MEETING FEARS AND CONCERNS EFFECTIVELY: THE INCLUSION OF EARLY CHILDHOOD STUDENTS WHO ARE MEDICALLY FRAGILE

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ABSTRACT

Due to advances in medical technology more early childhood students who are medically fragile are entering school and being included in general education. The field of special education lacks a broad research base regarding this unique population. This qualitative study examined the perceptions of nine early childhood teachers on the inclusion of students who are medically fragile in their classroom activities. The teachers voluntarily completed questionnaires and the content was analyzed by looking for themes. The early childhood teachers expressed a general openness toward the inclusion of students who are medically fragile, but the deduction can be made that they need more information and training in order to feel comfortable with the inclusion process. Concerns were expressed throughout regarding litigation and fear of harming the child with medically fragile characteristics.

Due to recent educational trends to include all special education students in general classrooms, many questions have been raised regarding an appropriate educational experience for students who are medically fragile. The inclusion of students who are medically fragile is becoming more readily accepted and promoted in the early childhood setting. As a result, early childhood teachers are faced with new issues and concerns that have not previously been addressed. These issues widely range from fear to the anxiety produced by current litigation and excitement regarding a new challenge.

This qualitative study explored common worries that early childhood teachers face when including students who are medically fragile. These concerns are identified along with suggestions for making the inclusion process a healthy and successful experience.

CHARACTERISTICS OF EARLY CHILDHOOD STUDENTS WHO ARE MEDICALLY FRAGILE

DEFINITION

Students who are medically fragile have health care needs which reach beyond the normal care of other children who are the same age. They have needs so specialized that individual health care plans, directed by physicians and nurses, are required for the daily care of the child (Landdeck-Sisco, 1992). Bowe (2000) stated that children who are medically fragile "require use of one or more pieces of equipment to prevent death or to forestall further disability" (p. 233). The Texas Education Agency (2000) defines students who are medically fragile as those meeting all of the following criteria.

- 1. The student must range in age from birth to twenty-one;
- 2. The student must have a serious, ongoing illness or a chronic condition that has lasted or is anticipated to last at least twelve or more months, or has required at least one month of hospitalization in combination with daily, ongoing medical treatments and monitoring by appropriately trained personnel which may include parents or other family members;
- 3. The student requires the routine use of a medical device or the use of assistive technology to compensate for the loss of usefulness of a body function needed to participate in activities of daily living;
- 4. The student lives with ongoing threat to his or her continued well-being. Other states have similar criteria that correspond to federal IDEA definitions for other disabilities coupled with severe medical needs. No federal category exists specifically for those students. Yet, the impact of severe medical needs often produces much concern and attention from school personnel.

Early childhood education frequently refers to the education of children aged birth through eight years old (Bredekamp, Knuth, Kunesh, & Shulman, 1992). The National Association for the Education of Young Children (NAEYC) also defines early childhood as birth through age eight. They have established guidelines concerning curriculum content and assessment for early childhood programs serving ages three through eight (Bredekamp & Rosegrant, 1992). The NAEYC (Bredekamp & Copple, 1997) defines an

early childhood program as "any group program in a center, school, or other facility that serves children from birth through age eight." (page 3).

Previous Studies

Most of literature that exists has been directed toward the medical field and not directly to educators. Braverman (2001) explored the problem of respiratory infections and asthma among children with severe disabilities. Cernoch (1992) discussed respite care for medically fragile children in her article from ARCH, published by the National Resource Center for Respite and Crisis Care Services. In the preceding article, the author gave information on hospitalization and at-home care for medically fragile children. She also provided data on establishing a respite program for the families of medically fragile children, as well as staffing and training issues to be considered. Public education was never mentioned in either of these articles as a consideration for these children.

Several articles were found regarding medical needs, grief and death, medical technology and needs of the school (Caldwell, Sirvis, Still, Still, Schwab, Jones, Anderson, Blanchard & Appel, 1999; Jordan & Weinroth, 1996; Schnieders & Ludy, 1996). Within the articles, the issues of facing death and grief in the classroom were discussed in relation to students with severe special needs. Many people treat the death of a child with severe disabilities as a blessing rather than a tragedy (Schnieders & Ludy, 1996). This attitude can complicate a teacher's attempts to help students cope with the loss of a classmate. In the early childhood setting, preschoolers often see death as something akin to sleep that is a temporary state. Schnieders and Ludy (1996) described three symptoms of grief found in children: physical, behavioral, and emotional. Emotional symptoms describe the internal responses of the child. Behavioral symptoms are observable actions and reactions; and physical symptoms are those that affect body functions. The authors concluded that the teacher must come to terms with his or her own feelings toward death, as well as create a comfortable, safe environment for the students to express feelings of grief.

School staff members need to have emergency protocols, health and safety checklists, and a team of professionals knowledgeable about a student with medical needs readily available (Prendergast, 1995). Advance preparation, and constant communication were discussed as vitally important to the successful education of the child. A committee from Gwinnett County schools, located outside of Atlanta, Georgia, suggested the formation of a Medical Review Panel (MRP). This Medical Review Panel would address health and safety issues in the Gwinnett County schools (Jordan & Weinroth, 1996).

When a student required specific, specialized health care, they suggested that a health care team be assembled for that child. This specialized health care team would be responsible for supervising the training of personnel and performance of procedures for that child. Checklists and forms for developing an Individualized Health Care Plan were located, as well as specific guidelines for procedures such as tube feeding and dialysis (Caldwell et al., 1999). Medical technologies, such as tube feeding, intravenous lines, clean intermittent catheterization, ostomy appliances, dialysis, and respiratory devices were listed as the most common ones required by students with severe medical needs (Caldwell et al., 1999).

The American Federation of Teachers (1992) provided a policy for training school employees to work with medically fragile children on their website, but offered no suggestions or help for personnel. Scant literature, which includes guidelines, recommendations, and informal reports of previous experiences, could be located regarding the inclusion of students who are medically fragile in an early childhood setting. This was especially true regarding early childhood teachers' perceptions toward the inclusion of students with severe medical needs. In many communities, educational programs for children aged five and under are not publicly operated, which limits options for inclusion (Cavallaro, Ballard-Rosa & Lynch, 1998). Most of the literature found regarding teachers' perceptions dealt solely with elementary students or secondary students (McDonnell, Thorson, McQuivey & Kiefer-O'Donnell, 1997; Smith & Smith, 2000).

INCLUSION

DEFINITION

Legally, the IEPs of all students with disabilities are required to describe the extent to which they will not be participating in general education (IDEA, 1997). For many students with disabilities, the ramifications include being incorporated into general education, and to the maximum extent possible, educated with students who do not have disabilities. Currently, this concept is seen through the implementation of inclusion, the placement of students with disabilities as full or part-time members in general education classrooms (Hunt & Goetz, 1997). The aim of inclusion is to provide for each child an environment that maximizes rehabilitation efforts and has the highest probability of remedying academic deficits (Sattler, 2001). Inclusion advocates promote the philosophy that students with disabilities need to spend as much

of the day as possible in a general classroom. Inclusion does not refer to the physical placement of students in a general classroom. Rather, it refers to the acceptance and sense of belonging that a student with special needs experiences when placed in a general classroom (Voltz, Brazil & Ford, 2001). Stainback, Stainback and Ayres (1996) state that the goal of full inclusion "incorporates the idea that all students deserve to be safe, happy, secure, and successful learners within the mainstream" (p. 31).

Wilson (1999) addresses the fact that the inclusion of students with severe disabilities who are medically fragile remains a very controversial issue in the field of education. Students considered severely disabled and medically fragile remain the least likely to be included in the general education classroom, but a small trend has begun to increase inclusion of this population. During the 1996-1997 school year, 44% of students identified with severe disabilities were educated in a separate class, and another 30% were educated in a separate school, residential facility, hospital, or the home (Turnbull, Turnbull, Shank, Smith & Leal, 2002). The remaining 26% were often included in very limited general education situations, such as art, music and home economics. In Today (August 2002), the Council for Exceptional Children explored new trends regarding inclusion. They deemed that five factors were necessary to make the inclusion of students with special needs successful: 1) Schools focusing on teachers' abilities to modify and make accommodations; 2) the engagement of co-teaching; 3) a variety of educational strategies; 4) planning time for teachers; 5) and the acceptance of a different, non-typical role by the teachers. These characteristics should extend to the needs of students who are also medically fragile.

Students considered medically fragile are increasing in numbers as medical treatments and interventions become more successful (Bowe, 2000). In the past, these students were often considered "uneducable" because they were not strong enough to attend school or lacked hearty immune systems. As a result they were often educated as homebound students. Advances in medical technology have allowed these students longer life spans and increased opportunities for public education (Essex, Schifani & Bowman, 1994; Schnieders & Ludy, 1996). The emphasis on inclusion has expanded the opportunity of a free and appropriate education within the least restrictive environment; this in turn has created somewhat of an uproar in the education community as to how to best meet the educational needs of these students while protecting their health status.

LITIGATION

Litigation regarding students who are medically fragile continues to emerge as students enter the general education setting. The case of Cedar Rapids Community School District v. Garret F. (1999, case No. 96-1793) brought these issues to the forefront and is considered one of the landmark cases on inclusion of medically fragile students. Garret F. incurred a spinal column injury when he was four years old and was dependent on a ventilator for life support. In 1993, Garret's mother asked their school district to assume financial responsibility for the health care services Garret needed during the school day, and the district denied the request. The United States Supreme Court ruled that under the Individuals with Disabilities Education Act (IDEA, 1997), ongoing, one-on-one medical care for a student who is medically fragile must be considered a related service to be provided by the school system so that the student can benefit from school (Walsh, 1999). Since Garret did not require a physician to attend to his needs, the services could not be called "medical services" which could be excluded under the school district's required provision. Before this ruling, if a student had severe medical needs that could not be met by the school nurse or personnel, the school district could refuse the student's entry on the basis that it could not provide adequate medical services.

A similar case went before the Supreme Court regarding related services vs. medical services. Catheterization was the main service in question in Irving Independent School District v. Tatro (1984, case No. 83-558). Amber Tatro, 8 years old, was a child with spina bifida, which in turn led to orthopedic and speech impairments, and a neurogenic bladder (Katsiyannis & Yell, 2000). In order to prevent damage to her kidneys, she needed a procedure called Clean Intermittent Catherization (CIC) performed every three to four hours. The school district provided special education services for Amber, but they refused to provide the CIC services. The Supreme Court ruled that the CIC service was a necessity for Amber to attend school and benefit from her education. Since trained personnel rather than medical personnel could provide the service, it fell under the supported services category and should be provided by the school district. This case was monumental in education, because it established the standard that services are to be provided by the school district if they do not have to be performed by a physician. If a physician is necessary, the school district is not responsible.

In the case of *Neely v. Rutherford County Schools* (1995), a seven-year old child, Samantha Neely, had a rare condition that caused difficulty breathing and required a tracheostomy. Samantha required constant monitoring and general suctioning of the tracheostomy to ensure that the tube did not

become blocked or that her breathing was not hindered. Samantha's parents requested that a full-time nurse or respiratory care professional be hired by the school district to attend to Samantha's needs. The school district initially agreed to employ the professional requested, but hired an individual with only a nursing assistant's license. This assistant was to provide care for Samantha and make provisions to train Samantha's teachers to care for her. Samantha's parents objected and removed Samantha from school. The case was eventually taken to the Sixth Circuit Court of Appeals, which ruled that Samantha's needed services were too extensive and complex for the school district to provide; and thus fell under the "medical services" definition of IDEA. Because the services were not considered "related services," which could be administered by any trained professional, the school district was not responsible for providing the necessary medical services. The court ruled that the requested care provided undue burden to the district. This case helped to differentiate between "related services" and "medical services"; and helped school districts define what services were appropriate. Since Samantha required constant medical attention and would most likely die without proper services, the Court ruled that the school district was not responsible for carrying the burden of her medical care.

The ramifications of these cases are extensive. School districts and special education services are responsible for the educational well being of students who are medically fragile, not necessarily for their medical well being. As illustrated in court decisions, such as the Tatro case (1984), rulings set a clear precedent for providing extensive and appropriate care at school and by school personnel when they are needed for the student to be educated. These medical and physical demands make many teaching personnel feel inadequate and unprepared. Cedar Rapids v. Garret F. (1999) defined "related services" as they are presently seen in public education, making clear an issue that had been very hazy to educators. Although these cases addressed services to be provided in the elementary setting for students who are medically fragile, they did not address early childhood issues, particularly pertaining to early childhood teaching personnel or early childhood students with special needs.

PURPOSE OF STUDY

The purpose of this study was to explore the perceptions and concerns of early childhood general education teachers regarding the inclusion of students considered medically fragile. Nine early childhood teachers who had various experiences with students labeled medically fragile were asked to

answer five questions. The teachers volunteered to answer the questions, and their identities were kept anonymous. The questions pertained to the teachers' experiences, feelings, and concerns regarding the inclusion of medically fragile students.

The focus of the study was to understand early childhood teachers' knowledge, emotions, and goals with and toward medically fragile students being placed in their classrooms. Although including special needs students with general students is a frequent occurrence, very little research is available to help teachers and administrators face and deal with the perceptions involved regarding the inclusion process of students who are medically fragile. Preconceived notions, fears, and lack of knowledge can present barriers for both the teachers and students. The extent and type of training and preparation for general and special education teachers is also a grave concern. Also lacking are data regarding the facilitation, encouragement and collaboration between general and special education teachers, particularly in the early childhood setting. Perhaps, most importantly, knowledge concerning helping both special and general education students succeed together in the general classroom is glaringly absent. (Janney & Snell, 1997).

RESEARCH QUESTIONS

The study addressed the following questions, which were asked of nine early childhood general education teachers.

- 1. What characteristics would you say define a student who is labeled 'medically fragile?'
- 2. Have you ever had any contact with a student who is considered medically fragile? If so, what was the context?
- 3. How did you feel about the student?
- 4. How would you feel about having a medically fragile student included in your classroom full-time?
- 5. What would be your concerns about including a medically fragile student in your classroom?

SETTING

Teachers were early childhood, general education teachers who taught on an exclusive pre-kindergarten campus. This campus was an open campus, meaning that the building had no inner walls. The classes were open and connected, with furniture being the only divider between rooms. It was a public

early childhood Head Start facility for three and four year olds, and was an inclusive campus. Students with mild to moderate disabilities were included full-time in the general classrooms. The campus held one self-contained special education classroom with a teacher and assistant. This classroom contained students with more severe disabilities. Most of the students in this class were also included in the general classrooms during smaller portions of the day. A team of two inclusion facilitators and two teaching assistants worked with children with special needs as well as with the classroom teachers to promote inclusion and ensure its success. A Student Support Team on the campus met regularly to discuss concerns about unidentified students and offer suggestions for the classroom teachers.

METHOD

CASE STUDY

A case study design was chosen to allow the researcher to gather in depth, graphic and focused information about a particular population—general early childhood education teachers faced with the challenge of including medically fragile students in their classrooms. The case study method enabled the researcher to understand how the teachers operate and function (Berg, 2001). Case Study Research Design and Methods (Yin, 1994) defines a case study as "an empirical inquiry that investigates a contemporary phenomenon within its real life context especially when the boundaries between the two are not clearly evident" (page 13). Further, "The case study as a research strategy comprises an all encompassing method—with the logic of design incorporating specific approaches to data collection and to data analysis" (page 13).

The case study method is a systematic way of looking at what is happening, collecting data, analyzing information, and reporting the results (Davey, 1991). It examines commonalities and particularities about a case, but the end result usually displays something that is uncommon. Case studies draw from the following: the nature of the case, the case's historical background, the physical setting, and other contexts such as economic, political, legal, and aesthetic factors (Stake, 2000). An advantage of using the case study method lies in its ability to open the way for new discoveries (Berg, 2001). To examine teachers' perceptions on including medically fragile students an instrumental case study was selected because the design is illustrative, descriptive in nature, and lends itself to the type of information sought.

CASE STUDY DESIGNS

The instrumental case study design is used to understand unknown perspectives (Stake, 1995). It looks at a particular case and examines it mainly to give insight into an issue or reformulate a generalization (Stake, 2000). The case itself is not the main focus of the research question—it simply gives information that leads to deeper understanding. In this case study several teachers provided specific information to give insight into a bigger picture: the perspectives of early childhood teachers who have encountered students considered medically fragile in their classrooms. The teachers who volunteered to participate were the pieces that contribute to the overall puzzle of inclusion of students who are medically fragile.

The illustrative, or descriptive aspect of the instrumental case study utilizes circumstances to show what a situation is like. Illustrative case studies are useful when little is known about the subject being researched. They help interpret other data, serve to make the unfamiliar more familiar, and give the readers a common language about the topic (Davey, 1991).

PROCEDURE

Data from the early childhood teachers were collected through a structured interview method. Structured interviews were given in a questionnaire format to each teacher. Each teacher received exact duplicates of the blank questionnaire. Teachers provided their opinions voluntarily, and were given no time frame with which to complete the questionnaire.

DATA ANALYSIS

Data collected in this study were analyzed from a social anthropological approach. Researchers who are interested in the behavioral generalities of everyday-life use this approach: language and language use, rituals and ceremonies, and relationships (Berg, 2001). This approach identifies and explains how people are operating in a particular environment or how they understand and manage in their day-to-day activities.

EVALUATION METHOD

Data were evaluated using content analysis with an inductive approach. This allowed total immersion into the structured questionnaire interviews in order to identify meaningful themes. Inductive categories were developed, which allowed the linkage, or grounding of the categories to the data from which they were taken (Berg, 2001). Content analysis involved the counting of

words and themes found throughout the teachers' answers. Words were counted according to the frequency they were used; and themes were derived from phrases seen most often. Some of these words and themes were combined into concepts or ideas regarding teachers' perceptions.

Precautions were taken to guard against the disadvantages discussed by Silverman (2000) of using coding schemes to form categories. Categorizing words and themes can be a very useful and effective way to organize and analyze data; but Silverman warned against disregarding uncategorized data. He discussed the importance of underlying information that can be found in this unused data. Silverman stated that the most important requirement is that other researchers could derive the same themes and codes when presented with the same data. Another factor to be aware of is a temptation to interject personal opinions and impressions regarding the themes. A professional objective viewpoint was maintained when categorizing the information. A safeguard to protect against personalizing the data was accomplished by having a fellow colleague or researcher check the information to determine if the patterns were evident and clear to them as well. No preconceived notions or expectations about categories or themes that emerged were evident.

Advantages of looking for patterns in the data included finding repetition in themes—which lent to the credibility and internal validity of the interviews (Yin, 1994). Looking for patterns made the data easier to evaluate by placing it in a categorical fashion rather than a running text.

RESULTS

Upon examination of the five questions asked of the early childhood education teachers, a recurrence of themes was evident. The first question, which elicited a broad range of responses, was "What characteristics would you say define a student who is labeled 'medically fragile'?". Characteristics listed from this question most frequently involved physical aspects: physical problems, wheel chairs, tracheostomies, and tube feedings. Themes from this question revolved around physical limitations and specific medical needs. Two teachers stated that these students needed extra-specialized assistance or medical personnel to attend to their needs.

The second question dealt with previous contact with a student considered medically fragile. Eight of the nine teachers stated that they had previous limited experiences with this population. The majority of the teachers had observed and interacted sparingly with students who were medically fragile. Two of these teachers had more direct experience by having the student that was medically fragile included in some way in their own classrooms.

Question three asked, "How did you feel about the student?" The most frequently cited themes were: accepting, questioning, and wondering about the conditions of the students. One early childhood teacher captured the group sentiment by saying, "I was nervous as first, unsure of how to respond and interact." Another stated, "You keep an eye on the student to make sure everything is all right." It needs to be noted that the teachers commented on their personal feelings, not about how they felt toward the child. All teachers avoided commenting on personal feelings directed toward the student.

The early childhood teachers were also asked how they would feel if a student labeled medically fragile were to be fully included in their classrooms. One-third of the teachers stated that they would want thorough training and access to help or a teacher's aide. One-third said that they would feel "OK," because every child should have equal opportunities. One-third said that they would feel worried or nervous and consider it a learning experience. One teacher expressed it this way: "I would worry about the child until I felt comfortable about how to care for him." Another teacher expressed her concern by stating, "It would be okay if this child did not need more time than normally would be given to a child that was not medically fragile and that there were not liability issues."

In the final question the teachers were asked about their concerns about including a student labeled medically fragile in their general classrooms. Those concerns most frequently cited were: lack of support, lack of training, emergency situations arising, classroom arrangement, other students hurting the included student, and not being able to devote 100% to the student being included. One teacher expressed concerns that the student would be placed in the general early childhood classroom without her consent.

DISCUSSION

GENERAL INFERENCES

This study holds many implications for teachers regarding the inclusion of students considered medically fragile in the early childhood setting. Based on the answers given, a deduction can be made that teachers need more information and training in order to feel comfortable with the inclusion process. They need a support system in place from which they can draw resources and assistance. They also need to be more informed of what the classification of medically fragile means and what it entails.

For the most part, the early childhood teachers were open to the idea of including students who are medically fragile. They had positive attitudes toward inclusion and regarded students as individuals who can each contribute to a general classroom. However, they directed the questions regarding their feelings toward themselves, concern for themselves, rather than feelings toward the child. Could this oversight possibly indicate that their concerns were with their own limitations rather than looking at the needs of the child and the relationship that could be established between teacher and child? This information led to the deduction that teachers are being educated on the concepts of inclusion and are consistently gaining knowledge but they are lacking in experience with developing relationships with children who have severe physical limitations and medical needs.

Teacher inadequacy to handle medical situations effectively seemed to be uppermost in the interviewees' minds. Concern over their role and possible liabilities appeared to consume and override their thoughts regarding successful inclusion of students that are medically fragile. Questions emerged from the study that are very troublesome: Is training what is needed? Or, does the problem lie simply in the personal, emotional inadequacy of being the responsible teacher? Will the teacher be able to deal with the challenges of a child with such limitations?

Overall, the reflections and perceptions of these early childhood teachers reach deeply into areas that pertain to preparation and legal protection. Other themes were: acceptance with reservations, concern over the time spent to meet specific needs, support from administrators and parents, and most importantly, emotional guidance and encouragement.

IMPLICATIONS FOR INCLUSION OF EARLY CHILDHOOD STUDENTS WHO ARE MEDICALLY FRAGILE

Early childhood teachers, facing the prospect of including a student who is medically fragile, confront many concerns. Several suggestions can be derived from the findings of this study. Teachers need to evaluate the extent of their training and ascertain whether additional training might be necessary to accommodate individual students with medical problems. This unique challenge will have to be faced with regard to each individual student. All students considered medically fragile are unique with individual needs. The teacher must feel confident in his or her abilities to professionally deal with any situations that may arise regarding the student. Emergency plans should be in place for the teacher and the administration.

In addition, the classroom environment must be evaluated to assure that the student will have adequate personal space and accessibility to the restroom. The classroom must have enough space for medical or adaptive equipment that the student needs. Ideally, the campus administration and/or nurse should be located nearby and readily available in the event of a medical emergency (see Table 1). Finally, the teacher must consider how to provide an environment that educationally supports and challenges every student in the class, including the student with medically fragile concerns.

Early childhood teachers facing the prospect of including a medically fragile student in their general classroom can take many proactive steps to make the process successful for all involved. They should encourage open communication between the family, special education staff, and general education staff. Home-visits, school conferences, phone calls, notes home, etc. will make the connection between home and school healthy. Professional development and training for the teacher and paraprofessionals, involving specific subjects such as medical procedures and emergency contingencies, as shown in Table 2, are necessary for adequate inclusion and school liability. Physical extras such as telephones, walkie-talkies, or an intercom system in

TABLE I Physical Supports for Teachers

- Telephone
- Walkie/Talkie or Intercom System
- Pager
- List of emergency numbers
 - Parents
 - · Backup contact designated by parent
 - · Pediatrician
 - Emergency Medical Services
 - Ambulance
 - · School administration
 - School Nurse Support
- · Available medical supplies
 - Hygiene supplies
 - · Prescribed medications
 - Any type specific equipment; e.g. filters, bandages, tubes, breathing machines, oxygen
- Emergency protocols
- Adaptive equipment
- Extra space for equipment
- · Extra space for auxiliary personnel

case of an emergency will give confidence and assurance of help to school personnel. This will alleviate some of the nervousness and fears associated with medical emergencies that may occur.

Administrators must realize the added responsibility that students with medical fragility add to the early childhood classroom setting. Support of the teacher and classroom personnel is essential. The administrator can do many things to promote good communication and collaboration between school, home and community. The students in the classroom and the teachers in the school will follow the model set by the administrator. Personal attitudes and the extension of school relationships between administrators and student can mold the situation into a productive and happy experience for all involved.

Early childhood teachers can receive a great deal of training and physical supports to help them adapt to the unique situation of including a student with severe medical needs. Although these may be present, the teacher still needs a great deal of emotional supports readily available. The inclusion of a student who is medically fragile can be a tenuous and stressful experience for a teacher who is not emotionally prepared and equipped to meet the individual needs of these students. Table 3 gives suggestions to assist the teacher and staff in making the inclusion process a pleasant and enjoyable one.

Finally, the school personnel can make sure that high expectations are the same for all students. These expectations will foster a sense of community among the students and a sense of independence and achievement for the student who is medically fragile. By working together and working toward open, constant communication among all involved, the early childhood gen-

TABLE 2 Training for the Teaching Staff and School Personnel

- · Emergency medical training
 - Specific procedures or interventions e.g. catherization, tube feeding, Cardiopulmonary Resuscitation
- Training for emergency policies and procedures within the school district
- Training on inclusion of the student that is medically fragile
- Training regarding the various disabilities of the student and the interaction between the disabilities
- · Training on how to prepare the other students
- · Training on stress management and team building
- Ongoing training on issues that may arise

TABLE 3 Emotional Supports for Teachers

- Someone to listen to their concerns (school counselor)
- Collaborative environment (nurse, administrator, parent, special education staff)
- Definite emergency protocols for greater confidence in handling situations
- · Adequate training to handle the specific health needs of the child
- Opportunities to rehearse potential questions from staff, parents and students, with feedback from seasoned teachers who have taught students who are medically fragile
- · Specialized training to handle the specific learning needs of the child
- · Support team to encourage and problem-solve
- · Validation from their administration
- · Assurance that legal permissions have been granted and are in place
- · Affirmation that their abilities are adequate
- · Help in terms of good planning periods
- Extra personnel (hands) for quick assistance
- · Quiet area when events become too stressful
- · Availability of a support group
- Availability of a forum of experienced teachers that have taught students who are medically fragile
- Stress management groups

eral education teacher can do a great deal to make the inclusion process successful for all involved.

LIMITATIONS OF THE STUDY

This qualitative study concerned one specific early childhood building. The study reflects the culture of one unique campus; it consists of three and four year olds exclusively. Results might differ with a more varied age range. The study also reflects one administrator. Administrative direction often colors the attitudes of teachers. Collecting data from various programs might yield different responses as the administration can affect the atmosphere of the school and the attitudes of the teachers.

Structured interviews in a questionnaire format were conducted with nine early childhood teachers. These questionnaires were limited in the degree of information obtained. Face-to-face interviews might have been more fruitful with the extensive use of open-ended questions. Another limitation consisted of pooling data from nine teachers with varying degrees of experience. Data could be grouped according to years of experience to provide different perspectives.

FURTHER RESEARCH

A paucity of research exists regarding the inclusions of early childhood students who are medically fragile. Teachers need more practical information on how to include these students and what the inclusion process entails. Research needs to be conducted on the needs of these students, the needs of their families, and the needs of teachers faced with accommodating students with special needs in their early childhood classrooms. Perhaps the most overlooked group is the peer group in the classroom. Research regarding the effect of working closely with someone with medical limitations may prove most helpful. Children's worries regarding infecting others with common illnesses and protecting their fragile classmate need to be explored. Until more research becomes available, teachers who include students labeled medically fragile will be some of the "pioneers" of education as we continue to grow and make each student's early educational experience a successful one.

As more information becomes available through future research, the inclusion of other disability groups needs to be explored. Many students with severe disabilities and specialized needs are not included to the fullest extent due to lack of knowledge of school personnel. As we learn more about teachers' perceptions and attitudes and how to help them in the classroom, the teaching field will be more open to the inclusion of students with disabilities.

These findings can also be applied to other age groups in the future. Researching the inclusion of early childhood aged students will provide a foundation that can readily be built upon by future research. As we learn more about early childhood, research findings will follow these children into elementary and secondary education. As teachers and school personnel learn more about their own attitudes and how to best serve students in inclusive settings, prospects for inclusion will be wide open to possibility.

CONCLUSION

The inclusion of students who are medically fragile is no longer a subject that general educators, particularly early childhood teachers, and administrators can avoid. The opportunity for inclusion of this population in the early childhood general education classroom is not only mandated by law, but also encouraged by the education system as a whole. Early childhood general education teachers are faced with many concerns and considerations when including students that are medically fragile in their classrooms. By carefully

addressing concerns and perceptions, and working collaboratively to make necessary adaptations and accommodations for students who are medically fragile, early childhood teachers can successfully prepare for this challenge.

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