was crucial in strengthening the previous law because it reaffirmed that students with disabilities must be offered a "free appropriate public education" (FAPE) while being taught in the "least restrictive environment" (LRE). The law stated that appropriate education must be defined through collaborative efforts of parents, general education and special education teachers by writing individual education programs (IEP) containing specific measurable educational goals for students with disabilities (Cutler, 1993).

With the emergence of Public Law 101-476, proponents of the REI asserted that collaboration was necessary for successfully including students with disabilities in general education classrooms and encouraged general and special education teachers to work together to create a full inclusion model (Stainback & Stainback, 1989). Proponents suggested that the full inclusion model should include collaboration between general and special education teachers to determine effective teaching strategies to meet the needs of all students in inclusive classrooms (Dettmer et al., 1996; Lipsky, 1994).

Since IDEA, many school systems have placed students with disabilities in classrooms with their non-disabled peers with varied results. While some school districts have found much success with inclusive educational practices (Salisbury, Palombaro, & Hollowood, 1993; Villa et al., 1992), others have indicated that there is still much work to be done (Salend & Duhaney, 1999; Scruggs & Mastropieri, 1996). Some studies have revealed that school districts have not adequately prepared their teaching staff for implementing inclusive education programs (Guetzloe, 1999). General educators assigned to teach in such classrooms may be faced with difficulties that could have been predicted and might have been prevented had adequate professional development been offered to teachers. If general educators are assigned to educate students with and without disabilities, yet do not have competent skills to do so, then all students may have troublesome and unsuccessful school experiences (Guetzloe, 1999).

Teachers' Perceptions of Inclusion

General educators who teach in inclusive classrooms have much to say about inclusive education. It is important to understand general educators' views because they have direct experience teaching students with and without disabilities in the same classroom. General educators can share important insights and considerations that deserve further attention by those advocating for inclusive education.

Within the literature on general education teachers' perspectives of inclusion, three main themes emerged. The first theme identified variations in the definitions of inclusion and inclusive service delivery models. The authors of cited literature shared numerous and diverse definitions of inclusion while providing data generated from various inclusive service delivery models. The second theme that emerged from the

literature review revealed teachers' attitudes about inclusion. Teachers' attitudes toward their own success at teaching in inclusive classrooms were examined. The third theme identified the needs of general educators who teach students in inclusive classrooms. The professional needs of individual general education teachers along with the needs of educational teams of teachers were analyzed.

Defining Inclusion and Service Delivery Models

Words and phrases such as "inclusion," "inclusive education," and "including students with and without disabilities in the same classroom" have often been used in research (Zionts, 1997). Concerns have been raised regarding the term inclusion and its associated definition. Guetzloe (1999) argued there have been grave misunderstandings of inclusion and that when used it is often loosely defined. Kaufmann (1999) argued that the term inclusion has become "virtually meaningless" and offered his concern regarding Vermont school officials who "described a special, separate school as part of their full inclusion plan" (Guetzloe, 1999; Kaufman, 1999, p. 246). Proponents of full inclusion argue for a "zero reject philosophy" insisting on eliminating "classes designed as self-contained for special education" (York & Tundidor, 1995). The example that Kauffman (1999) cited depicting Vermont school officials offers insight into the differing perceptions and confusion of the term inclusion. An educational plan described as being inclusive in design is contradictory when it utilizes a separate school to educate some student populations. In this example, students with disabilities are not educated in the same classroom or the same school as their non-disabled peers. Instead, school officials merely accounted for students with disabilities in their educational plan by citing that population of students while terming their plan inclusive. There may be other situations

similar to the Vermont case where educators and researchers have falsely assumed that there was a mutual understanding of a common, shared definition of the term inclusion.

Nonspecific definitions of inclusion have been frequently cited in literature (Hammill, Jantzen, and Bargerhuff, 1999). Of the 20 studies reviewed, nearly half did not provide any explicit definition of inclusion. In addition, of the definitions found, there was a sharp discrepancy in the phrases used to define the term. For example, Vidovich and Lombard (1998) stated that, "it [inclusion] supports educating every student with a disability in the school, and when appropriate, [in] the class that student would have attended had he or she not had a disability [emphasis added]" (p. 41). In this definition, the clause "and when appropriate" allows for misunderstanding and misinterpretation because the phrase requires an answer to the question, what does appropriate mean? When describing the term inclusion to explain teachers' perceptions of "the process of inclusion", Vidovich and Lombard (1998) stated, "responsible inclusion has more to do with a philosophy and belief than placement of all students in general classrooms and programs" (p. 51). Vidovich and Lombard's position on inclusion is inconsistent with other authors who have attempted to outline a philosophical stance on inclusion while stating the practical, needed support and service delivery necessary for students with disabilities to be educated in inclusive classrooms within one definition. For example, York and Tundidor (1995) defined inclusive education as

> attendance by students with disabilities in the same schools as peers without disabilities, a natural proportion of students with disabilities, zero reject philosophy, age-appropriate grade and class placement with no classes designated as self-contained for special education students, and special education support

> provided in general education and other integrated learning environments [emphasis added]" (1995, p. 31).

In this definition, York and Tundidor (1995) included a "zero reject philosophy" which holds that all students, regardless of ability, would be educated in general education settings with educational support.

The differences in the definitions of inclusion previously mentioned are not problematic in and of themselves. What can be problematic, however, are conversations among educators based on false assumptions of shared meaning of the term inclusion. As conversations multiply, differences in meaning may compound. The discrepancies in definitions are indicative of misunderstandings regarding inclusion and inclusive education and potentially lead to the misinterpretations of findings from studies. This is important to understand because studies that represent educational programs judge and evaluate them as successful or unsuccessful based on very different definitions and inclusive service delivery models.

A wide range of inclusive education delivery models has been used in different school settings (Webber, 1997). Webber (1997) cited five different service delivery models that schools utilize when incorporating a spectrum of inclusive education practices. Students with disabilities can be placed in general education classrooms with: (a) few or no support services; (b) special educators' consultation assistance; (c) itinerant specialist assistance; (d) resource room assistance; and (e) partial placement in special education classrooms (Webber, 1997). The spectrum of placement options that schools offer may lead to confusion when attempting to understand educators who profess to teach in inclusive classrooms. This confusion requires initial inquiry into how teachers

define inclusion and what types of service delivery models are used. This information can help to understand the educational context of teachers with experience in inclusive classrooms.

When reviewing literature on teachers' perceptions of inclusion, a variety of inclusive education service delivery models were described (Bennett, DeLuca, and Bruns, 1997; Debettencourt, 1999; Downing, 1997; Olson, Chalmers, and Hoover, 1997; Stanovich, 1999). The different inclusive education service delivery models define the location, design and support that students with disabilities receive in school settings. Bennett et al. (1997) reported quantitative findings from 84 general education teachers who taught disabled students who were "included to varying degrees in general education classrooms" (p. 118) yet the findings were not reported with regard to the specific service delivery model used. Instead, findings were generalized to report perspectives of teachers who were using "inclusion." Similarly, Buell, Hallam, and Gammel-McCormick (1999) reported data from 202 general educators who were "working with students with disabilities in inclusive settings" (p. 147) yet did not describe or define the service delivery models teachers used when reporting "teachers' perceptions and inservice needs concerning inclusion" (p. 143). Unless specified, research review and synthesis may lead to misinterpretations if findings from dissimilar contexts are combined or contrasted.

While the reviews of studies on inclusive education have the potential to synthesize data generated from individual studies, the information can be misleading when the combined data represents teachers who may have interpreted "inclusion" and "inclusive teaching practices" in very different ways. For example, reviews of literature by Scruggs and Mastropirei (1996) synthesized data from 28 studies of general educators'

views on inclusion by completing a research review of literature on mainstreaming/ inclusion and produced many findings regarding general education teachers' needs. The studies that were reviewed in the synthesis included teachers who taught students with disabilities using a variety of service delivery models. Scruggs and Mastropieri's research findings revealed perceptions of inclusion that could have been better understood had the service delivery models that teachers used been described and used as a sorting tool for reporting teachers' perceptions. Without this sorting, false conclusions might be drawn based on synthesized findings of teachers who teach in mainstreamed /inclusive classrooms. Scruggs and Mastropieri (1996) found that "teachers need additional personnel assistance" for inclusive practices (p. 72). However, findings did not specify which service delivery model teachers of each reviewed study used. The findings of the reviewed studies were combined regardless of the inclusion service delivery model used.

Adding to the work of Scruggs and Mastropieri, Salend and Duhaney (1999) completed a similar review in 1999 by reporting additional data from over 15 studies on teachers' perceptions of inclusion. Collectively, the reviews summarized data from more than 50 individual studies representing nearly 10,000 general education teachers' perceptions on inclusion. Both reviews did not identify the individual teachers' inclusive education service delivery models and did not identify teachers' or researchers' definitions of the term inclusion. Regardless, teachers' perceptions were collectively summarized to offer findings of the reviewed studies to represent a larger sample of teachers than individual studies could offer. Since the definition of the term inclusion and the way that inclusive practices are delivered in classrooms can significantly vary, compiling data in

this way can become problematic because summarized findings may lead to misrepresentative information of teachers who participated in the reviewed studies. This practice could inaccurately inform future research, practice and policy changes.

Individual studies also provided mixed definitions of inclusion and reported data from teachers who used varying service delivery models (Buell et al., 1999; Cochran, 1998; Cutbirth & Benge, 1997; Hammill et al., 1999; Olson et al., 1997; Pearman, Huang, and Mellblom, 1997; Stanovich, 1999; Trump & Hange, 1996; Vidovich & Lombard, 1998; Werts et al., 1996, Wolery et al. 1995). Findings from studies and synthesized research need to be regarded with consideration because the presentations of these findings were not sorted into specific categories defining different service delivery models.

Teachers' Attitudes about Inclusion

School populations are more diverse than ever before (Sapon-Shevin, 2000, p. 166). General education teachers teach a diversity of students in the same classroom and may view diversity in a variety of ways. Teachers' attitudes regarding students' differences are critical factors that can influence students' success in schools (Sapon-Shevin, 1992). Investigating general education teachers' attitudes on diversity issues such as students' ability and disability can be beneficial because this factor plays a critical role in the success of inclusive education. D'Alonzo et al. (1996) indicated that the success of inclusive education depends on the attitudes of teachers who teach students with disabilities (p. 310). The literature reviewed included many studies about general education teachers' attitudes toward teaching students in inclusive classrooms (Cochran, 1998; Smith & Smith, 2000; Soodak, Podell, and Lehman, 1998; Trump & Hange, 1996).

Findings indicated that attitudes were diverse. Teachers' attitudes were often reported to be positive, negative, or mixed within and across studies. Investigating research findings can help to reveal what may have influenced teachers' attitudes regarding teaching students in inclusive classrooms.

Teachers' Positive Attitudes toward Inclusion

Studies have revealed a wide range of teachers' attitudes about inclusion. For this literature review, attitudinal terms and phrases that shared similar meanings were compiled. That is, teachers who indicated they felt confident, successful, effective and willing to teach students with and without disabilities in the same classroom were deemed as having positive attitudes on inclusion.

Scruggs and Mastropieri (1996) published an extensive review of literature and synthesized findings of 28 studies of teachers' attitudes toward "mainstreaming/inclusion" dated 1958 through 1996 (p. 60). Despite the 38 year difference in publication dates of reviewed studies, the results indicated teachers' attitudes on inclusion were "highly consistent" between teachers overall (p. 71). A majority of the teachers represented in all studies (n = 10,560) agreed with the concept of including students with disabilities in general education classrooms, while slightly over half of the teachers indicated willingness to educate students with disabilities in their own classrooms. Perhaps one of the most significant findings of Scruggs and Mastropieri's synthesis was that some studies attempted to correlate teachers' attitudes with researcher identified factors inherent to teaching in inclusive classrooms. In doing so, Scruggs and Mastropieri revealed that "support for and willingness to implement 'mainstreaming/ inclusion' appeared to co-vary directly with… the severity of the disability categories represented"

(1996, p. 60). That is, general education teachers' willingness to educate students with and without disabilities together decreased as the severity of disabilities that students had increased. Additionally, Scruggs and Mastropieri indicated that some data suggested that general education teachers' attitudes became more positive toward teaching students in inclusive settings after "extended training" (p. 71). These findings can be encouraging to advocates of inclusion because the data suggested that offering "extended training" could alter general educators' attitudes toward inclusive education practices.

Smith and Smith (2000) also reported general educators' attitudes toward inclusion. In their qualitative study, all teachers indicated a positive fundamental value of teaching in inclusive classrooms (n = 6). Similar to Scruggs and Mastropieri's synthesis (1996), Smith and Smith's findings showed some correlation between teachers' attitudes and independent variables. Smith and Smith found four variables that contributed to teachers' feelings of success when teaching students with and without disabilities. As in Scruggs and Mastropieri's review (1996), Smith and Smith found that teachers who had training felt successful with inclusion. The participants in Smith and Smith's study had one to 40 years teaching experience but, despite their wide range in experience all participants, claimed that their undergraduate or graduate training did nothing to ready them for inclusion (p. 165). Smith and Smith found that general education teachers perceived that inservice training helped prepare for inclusion more than any other factor. In an earlier study, Stoler (1992), reported similar results and indicated that teachers who took courses or had inservice training in special education had more positive attitudes toward inclusion than teachers who did not have training (Downing, 1997, p. 134). According to Ayers (2001), these findings are not surprising.

Ayers argues that it is a myth to believe teachers learn to teach in colleges and universities. Instead, Ayers claims that teachers learn to teach "on the job," that most teacher education programs are "painfully dull" and preservice programs do nothing to prepare new teachers for classroom experience (Ayers, 2001, p. 11). Ayers asserts that teaching is best learned on the job, through vigilant reflection of teaching practices and through conversations with other teachers (p. 12).

Teachers' conversations provide an opportunity to collaborate on effective teaching practices and students' goals. Smith and Smith's findings (2000) indicated that teachers felt positive regarding their success with inclusion when they had support from paraprofessionals, special educators and administration. Positive feelings of success were also expressed when teachers had enough time to meet and collaborate with other teachers. The last factor that influenced teachers' attitudes about successful inclusive education practices were characteristics of teachers' class load. Smith and Smith defined class load as "class size, number of students with special needs, severity and range of needs of students" (Smith and Smith, 2000, p. 165). The aforementioned factors contributed to the difference between feeling successful and unsuccessful teaching in inclusive classrooms.

Olson et al. (1997) conducted a qualitative study of ten general educators who were identified by their school principals and special education teacher colleagues as being "effective inclusionists". The researchers conducted interviews that elicited responses from "effective inclusion teachers" to learn more about their attitudes and attributes. Findings indicated that teachers showed an attitude of "interpersonal warmth and acceptance with students" (p. 28). In the study, elementary school teachers revealed

that teachers' positive attitudes are central to effective, successful inclusion practices (p. 31). One of the teachers explained, "I want to develop a sensitive community, where [children] care about each other and work together" (Olson et al., 1997, p. 31). Building a sensitive community where students work together has been frequently cited as being a critical factor for teachers developing successful inclusive education programs (Salend, 1994; Sapon-Shevin, 1999).

Other studies reviewed found teachers who had negative attitudes towards teaching students in inclusive classrooms.

Teachers' Negative Attitudes toward Inclusion

Studies have revealed teachers' negative attitudes of inclusive education. Teachers who indicated that they felt unsuccessful, resistant, hostile, and no commitment to inclusive education were deemed as having negative attitudes toward inclusion.

DeBettencourt (1999) surveyed 71 general educators of 7th- and 8th- grade students to determine their attitudes toward teaching students with mild disabilities. Over half of the respondents believed that inclusion was advantageous for students with mild disabilities. However, over 60 % of the general educators surveyed "felt no strong commitment or did not support" the concept of inclusion (p. 31). DeBettencourt stated that these findings were of great concern and suggested that they likely represented ways teachers may have responded 20 years ago when PL 94-142 was just being implemented (p. 32). Why would so many teachers who claimed that teaching students with and without disabilities together would benefit all students also lack positive attitudes about teaching students in inclusive classrooms? DeBettencourt offered some insight into this question.

Half of the general education teachers who were surveyed indicated that they spent less than one hour of each week in consultation with special education teachers. DeBettencourt suggested that, with an increase in consultation time, general education teachers might learn and attempt to implement different teaching strategies to educate students with and without disabilities in the same classroom. Since many general educators who were interviewed had not taken any coursework in different teaching strategies for students with disabilities, DeBettencourt noted that this might have contributed to teachers' low success with teaching students with and without disabilities and may have further contributed to negative attitudes. Of the few teachers who had taken advanced courses, those teachers implemented strategies such as "advanced organizers, learning strategies, and metacognitive self-talk strategies" into their classrooms (p. 32). Findings of DeBettencourt's study implied that general educators needed more self-awareness of personal attitudes and how teachers' attitudes can influence students' educational experiences. Further, DeBettencourt indicated general educators lacked necessary teacher education for facilitation of success in inclusion which can contribute to positive attitudes when teaching students.

Buell's (1999) findings in a quantitative study of 202 general educators and 87 special educators who served students from birth to age 21 were similar to DeBettencourt's results. General education teachers reported that they did not feel confident in tasks where special educators reported no concern. General education teachers indicated that they were significantly less confident with tasks including writing Individual Education Plans (IEP), adapting materials and curriculum and providing individual assistance to students (p. 153). One of the findings that Buell claimed was of

specific concern indicated that nearly 80% of general educators lacked any inservice training on inclusion. Responding to a survey, general education teachers indicated valuable training would include "all topics taught in undergraduate or graduate preservice special education preparation programs" that were not part of general educators' coursework and preparation training to be a teacher (p. 154). Topics identified included developing IEPs, using assistive technology, adapting curriculum, utilizing classroom management techniques, and assessing individual academic progress of students.

Trump and Hange (1996) conducted a study unlike those previously mentioned. They analyzed results of 16 focus group interviews that provided qualitative findings of 144 special and general educators' views on inclusion. The study's emphasis was on teachers' "perceptions of and strategies for inclusion." Findings indicated that most teachers held negative attitudes toward inclusion. Results of the study indicated that teachers' negative attitudes might be precipitated by lack of general teachers' training in modifying curriculum and instruction to educate students with and without disabilities in the same classroom. Data from this study confirms the findings of DeBettencourt (1999) and Buell et al. (1999). All three studies reported similar findings regarding general education teachers' negative attitudes toward inclusion. Trump and Hange also found that teachers needed additional time for collaborative planning. As previously mentioned, Smith and Smith (2000) reported that teachers' attitudes toward inclusion became more positive as collaboration time increased. Findings from both studies indicated a strong correlation between attitudes on inclusion and teacher collaboration time.

Cutbirth and Benge (1997) conducted a quantitative study to investigate attitudes of teachers and students involved with inclusive education. Results from a survey of 40

special educators and students and 59 general educators from metropolitan and rural settings revealed perceptions of inclusion. The findings indicated negative teachers' attitudes toward educating all students with disabilities in inclusive classrooms. General educators believed that full inclusion was unrealistic for all students with disabilities (p. 342). Cutbirth and Benge did not provide details about why general educators felt that full inclusion was unrealistic. However, in a similar study, Trump and Hange (1996) argued that students' "lives are being negatively affected today, as some are being placed in general education classes with untrained teachers who are angry at being forced to receive within their class a student with disabilities" (Trump & Henge, 1997, p. 342).

Studies revealing teachers' negative attitudes toward inclusion indicated that teacher collaboration time to meet and plan with other teachers and teacher training may help to develop more positive attitudes towards students with disabilities and inclusive education.

Teachers' Mixed Attitudes toward Inclusion

Some studies have revealed teachers' mixed attitudes on inclusion. Teachers who indicated that they had both positive and negative (or uncertain) attitudes with little or no commitment to inclusive education were deemed as having mixed attitudes toward inclusion.

Vidovich and Lombard (1998) conducted a study of parents, teachers, and administrators to determine their perceptions of the process of inclusion. Of the 60 teachers surveyed, only 67% supported the idea of teaching students with disabilities in general education classrooms. Half of the teachers reported they had mixed feelings teaching students with disabilities. Vidovich and Lombard found that all teachers

surveyed were willing to work with other professionals to get suggestions and learn about modifying assignments for their teaching and classroom management techniques (p. 44). Findings also indicated that teachers felt that adequate training was not provided for general educators to learn how to teach students with and without disabilities in the same classroom. Interestingly, some teachers wrote on their survey that they would attend any inclusive education training sessions on their own time if training were offered. Bennett et al. (1997) argued that general education teachers are a critical component to successful inclusive education and training is often needed to teach learning strategies and skills to facilitate success in inclusive classrooms (p. 129).

Bennett, Deluca, and Bruns (1997) conducted a study of 84 general education teachers in pre-kindergarten through third grade settings and 48 parents of students with disabilities. Surveys were used to generate perspectives of teachers and parents. Of the teachers surveyed, eight were interviewed to better understand results. Some of the findings from Bennett, Deluca and Bruns's study were similar to findings of Vidovich and Lombard (1998). Bennett et al. (1997) found that teachers displayed interest and need for coursework, inservice training and conferences to help them learn more about inclusive education practices.

Bennett et al. also found that teachers who had a greater number of years teaching were likely to have more negative attitudes towards inclusion than teachers with fewer years of experience. Positive attitudes toward inclusion improved if teachers had knowledge about accessing resources and had the skills necessary to teach students with disabilities in inclusive classrooms (p. 127). Findings also revealed a positive correlation between teachers' knowledge about educating students with disabilities and

attitudes regarding inclusive education. It was further implied that teachers who recently completed teacher preparation coursework may have been educated to accept differences in students and gained an understanding on how to teach a wide diversity of students in inclusive classrooms (p. 127). Bennett et al. (1997) found that general education teachers who held negative thoughts about offering academic assistance to students with disabilities in general education classrooms also indicated positive attitudes regarding their ability to facilitate a comfortable social interaction between students with and without disabilities. Salend (2000) suggested that, to a large extent, inclusion programs were created to contribute to all students' social and behavioral development. Similarly, Sapon-Shevin (1999) argued that it is important for teachers to build "cooperative, inclusive communities" that encourage the social development of all students (p. 18). Teachers from the study conducted by Bennett et al. (1997) indicated they had confidence and saw value in creating such socialization between students with and without disabilities.

Soodak, Podell and Lehman (1996) surveyed 188 general educators to determine their perceptions on including students with disabilities in their classrooms. Data were grouped into two main categories. Categorical sorting placed findings into either the "hostility/receptivity" or "anxiety/calmness" classification. These terms refer to the emotional tension felt by general education teachers who teach students with and without disabilities (Soodak et al., 1998, p. 498). Teachers with more experience teaching were found to display more hostility toward inclusion than teachers with less experience. Receptivity indicated that teachers were more willing to educate students with disabilities if they had a greater sense of teacher efficacy and felt confident using effective teaching

practices collaboration skills. These two terms were grouped together because Soodak et al. explained that they were "adjective pairs" found in their gathered data. Identified adjective pairs that were gathered from teacher data included "pleased/displeased, accepting/opposing, angry/not angry, and optimistic/pessimistic" (p. 487).

The categorical term "anxiety/calmness" was used to label the teacher-identified adjective pairs that included anxious/relaxed, nervous/calm, and scared/fearless. The categorical term "anxiety/calmness" can be better understood by analyzing the terms separately. Anxiety was noted in teachers who had large class size, low efficacy and who were teaching students with mental or physical disabilities in general classrooms. Calmness was found with teachers who had small class size and a greater degree of efficacy and educating students with disabilities. Soodak et al. (1998) indicated there is both resistance to and acceptance of teaching students with disabilities in inclusive classrooms. Not only was more training indicated as necessary to educate teachers about effective inclusive education practices but also that such training could interrupt teachers' discrimination against students with severe disabilities (Soodak et al., 1998, p. 494).

Teachers' attitudes inform their willingness to educate students. According to Salend and Duhaney (1999), teachers' cooperation with other educators and students is critical to successful inclusive education programs (p. 120).

Needs of General Educators

General education teachers play a central role in inclusive education planning and implementation. Studies have identified what general educators say they need to successfully teach students with and without disabilities. From the 20 reviewed studies, general education teachers identified four main components that they need to successfully

educate students with and without disabilities in the same classroom setting. General educators deemed small class size, educational support staff, consultation and collaboration, and teacher training necessary for successful inclusive education practices.

General Educators' Need for Small Class Size

Class size has been a frequently researched educational issue throughout the past century (Fritzberg, 2001). Studies have revealed findings that supported the belief that smaller class size facilitates greater student success in school (Buell et al., 1999). That is, research has indicated that reducing class size improves the likelihood of increasing students' achievement. In 1998, President Clinton provided the U.S. Congress the "Class-Size Reduction and Teacher Quality Act". The act proposed a federally backed educational initiative to reduce class size of kindergarten through third grades to a maximum of 18 students (Fritzberg, 2001). This act exemplified the support for smaller class size.

Reviews of studies on teachers' perceptions towards inclusion also revealed the perceived need for smaller class size in inclusive classrooms. Scruggs and Mastropieri (1996) synthesized 28 studies on general educators' perceptions on "mainstreaming/ inclusion" and found that teachers believe that they needed a small class size of fewer than 20 students to be successful educating students with and without disabilities in the same classroom (p. 72). In a later study, Bennett, Deluca, and Bruns (1997) also found that among the most frequently cited needs included smaller class size. General education teachers who were surveyed and interviewed in this study believed that decreasing class size would be an effective element for successful inclusion (p. 125).

In a quantitative study, Buell, Hallam, and McCormick (1999) surveyed 202 general educators. From the survey, 79% of general education teachers felt that they did not have adequate class size. Teachers represented in this study also felt that they needed classes with a smaller number of students to be successful with inclusion (Buell et al., 1999, p. 151). These researchers are not alone with this finding. Trump and Hange (1996), and Harrington (1997) indicated that class size and the ratio of teachers to students is very concerning to general education teachers.

Smith and Smith (2000) conducted a study of 47 general educators' perceptions of inclusion using qualitative and quantitative methods. From the quantitative results, a significant correlation was found between smaller class size and perceived success at inclusion (Smith & Smith, 2000, p. 167). In addition, Smith and Smith asked a question regarding class size during the qualitative, interviewing component of their study (n = 6). General educators reported that class size mattered as well as the ratio of teachers to students. This supports the findings of Trump and Hange (1996) and Harrington (1997) who also found that the ratio of teachers to students is a factor that general educators claim that is needed for successful inclusion (Smith & Smith, 2000, p. 167). Smith and Smith also found that, when general educators had class sizes between 13 and 21, with as few as two and as many as four students with disabilities in inclusive classrooms, these teachers considered themselves as successful. When class size increased to 18 to 21 and with seven or eight students with disabilities included in the class, teachers' perceptions of success decreased substantially (Smith & Smith, 2000, p. 167).

Smith and Smith also reported that general educators perceived class size, or load, as more than numbers or ratios. That is, teachers reported that successful inclusive

education practices were also dependent on the types and severity of students' disabilities, as well as how many students were served in one classroom. General education teachers felt more successful when teaching students with mild to moderate disabilities (Smith & Smith, 2000, p. 168).

Werts et al. (1996) conducted a survey of 1,430 kindergarten through grade 6 general educators. Of the teachers in the study, 80% had least one student with a disability in their classroom; 74.5% of the teachers had disabled students in the classroom full time (Werts et al., 1996, p. 191). More than 70% of the teachers surveyed perceived that reducing class size was needed to facilitate successful inclusion. Werts et al. suggested that class size adjustment requires schools to increase financial resources and analyze current district policies that incorporate the allotment of such resources (Werts et al., 1996, p. 201). This alluded to a domino effect that reducing class size might require additional district financial resource reallocation, as Werts et al. mentioned.

General Educators' Need for Support Staff

Teachers' perceptions of their need for personnel resources to assist students in inclusive classrooms were revealed in the literature review.

Wolery et al. (1995) surveyed 158 general education and special elementary teachers who claimed that they had experience with inclusive educational practices. Teachers of the study reported that they had experience teaching students with moderate to severe disabilities in general education classroom settings (p. 15). Wolery et al. provided a survey that gave information regarding part-time assistants, full-time assistants and volunteers. Of the general educators surveyed, 54% of the teachers reported they needed a part-time assistant who served in the classroom as support

personnel. At that time, only 22% of the general teachers had part-time support staff to assist in the classroom. Fifty-three percent of the general education teachers reported they needed full-time assistants while only 31% of the teachers received this assistance. In addition, 55% of the teachers claimed that volunteers were necessary while 46% of the teachers reported that they had the volunteer support that they needed.

Smith and Smith's study (2000) offered insight into some of the concerns general educators may have when interacting with support staff. They reported that general educators needed additional support staff to successfully teach students in inclusive classrooms. Smith and Smith argued that support staff needed a shared work ethic and common philosophy of teaching (p. 169). All teachers from Smith and Smith's study indicated that they could not "do inclusion alone" (p. 169). Support staff that was mentioned included general education paraprofessionals, special education teachers, special education paraprofessionals, and building administrators.

Although all teachers represented in the study claimed that they needed support staff for inclusive education to be effective, reports were varied regarding how often support was provided and how effective the support was for students. One teacher responded that her paraprofessionals would get used for other school business and were regularly pulled out from her classroom. The general education teacher stated, "Oh, I just don't plan for them to show up…" (Smith & Smith, 2000, p. 170). Another general educator indicated that the paraprofessional "wasn't doing what I wanted her to do, even though I had written all my expectations out" (p. 170). In addition, concern was mentioned regarding paraprofessionals' understanding of education. A general educator stated, "they [paraprofessionals] didn't have a degree in education, nor were they being

paid for the extra time that it took or the responsibility that they were given. If something should go wrong, then we've got an issue of dealing with a possible lawsuit because they're not certified and they may be doing things that they shouldn't be doing" (p. 171). Smith and Smith (2000) found that general education teachers needed trained support staff that understood teaching practices and the needs of students with disabilities.

General Educators' Need for Consultation, Collaboration, and Teamwork

In the past, general education teachers worked autonomously in their own classrooms (Dettmer, 1996, p. 4). However, as students with disabilities began to be included in general classrooms, more supports for planning and implementing lessons for a wide heterogeneity of students became necessary. The National Center on Educational Restructuring and Inclusion (NCERI, 1994) conducted a study that determined necessary elements for successful inclusion. One of the necessary elements mentioned in the study was a need for general and special education teachers to have collaborative planning time. The study also revealed that curricular adaptations were a necessity when planning for students with disabilities; adaptations were most effectively made with consultation and collaboration between general and special educators (Dettmer et al., 1996, p. 12). Dettmer et al. (1996) argued that teacher preparation programs have often done little to prepare new teachers for the complex processes involved with working in school environments (p. 2). The following reviewed literature supports this understanding.

In a quantitative study, Bennett et al. (1997) found that general education teachers ($n = 84$) lacked the time considered necessary for the collaboration and consultation needed for planning instruction for students with and without disabilities (p. 125). Downing et al. (1999) reported similar results from 27 general and special educators of

students with severe disabilities. Sixty-seven percent of all respondents indicated a strong need for a full-time support staff member to assist general educators in inclusive classrooms. Teachers pointed to a need for collaborative planning time so they could brainstorm and problem solve to find effective ways to educate all students in inclusive classrooms (Downing et al., 1997, p. 138). According to Mundschnek and Foley (1997), collaboration has been recognized as an important component for successful inclusive education (p. 57). Effective collaboration is based on assumptions that general educators and special educators will work as equals to combine professional skills to create and execute effective instruction for all students (p. 57).

Bennett et al. (1997) found that general education teachers (n = 84) stated a need for effective communication among all inclusive support personnel so that team collaboration could be effective. In addition, general educators stressed a need for team efforts to support inclusion. Creating and utilizing an instructional team composed of general education and special education teachers and support staff has been cited as a significant contributing factor in the overall success of inclusive programs (Mundschenk & Foley, 1997). In teams, teachers and support staff work together to determine best approaches to teaching in inclusive settings.

Hammill et al. (1999) conducted a quantitative study of 111 educators consisting of general elementary (75%), special education (18%), administrators (2%), and persons in "various other roles" (5%) to determine effective educator competencies in inclusive environments (p. 21). These findings are consistent with those of Downing et al. (1997). Hammill et al. argued, "no [teacher] competency is more important than the ability to collaborate, particularly through teamwork" (p. 33). Over 70% of the educators

perceived "collaboration/cooperation/communication /team teaching" to be the most critical competency general education teachers needed for successful inclusion (Hammill et al., 1999, p. 25).

Walther-Thomas (1997) conducted a three-year qualitative study of 119 general and special education teachers and 24 administrators to determine their experiences with collaboration efforts as part of a co-teaching program design. From the data, Walther-Thomas reported that many of the teachers expressed that they perceived teaching as a lonely profession and that it was very rewarding to use collaborative planning and teaching to educate students (p. 401). General education teachers reported that the emerging inclusive practices that teachers experienced increased the collaboration among faculty members. Additionally, general educators claimed that inclusive education practices increased the involvement of specialists and support staff in the classroom (p. 402).

Hamre-Nietupski et al. (1999) conducted a qualitative study of three general and three special educators. The most persistent theme that emerged indicated that general educators needed time with other educators for collaboration and team planning (p. 244). Although some teachers did report that they had some time for planning with support staff, it was not enough. Thus, general education teachers claimed that additional time allotted for planning and collaboration was necessary for inclusion to be successful (Hamre-Nietupski, et al., 1999, p. 245).

Other studies reported similar findings. Olson et al. (1997) conducted a study of five elementary and five secondary teachers who were identified by their principals as being effective inclusionists. All teachers in the study revealed that there was insufficient

time available for collaboration between staff members. Pearman et al. (1997) surveyed 246 school staff members. Findings indicated there was a pressing need for general educators and special educators to have time to cooperatively plan lessons for successful inclusive education (p. 19). Findings from Smith & Smith (2000) also suggested that teachers felt that they needed more time to meet and plan collaboratively with all staff members involved with inclusive education. Smith and Smith (2000) argued that there should be organizational and administrative commitment to provide time for regular and special educators' planning and collaboration (p. 177).

Salend and Duhaney (1999) published a review of studies focusing on students' and teachers' perceptions of inclusion. The review indicated that general and special educators' perceptions of inclusion were mixed and complex. Teachers who worked in cooperative team teaching inclusive classrooms reported that collaborative and cooperative planning was effective for students and teachers. However, one of the problems teachers encountered was that there was not enough time for efficient teacher collaboration (Salend & Duhaney, 1999, p. 123). In an earlier review of literature, Scruggs and Mastropieri (1996) compiled data from 28 studies on "mainstreaming/ inclusion." From the findings of their review, one fourth to one third of the teachers (N = 10,560) reported that they had sufficient time for implementing successful inclusion programs (p. 71). Salend and Duhaney (1999) and Scruggs and Mastropieri (1996) revealed similar findings of general educators' perceived needs for teaching students with and without disabilities. Both reviews suggested a strong need for teacher collaboration time.

Overall, these nine studies revealed that teachers reported a need for consultation, collaboration and teamwork among all school personnel involved with inclusive educational practices.

General Educators' Need for Training

Efforts to place students with mild, moderate, or significant disabilities in general classrooms have increased dramatically since inclusive educational reform efforts have gained strength and momentum (Salend, 1994). Petch-Hogan (1999) argued that there is a lack of training for general educators to teach students with disabilities in general education classroom settings. One of the strongest themes that emerged from the reviewed literature was general education teachers' desire for training.

Although many researchers used the term "training" when referring to inservice teachers' needs for additional education, there has been considerable debate about the term 'training' versus the use of the term 'professional development'. Many teachers who participated in the reviewed studies were quoted using the term "training". Since it is important that the participants' voices are heard through their own language, the term "training" will be used when discussing teachers' call for more professional development when referring to inservice education.

Minke et al. (1996) studied 185 general education teachers who taught in traditional classrooms and 71 general and 64 special educators who co-taught students in inclusive classrooms. Minke et al. collected data from participants who were employed in the same school district where students with mild disabilities were in inclusive classrooms for nearly twenty years (p. 178). Findings of the study revealed that teachers who taught in classrooms identified as "successful" included teachers who were

"adequately trained" for such positions. This is consistent with findings of prior research on inclusion (Janney et al., 1995; Vaugh & Schumm, 1995).

Bennett, Deluca and Bruns (1997) reported data from a survey of 84 pre-kindergarten through third grade teachers. Results indicated the need for on-going training for general educators. Training that was mentioned included disability awareness, factors describing the benefits of inclusion, and teaching practices that promote successful inclusion. Data from the study indicated teachers' desire for course work, workshops, inservice training and conferences (Bennett et al., 1997, p. 127).

Buell et al. (1999) found that 78% of the 202 general education teachers surveyed reported that they did not have inservice training opportunities to better understand inclusion (p. 153). Buell et al. argued that general educators would benefit from inservice training that included "program modification, assessing academic progress, adapting curriculum, managing students' behavior, developing IEPs, and using supportive technology" (p. 153). Without the training supports in place, general educators do not seem to feel confident with inclusive education practices.

Downing, Eichinger, and Williams (1997) found similar results from structured interviews of special and general educators (K-6). Data from the study indicated that training on inclusion was considered of great importance to general education teachers. One special education teacher argued that training is critical to the success of inclusion. She stated, "Good training would solve all of the problems. But not just one weekend, one conference here or there, but real in-depth training. It would be really nice if there was a program for the regular educators, like two semesters, two or three courses" (p. 140). Downing et al. posited that the lack of trained teachers in inclusive classrooms

might be a result of the commonly reported financial barrier of successful inclusion. Downing et al. suggested that lack of training is often an indicator of a lack of sufficient financial support for inclusion from the district (p. 140).

Hammill, Jantzen, and Bargerhuff (1999) analyzed effective educator competencies in inclusive classrooms with data from 111 surveys of teachers and administrators. Findings revealed effective competencies of general educators who were in inclusive environments. Competencies included adapting instruction, utilizing knowledge of students with disabilities, understanding alternative assessment, knowing how to organize inclusive classrooms and using developmental curricula. In addition, findings revealed that inclusive educators should be able to promote hands-on learning and students' self-esteem (p. 33). Hammill et al. (1999) found that these competencies could be facilitated through professional developmental programs to provide opportunities for educators to better understand inclusive education theory and practice.

Hamre-Nietupski et al. (1999) conducted a qualitative study of three general and three special educators. One of the most frequently identified themes was teachers' need for training and information for inclusive education. Similar to the findings of Hammill et al, (1999), Hamre-Nietupski et al. revealed that training was not provided although teachers often indicated that it was needed. When teachers from three different schools were interviewed to determine their perceptions of inclusion, they experienced inclusive practices very differently. Teachers from only one school reported satisfaction with resources and support. Teachers from both of the other schools revealed that when training was provided, it was often not as effective as it could have been (p. 252). For example, teachers stated a need for training related to the challenges and concerns they

had regarding students they taught. One teacher reported, "We're just kind of struggling along off the top of our heads right now, adapting to it [the curriculum]" (p. 253). Another teacher claimed, "I feel like they dumped them and left us alone". A third teacher questioned, "What kind of support do you think I've gotten so far? None. I mean who's to come to me to say we should be doing this and this…. It's happened so many times. We've been told, 'You are getting so and so in your class.' Fine. Thanks" (p. 253). Hamre-Nietupski et al. (1999) found that none of the teachers were qualified or trained to teach students with moderate to severe disabilities. From the analysis of data, Hamre-Nietupski et al. claimed "the time has come for a radical restructuring of teacher training so all teachers acquire expertise to serve students with moderate/severe disabilities" (p. 257).

In a quantitative study by Pearman et al. (1997), all 558 members of the school staff completed the Schools and the Education of All Students (SEAS) survey. Teachers reported concerns and incentives of educators regarding inclusion. Results revealed that one of the main concerns of educators was that they lacked "proper training" to educate students in inclusive settings. Pearman et al. (1997) argued that general educators have little or no preparation for teaching students with disabilities. This, Pearman et al. contended, would become even more necessary when proposed national standards are implemented (Pearman et al., 1997, p. 19). In addition, researchers posited that, even though universities began to graduate teachers with some understanding in inclusive education, there are still many teachers currently in the field that have little experience teaching the diversity of learners represented in inclusive classrooms (p. 19).

Smith and Smith (2000) conducted a survey of 47 kindergarten through 3rd-grade teachers. From the 47 surveyed teachers, Smith and Smith conducted interviews with 6 of the teachers to better understand surveyed responses. All six participants said that they felt unprepared for teaching in inclusive classrooms. All of the participants believed that neither their undergraduate or graduate experience prepared them for teaching in inclusive classrooms and claimed that the inservice training that had been provided by the district was where they had been educated about inclusion. Teachers offered mixed reviews on the effectiveness of the inservice training that they received. Some responses were supportive regarding the training that they received while others found problems with the inservice that they received. From the findings, Smith and Smith indicated that inservice training must be made available for both general and special educators. The training must be made practical and relevant. This finding was reported by Hamre-Nietupski et al. (1999) and Kontos and File (1993) who concluded that instruction about inclusion needs to be individualized to be effective for teachers.

Villa et al. (1996) conducted a quantitative study of 690 general and special educators. From the data that represented 32 different school sites, teachers reported that they needed experience educating students with disabilities in general education classrooms and needed training to acquire skills to better meet the needs of all students. Wolery et al. (1995) found similar findings from another survey of 158 general and special educators. Large percentages of teachers in the study reported a need for training in inclusive educational practices yet small percentages of teachers reported that they had availability to training. Wolery et al. suggested that educators would benefit from beginning of the year and on-going training (p. 25).

Other researchers have confirmed these research findings. Werts et al. (1996) used a survey to compile findings of school personnel utilizing inclusive teaching practices. Werts et al. reported that teachers stated that training for inclusion programs is the greatest indicator of success. Lack of frequency of training was found as a problem for general educators. That is, general education teachers indicated that they lacked training and insufficient knowledge of special education methods compared to their special education counterparts. Werts et al. also compiled national surveyed data from 1,491 teachers. From the national survey, 35% of the teachers said that training was critical to the success of inclusion. One teacher reported, "I was given no specific training to meet his needs" (p. 18). In all instances, Werts et al. found that the training needed to be relevant to the student's needs to have it be effective.

Other studies that revealed that general educators needed training to teach effectively in inclusive classrooms included Trump and Hange (1996), Fox and Yesseldyke (1997), and Vidovich and Lombard (1998). Each study suggested that general educators did not perceive that they had necessary training for effective inclusive education.

Salend and Duhaney (1999) compiled and examined data from previous studies that revealed the impact of inclusion on students and teachers. Salend and Duhaney revealed that teachers' perceptions of inclusion seemed to be related, in part, to teachers' training. Findings indicated that teachers' training might have an impact on teacher efficacy in implementing inclusion (p. 124).

In an earlier literature review, Scruggs and Mastropieri (1996) synthesized findings of 28 studies on teachers' perceptions of "mainstreaming/inclusion". An analysis

of the findings revealed that only about one fourth to one half of the teachers represented in reviewed studies (n = 10,560) indicated that they believed that they had sufficient training for teaching in inclusive classrooms. In some of the reviewed studies, teachers' attitudes became more positive after training, implying that there might have been some correlation between training and attitude (p. 71).

Overall, of the 20 studies and two literature reviews, nearly 75% of the studies revealed that general education teachers believed that they lacked sufficient training to successfully teach students with and without disabilities in inclusive classrooms. While some researchers generated implications for training, little is known regarding how teachers define the training that they need for inclusive education.

Summary

Overall, this chapter reviewed the historical emergence of inclusion and focused on key themes within the research literature. Themes included (a) diverse definitions of inclusion and service delivery models, (b) general education teachers' attitudes toward inclusion and (c) general education teachers' perceived needs for teaching students with and without disabilities together. These themes were described as critical elements for teachers' successful inclusion practices.

The first theme offered ways researchers and general education teacher participants of studies defined inclusion. This is worthy of further consideration because it has not yet been clearly understood where and how general educators are learning theoretical and practical underpinnings that informs their definitions of inclusion. The second theme revealed attitudes that general educators have toward teaching students in inclusive classrooms. Findings of the reviewed studies indicated that teachers' attitudes

were varied. Designs of the reviewed studies indicated that some researchers attempted to determine ways that teachers' attitudes were dependent on factors inherent to teaching in inclusive classrooms. The third theme that emerged from the reviewed literature was general educators' perceived needs in order to teach in inclusive classrooms. Among the findings was the strong call for general education teacher training. While nearly 75% of the reviewed studies indicated that general educators' perceived training as their greatest need to successfully educate students in inclusive classrooms, little is understood regarding teachers' actual inservice needs. Although studies revealed that general educators felt they needed training, it was unclear what specific information teachers have actually acquired while teaching in inclusive classrooms. This study's inquiry focused on how general education teachers learned what they believed mattered most when teaching in inclusive education classrooms.