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Inclusion of Students with Mild Disabilities: Accessing the General Curriculum

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**Abstract**

Inclusion in general education classrooms is generally believed to have many benefits for students with disabilities. However, relatively little is known about the process of successful inclusion. The broad purpose of this study was to explore the process of inclusion. It sought to discover the variables that may have contributed to the learning experiences and outcomes of two students with mild disabilities in a general education classroom. The intent was to document the students' experiences as they related to instruction, their peers without disabilities, and teacher supports in an effort to aid teachers and others in implementing inclusion in classroom settings.

Fulfilling the mandate of the Individuals with Disabilities Education Act (IDEA) requires that students with disabilities be provided with positive educational experiences and maximum access to peers without disabilities. The legal mandate is unambiguous about what needs to be done where inclusion is concerned. What is not clear is how to accomplish successful inclusion. We know relatively little about the process of inclusion. What is needed is research identifying the classroom variables that contribute to positive learning experiences and outcomes for students with disabilities in general education classrooms.

This qualitative research sought to describe the process of inclusion. Specifically this study describes observations and analyses of the experiences of two students with mild disabilities who participated in the general education curriculum in a setting which adhered to the theory and procedures of an approach called *Fostering a Community of Learners (FCL)*, developed by Brown and colleagues (Brown, 1992; Brown & Campione, 1994; 1996). The primary focus of the study was on the

students' responses to and interactions with (a) instruction, (b) their peers without disabilities, and (c) teacher supports.

The FCL curriculum addresses the learning needs of students with diverse abilities. It supports the inclusion of students with disabilities by providing a flexible curriculum that addresses individual learning needs, instructional activities that capitalize on students' unique talents and expertise, and an environment that supports peer collaboration. Most of the research with FCL has been in general education classes that did not include students with disabilities. However, the data suggest the effectiveness of the approach in supporting students with exceptional learning needs (Campione, Gordon, Brown, Rutherford, & Walker, 1994). An example is reciprocal teaching, one of the practices in FCL, which strengthens reading comprehension in struggling learners (Palincsar & Brown, 1984). Three aspects of the FCL approach that are pertinent to including students with disabilities are (a) *multiple zones of proximal development*, (b) *legitimization of differences*, and (c) *communities of practice* (Brown & Campione, 1994; 1996).

*Multiple zones of proximal development* is a concept based on Vygotsky's zone of proximal development (ZPD) (Vygotsky, 1978). Vygotsky described the ZPD as the distance between a child's actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers. Said another way, a student can perform a task under adult guidance or with peer collaboration that he or she could not achieve alone. The ZPD is that area between what is known and what can be known. Vygotsky claimed that the ZPD is where learning occurs. Brown's elaboration of Vygotsky's concept recognizes that individuals possess numerous areas of strength and weakness. Brown and colleagues contend that students have multiple ZPDs and they may be functioning at a different level in each ZPD. Rather than focusing exclusively on remediation and skill-building,

recognition and validation of students' areas of strengths in those learning processes will promote confidence and increased motivation.

*Legitimization of differences* emphasizes the importance of providing concepts in different ways and varying the rate of presentation. Because formal schooling groups children by age and grade level, teachers sometimes forget that every one of the same age and grade does not learn at the same rate or with similar materials. FCL encourages students to revisit material in different ways so that they develop a thorough knowledge base, more mature understanding, and fluent skills. Content is recycled across time in different forms, providing sufficient repetition to engage and reinforce students. Students come to connect personally and in depth with concepts and materials.

*Communities of practice* are a learning approach that relies on interactions between students, and between teachers and students to support understanding and acquisition of new concepts and skills. Students join together with one another and with their teachers for the purpose of expressing and clarifying their ideas, and getting feedback and guidance. In the group or community context, students are exposed to diverse perspectives and continual sharing of ideas. In the process of assuming multiple and overlapping roles (learner, peer tutor), students learn to value and respect diversity. They also gain new insights and a broader understanding of new concepts.

### *The Challenges of Inclusion*

The No Child Left Behind Act (NCLB) of 2002 and recent amendments to the IDEA have increased access to the general education curriculum. The most recent data suggest that 95% of students with disabilities are included in general classroom settings for at least part of the school day and 32% for most of the day (Annual Report to Congress, 2003). Despite the increased inclusion of students with disabilities in general education classes, there continues to be a paucity of information about the processes that facilitate inclusion. The lack of information on inclusion processes has fueled continuing

skepticism as to whether schools can meet the attendant challenges (Albritten, Mainzer, & Ziegler, 2004).

Most teachers recognize that general education environments place very different academic and social demands on students with disabilities than separate special education environments. The obvious differences are (a) less individual, guided adult support, (b) the need for more initiative, independence, and self-sufficiency, and (c) the expectation that students will demonstrate organizational and long-term planning skills in the general education setting. There are undoubtedly many less obvious differences. A better understanding of these differences will make it possible for teachers to be more facilitative and supportive of students with disabilities.

#### Research Questions

The broad purpose of this study was to explore the process of inclusion to identify variables that may contribute to the learning experiences and outcomes of students with mild disabilities in general education classrooms. The central research questions were: How do students with disabilities experience the instructional demands in a general education classroom? How do students with disabilities experience their peers without disabilities in a general education classroom? What supports did the teacher provide in the general education classroom to facilitate successful inclusion?

#### Methods

Qualitative research methods were used to capture the breadth and depth of the participants' experiences and their personal perspectives. The study is a naturalistic inquiry which examined changes over time to gain an understanding of how two students with disabilities were responding and adjusting to the general education classroom.

#### *Setting*

The setting was an elementary school close to a large urban area. Compared to other elementary schools in the district, it was a relatively small school with enrollments ranging from 230-270

students. The school had a high enrollment of minority students, including African American (75.1%), Hispanic (9.4%) and Asian (6.8%) students. Nearly 11% of the school population reported English as a second language and 48.3% of the students received free or reduced school lunch (a federal poverty indicator, <http://www.fns.usda.gov/cnd/Lunch/>). The average class size was 24.4 students (EdData, 2005).

Several classrooms in the school were comprised of mixed grade level students (K-1; 1-2; 2-3). The general education classroom in which the study took place had 29 first and second graders and one general education teacher. Students were 6 and 7 years old. There were some changes to the class composition during the school year. Two new students entered the class at different points in the school year and one student transferred to another school mid-year. Academic abilities in this class ranged from students who were proficient readers at the second grade level to students who were emerging readers and writers. The latter were working on readiness skills such as letter names and sounds. The teacher was experienced, having incorporated the FCL approach for four years when this study began. Having included students with special needs in varied classroom activities (e.g., reading period, morning routines) over the past years, she was receptive to having students with disabilities join her class.

### *Participants*

The two students observed for this study were Erica and Gabe. The Individualized Education Programs (IEPs) for both students indicated that they were to be included in the general education classroom for part of the school day. The IEPs of both children had goals for receptive and expressive language and reading. Erica was somewhat stronger in reading than Gabe. Both students indicated that they wanted to participate in the general education classroom, and they were agreeable to being observed in that class. The parents of both students consented to their children participating in this study.

*Erica.* Erica was 7 years 9 months at the beginning of this study. At 4, she had begun receiving special education services under the category of speech impairment. She continued to receive special education services and at the time of the study, she was provided individual speech and language therapy sessions three times each week. Erica was described by her special education teacher as friendly, pleasant, and well-liked by her peers. She was quite verbal despite her difficulties with articulation and pronunciation, and she was always willing to engage in social interactions. When she had difficulty with an academic task or with a peer, Erica sought adult support. Erica read at a second grade level. She was able to phonetically sound out words and used invented spelling in her writing. Most of her difficulties were in the area of reading comprehension.

*Gabe.* Gabe's age was 7 years 4 months at the beginning of this study. His eligibility for special education was based on evidence of a specific learning disability. Gabe had been receiving special education services in a separate class for two years prior to this study. His IEP indicated that he was to be included in the general education classroom for academic (i.e., math, science) and nonacademic periods (i.e., physical education, recess, assemblies). Comparison of scores from the Expressive One Word Vocabulary Test and the Receptive One Word Vocabulary Test indicated better understanding than use of language. Writing was difficult for Gabe, but he attempted to sound out and write words using invented spellings. Gabe followed directions well and responded to encouragement. His special education teacher described him as well liked by peers and willing to initiate and engage in social interactions (e.g., games, conversations). His expressive language disability was evident in his difficulty recounting events surrounding disagreements with peers. He was dependent on an adult to try to piece together what happened and help him resolve conflict

#### *Data Collection*

Data were gathered through (a) observations, (b) student work samples, (c) student journals and verbal check-ins, and (d) student interviews.

*Observations.* Erica and Gabe were observed for 28 weeks in the general education classroom. Field notes were recorded 3 days per week during the 90-minute science period. I positioned myself close enough to the students to hear and see all of their interactions during this time. Decisions about which kinds of activities and events would be most likely to yield useful insights and information were based on “sensitizing concepts” (Patton, 2002). As opposed to pre-ordinate categories or operationalized variables, the purpose of sensitizing concepts is to provide a basic framework that highlights the importance of specific kinds of activities, events, and behaviors. They provide a way to organize what is observed and make decisions about what to record. The sensitizing concepts for this study derived from the research questions. They served to focus the data collection on (a) the academic demands of the instructional period, (b) interactions with peers without disabilities, (c) supports provided by the teacher. Verbal and non-verbal types of evidence were gathered.

*Student work samples.* Work samples for each of the participants were collected. These samples included drafts of their work (i.e., illustrations, handwritten and computer generated drafts) as well as final research projects. Examples of research projects included a report on an animal and a report on animal survival and interdependence.

*Student journals and verbal check-ins.* Informal check-ins were conducted once per week with each of the participants. Brief probes (e.g., How has your research been this week? Tell me about what you have been doing in Ms. \_\_\_'s class.) were used to stimulate discussion about classroom experiences. Students were encouraged to express themselves in two ways: through illustrated entries in their journals and in our weekly discussions. Check-ins were audio taped and transcribed.

*Student interviews.* Participants were interviewed separately on three different occasions: at the beginning, midpoint, and during the last week of this study. An interview guide was used to focus the interview. They were asked to describe their perceptions and attitudes about (a) what they were learning, (b) their peers, and (c) what help they were receiving. Examples of some of the questions that

were posed to elicit responses were: What do you enjoy the most about the class? What do you like the least about the class? Who are some of the people that you are getting to know and enjoy working with? Tell me about things that are hard for you in class and the help you are getting. Tell me about the things that are easy for you.

### *Procedures*

As noted above, Erica and Gabe were included in the 90-minute science period of FCL. Language arts were integrated into the lesson as students were required to read about related topics, write and report on those topics in small groups, and orally present material to the larger group. Reciprocal teaching was one of the components guiding students' exposure to literature on the topic of animal survival and interdependence. There were two distinct phases of instruction for the students. The first phase included research on a particular animal; the second phase included collaborative research in teams. Erica and Gabe initially joined the class the week that the teacher introduced the science unit.

*Phase One: Research on a particular animal.* As a launching activity the teacher shared a story entitled *Tree of Life* by Barbara Bash (1989). The first research activity was inquiry about animals that were presented in the book. Each student selected an animal that had been introduced in the story and then drew pictures and wrote about that animal. The class spent 11 weeks in this phase--researching and writing about animals. After they developed a handwritten draft, they worked independently or with one other peer to revise and edit their work on the computer. The culminating activity for Phase One was a presentation to the entire class about the animal each student had researched. Following the student presentations, the teacher guided a discussion on animals that had been presented. Students generated questions based on information they acquired through their own research and the information that had been shared by peers.

*Phase Two: Collaboration in teams—Research on a topic.* Students were assigned to teams of four to six students. The research questions that had been developed during Phase One were used to

generate six main topics of study: acquiring food, protection from predators—color (camouflage), protection from predators—non color, protection from the elements, babies, and communication. From the cumulative list of questions generated by the class, the teams identified three questions that would guide their research. Then they used various resources (i.e., books, materials) that had been read during reciprocal teaching sessions to gather information on their topic. Each group gathered information in notebooks and discussed the main ideas to ensure that all team members understood the information. Team members drew an animal illustrating the topic they had been researching. The culminating activity for Phase Two was a collaborative learning jigsaw activity. The jigsaw groups were comprised of one or two members from each of the original research teams. Each student in the jigsaw group presented verbal explanations of what had been represented in their illustration. After the jigsaw session, students added a written piece to their illustration about the specific features or behaviors of their animal as it related to their topic. Erica and Gabe were on different teams. Erica's team researched babies (animals and their young), and Gabe's team researched camouflage (protection from predators using color).

Descriptive data gathered during the two phases of FCL were analyzed using standard methods to identify prevalent and recurring themes (Bogden & Biklen 1992; Patton, 2002). The primary patterns and relationships between descriptive dimensions were established through inductive content analysis. The data were organized into five categories: (a) events or infrequent occurrences that marked important points in the student's experiences, (b) activity or regularly occurring behavior, (c) social structure or patterns of behavior among individuals, (d) strategies or techniques and ways in which individuals accomplished something (e.g., task, acquiring assistance, communicating needs), and (e) process or sequences of events and changes over time (Bogdan & Biklen, 1992).

## Results

The data sources provided a picture of (a) how the students experienced the instructional demands in the classroom, (b) their interactions with peers without disabilities, and (c) the supports provided by the teacher.

### *The Instructional Demands*

Erica's and Gabe's roles in the classroom evolved over time. From an initial newcomer role they shifted to a membership role. As they became more integrated as members of the class, Erica and Gabe seemed to feel that they were perceived as contributors, individuals with strengths and the ability to provide help. The catalysts for development of this new role seemed to come from two sources: the students' own initiative and the teacher's persistent facilitation of interactions.

In addition to being newcomers, Erica and Gabe had to overcome rather negative perceptions held by their peers without disabilities. Prior to inclusion, students in the general education class were not enthusiastic about Erica and Gabe joining their class. A comment by one student (stated in an unemotional matter-of-fact tone) was "Oh...the mental class." In the beginning, students asked the teacher questions such as, "Why does Erica talk funny?" One child complained, "I can't understand what Gabe is saying."

During the first few weeks, Erica and Gabe frequently asked for help. Peers were not responsive, so the classroom teacher provided a great deal of support at the outset. Both students frequently had to wait for long periods of time to receive assistance. On one occasion in the early weeks of the study, Gabe was observed to ask for help even before attempting the assigned task. He repeatedly stated, "I need help."

Gabe's unsuccessful attempts to gain help resulted in him sitting idle for much of the time. Erica, on the other hand, was persistent in her efforts to engage with others (e.g., calling students by name, raising her hand). This is not to say that her initial efforts were always successful. Early on, when Erica

raised her hand to answer questions posed by the teacher, her response was not adequate. She repeated parts of what the teacher asked or what another student had already stated. The following is an example:

Teacher: *Do you think the person who is doing the giraffe will make it tall or short?*

Class: *Tall!*

Teacher: *Why will the giraffe be drawn tall?*

Erica: *...cause it's (gestures pointing up)...it's tall.*

Over time Erica's responses became more contextually appropriate. For example she answered the question: "What kind of animal comes out at nighttime?" with "Bushbaby." This is an early instance of Erica's increasing competence related to instructional demands. Concurrently, Erica's participation shifted from being a recipient of help to a provider of help. Moreover, she seemed to be aware of the exchange of helper and helpee roles. Not only was she aware of the assistance she received but also the assistance she provided to others. An example:

Erica: *I have ...I had fun working on my sentences and me and Emma write my sentences and I just...I just helped her and she helped me and I just typed my sentence.*

Teacher: *Was it helpful to work with Emma?*

Erica: *Yes. She helps me and I be helping her.*

Similarly, Gabe grew in his ability to assume a helper role. During one observation, Gabe and a peer, Sam, were working on illustrations of animals. Sam appeared to struggle, repeatedly erasing portions of his drawing. Gabe said "Let me do it" (and he draws the face on the Sam's impala). Sam held up Gabe's illustration of the dik-dik, comparing it to his impala. Noting that the impala's horns should be bigger than the dik-dik's, Sam extended the horns on his drawing. When interviewed, Gabe and Sam acknowledged the support they received from one another.

Data from journal entries and verbal check-ins supported the observation of Gabe's increased confidence in the face of the instructional challenges. In the sixth week he stated that he didn't want to go to the general education class because it was hard for him. By the fourteenth week, he was decidedly more sanguine, noting: "I work hard. The writing part is hard. I work with Sam. Research is fine. Sam is my friend. I work on the computer by myself. I like the computer."

During the early part of Gabe's participation in FCL he did not contribute to discussions nor did he even attempt to initiate (e.g., raising hand). However, by week 16, he began to raise his hand unsolicited, and during one research session he attempted to participate 12 times (raised his hand to comment, ask or respond to a question). He was called on twice and responded appropriately each time. He also provided a presenter with feedback saying, "Thank you for standing up straight." Having a balance between the roles of recipient and provider of help seemed to contribute to students becoming genuine constituents.

#### *Interactions With Peers*

In time, Erica and Gabe began to interact socially with a few peers with whom they worked well academically. During a feedback session Erica elaborated upon these interactions. Her comments indicated that she had received help with writing and that she had learned much more about the animal that she was researching. On one occasion she assisted a peer, Leroy, who struggled with being able to convey his ideas in writing. Erica took his paper and read it over slowly. (It is difficult to read because of his invented spellings.) Erica changes some of the words to conventional spelling and asks, "Why do you like sweat bees?" Leroy says that it is because they suck the nectar from the flowers. Erica writes this on Leroy's paper and hands it back to him.

Reversing roles on another occasion, a peer helped Erica with her writing. The exchange appeared to be gratifying for both girls.

Emma: *Anything else you want to write?*

Erica: *Yes.*

Emma reads the last sentence on Erica's draft.

Erica: *...to the warm sun.*

Emma types 'to the'

Erica: *I know how to type* (Erica types in warm sun).

Emma: *Is that the end of the sentence?*

The girls read in chorus: *This is the fruit bat. This is wings to fly.*

Both girls laugh and Emma points to the misspelled word 'wly.' Erica corrects the word to 'fly.'

Erica: *The baby's name is the pup.* (Erica gets a copy of the Tree of Life and turns to the page with the fruit bat). *See, the name is pups.*

Emma: *Where is the pups?*

Erica: *The baby name is the pups.*

Emma: *Write it.*

Erica locates the sentence stating '*This is the baby.*' She adds to this line '*name is pups.*'

Although Gabe did not initiate verbal interaction as often as Erica, he found ways to connect with his peers. For example, once during a lesson he pulled a small toy from his pocket and showed it to the peer sitting next to him. Gabe frequently selected Sam as a research partner and he wrote about Sam in his journal, illustrating his comments with a picture of Sam and himself working on the computer together.

Both social and academic interactions supported class membership and they became increasingly more common over time. Erica regularly greeted peers by name when she arrived to class and both Erica and Gabe played with their peers from the general education class at recess. On several occasions later in the project when Gabe was returning to his special education class, students called out to him saying that they would see him later.

### *Supports Provided by the Teacher*

There were three distinct types of support provided by the classroom teacher including (a) preparation and planning prior to inclusion, (b) direct support, and (c) indirect support. The two major preparation/planning activities undertaken by the general and special education teachers were a discussion of how to align their classroom expectations and curricula, and how to combine their classes for select large group activities. When they began the discussion of classroom rules, the teachers discovered that they had similar expectations; however, the terms used varied. For consistency, the special education teacher changed how classroom rules and expectations were framed so that the terminology was similar to that used by the general education teacher. For example, 'Show consideration for others' was changed to 'Respect others.' Prior to inclusion the special education teacher attempted to parallel the general education curriculum by including a unit on desert animals in her curriculum. In the second preparation/planning activity, the teachers coordinated their schedules so that the general and special education classes could combine for assemblies and physical education.

Direct support to the participants took many forms: (a) verbal prompting, (b) questioning and modeling, and (c) recognition. The general education classroom teacher provided verbal prompts for Erica and Gabe when she saw that they wanted to respond but seemed unable to find the words to communicate their ideas. The following is an example of how the teacher helped Erica communicate when asked to formulate a research question.

Teacher: *What do you call animals that eat other animals?*

Peer: *Predators*

Erica: *It's about the ....it's about the wh...I don't know.*

Teacher: *If you tell me what it's about I can help you ask it.*

Erica: *Uh...*

Teacher: *You brought up something very important about the fruit bat. When does it drink the nectar from the white flower?*

Erica: *Nighttime.*

Teacher: *What kind of animal eats at night time?*

Erica: *Nocturnal.*

Teacher: *So you might want to ask...Is the animal....*

Erica: *nocturnal.*

The teacher posed direct questions to Gabe and Erica and then encouraged them to elaborate on their answers. When they responded with a single word she asked for clarification, modeling more elaborate responses when necessary.

Recognition was an especially potent teacher support in that its effect on Erica and Gabe was readily apparent. They looked very proud when the teacher explicitly acknowledged their strengths. Also, the teacher often commented to the class about accessing the strengths of Erica and Gabe. Here are examples:

Teacher (to Erica): *I saw you closing down your work at the end of research time.*

Teacher (to class): *Erica has pretty good skills on the computer so she is someone you may want to ask for help on the computer.*

On another occasion:

Teacher (to class): *Gabe has a good eye for color [holding up Gabe's illustration of a hawkmoth camouflaged against the bark of a tree]. Those of you who are having difficulty with your illustrations may want to ask Gabe for help with color.*

Indirect support took the form of partnering students so that they could serve as peer supports.

In preparing the general education students for their new class members, the teacher was

straightforward with them about differences in learning style and strengths. Despite initial preparation of the students in the general education class, some seemed skeptical about Erica and Gabe joining their class. Initially, some of the students seemed to exclude Erica and Gabe from conversations and from participating in activities. To more fully support the participation of Erica and Gabe, the teacher identified specific peer partners for them. Based on Erica's and Gabe's strengths and needs, she identified peers who she believed would be able to support them socially and academically. Interestingly, the selected partners did not remain in this role because it was soon apparent that Erica and Gabe were drawn to other peers. The teacher encouraged Erica and Gabe to work with the peers to whom they were drawn, viewing their social initiations as opportunities to build a more natural support system.

In addition to recognizing Gabe's and Erica's strengths (e.g., facility with the computer, visual strengths), the teacher took advantage of every opportunity to place Erica and Gabe in helping roles. She paired them with peers who needed help and who would benefit from their help on the research project. At the end of this study, Erica and Gabe both expressed that they enjoyed working with peers in the capacity of receiver and provider of help. Their peers also talked about helping and being helped as positive experiences.

#### Discussion

The overall purpose of this qualitative study was to (a) explore the experiences of two students with disabilities in an inclusive activity in a general education classroom, and (b) identify variables that contributed to positive learning experiences and outcomes. Discussion of the findings will be organized according to the three central research questions: How did the students with disabilities experience the instructional demands of a general education classroom? How did the students with disabilities experience their peers without disabilities in a general education classroom? What supports can a teacher provide in the general education classroom to facilitate successful inclusion?

*Students' Experiences and Responses to Instructional Demands*

Initially Erica and Gabe had difficulty meeting the instructional demands of the general education classroom as it required facility with academic skills such as reading and writing. Additionally, language and communication were important as the curriculum drew from class discourse on topics of animal survival and interdependence. Both students were observed to have difficulty and conveyed frustration with meeting academic demands. Specifically, Gabe expressed having a hard time with reading and writing. Erica made statements about peers not listening or not giving her opportunities to share ideas. At first, Erica's and Gabe's limited participation revealed that they were not contributing to conversations. Both either reiterated what had already been stated or were unable to convey complete ideas. Despite these difficulties both students persisted and this contributed to their success.

Over time, the students' observation of and interaction with their peers in classroom activity supported their ability to better meet instructional demands. This finding is supported by Vygotsky's (1978) assertions that language leads development; learning occurs first at the social level before becoming internalized by the individual. Erica and Gabe watched, listened, and emulated the classroom teacher and their peers. For example, patterns of speech were modeled by the teacher and by peers and then used by Erica and Gabe. There were not only more attempts made by the Erica and Gabe to participate, but there were also changes in the types of statements and questions posed by both participants. Ideas were more completely expressed and interrogatives were used more appropriately. Examples of Erica's and Gabe's progress were revealed through their participation in classroom discourse and in their development of products. As Gabe and Erica's participation and conversation increased, so did their knowledge base and ability to cope with the instructional demands.

Results suggested that the curriculum itself promoted opportunities for interaction as students recognized links between individually researched topics and topics researched by other students. The group instructional arrangement may have created a ZPD, with some students modeling various levels of

competence and/or serving as coaches for others. This promoted success and facilitated peer interaction. During Phase One, individual student work was situated within a larger curricular context, thus providing links within the curriculum. The structure of Phase Two of FCL incorporated peer collaboration through classroom activity that focused on team processes such as jigsaw, again linking smaller topics to the broader topic of the lesson.

Although the potential to support students academically was inherent to FCL, maximizing opportunities for students' participation and growth was directly affected by the classroom teacher's explicit instruction. The difficulties that Erica and Gabe encountered when their inclusive experience began suggest that additional supports may have been beneficial to them. Perhaps explicit and direct forms of support could be provided to students to increase their use of strategies so that they would not only persist but use alternative approaches to (a) address difficult content as well as (b) engage others.

#### *Students' Experiences With Peers Without Disabilities*

Erica and Gabe were both challenged by entering another classroom with 'visitor' status. They needed to develop familiarity with their peers and establish themselves as valued members of a classroom community. Peers initially did not seem to perceive Erica and Gabe as being viable contributors to the group process. Some of the responses to Erica and Gabe by peers included ignoring and excluding them from activities. Over time, there was a shift in Erica's and Gabe's engagement in their groups and acceptance by their peers.

In addition to struggling with the content when they entered the inclusive setting, Gabe and Erica also had difficulty working in groups. The group activity required peer engagement and interaction, and gradually both learned to participate effectively. Grouping students in clusters (physical arrangement) facilitated interaction. Also, throughout the FCL project, the classroom teacher regrouped students, and this allowed Erica and Gabe to interact with a number of different peers. Time for familiarization with peers through in-class opportunities as well as during unstructured periods such as

lunch and recess further supported the development of relationships. Social relationships seemed to support working partnerships and productivity in the classroom. Self-selection for group membership was also permitted and occurred after personal relationships had been established with particular students.

Erica's and Gabe's roles changed over time as they became much more effective at soliciting help as well as providing help to their peers. Direct support provided by peers included assisting Erica and Gabe with areas such as writing and reading. Initially, the classroom teacher was instrumental in encouraging this support; however, over time, helping behaviors by peers were more spontaneous and unsolicited. An important outcome was the mutual reciprocity observed between participants and their peers. Both participants and peers experienced dual roles (e.g., person assisting and person being assisted).

Important events that contributed to positive peer interactions included the classroom teacher providing students with opportunities to familiarize themselves with peers. What appeared to be off-task socializing resulted in students developing stronger working relationships. Flexible groupings (e.g., rotating peer partners and team members) provided Erica and Gabe with opportunities to work with more individuals in the class. Consequently, these opportunities provided students with exposure to individuals' different working styles and proficiencies. Use and refinement of interpersonal skills were embedded within the academic curriculum; however, the teacher's decision to capitalize upon the group process through problem-solving and feedback on an ongoing basis further promoted positive relationships.

#### *Teacher Support Facilitating Inclusion*

This last aspect, teacher support, was key to Erica and Gabe's success. Although this aspect is reflected in the former two areas (instructional demands and peer interaction), there were specific teaching decisions that affected Erica and Gabe's experience in the general education classroom. The

teacher (a) included the use of instructional strategies and progressive techniques in structuring learning experiences, (b) was responsive to student's learning needs and had provided direct support to individual students, and (c) prioritized and promoted a classroom climate of equity.

Instructional strategies used by the classroom teacher supported students' academic growth. The classroom teacher emphasized the learning process and explicitly taught the connections between academic activities. For example, information discussed by students during reciprocal teaching sessions was further expounded upon during the science research period. One of the structured periods, reciprocal teaching, provided students with exposure to language arts strategies, which supported reading comprehension, independent self-monitoring skills, and the ability to participate in academic discourse. The teacher also guided students toward seeing the 'bigger picture' of overarching themes by linking concepts and ideas that individual students had raised during class discussions. The effectiveness of this strategy was evidenced in Erica and Gabe's verbal responses and written work that revealed conceptual changes over time.

One example of the teacher's incorporation of progressive techniques was her use of smaller paired-student arrangements in preparation for more involved small group work, which required negotiation and engagement among four to six students. A second example was that the teacher allowed for social conflicts to be addressed as they related to students' educational progress. An approach that she used supportive of the group process was feedback sessions, short five to ten minute blocks of time at the end of the work period, dedicated to students talking about what was working and not working for them. Issues that arose during the early phases of FCL included addressing different work habits and whether the group was cohering or not, interpersonal differences that prevented students' productivity, and environmental needs such as need for a quieter classroom environment. Students' feedback during earlier sessions of FCL was predominantly focused on social and interpersonal issues. Over time, students continued to talk about social dynamics but in relation to how help provided

and help received supported their work efforts. Both Gabe and Erica contributed to feedback and were involved in the group process. Another value for the feedback sessions was that the nature of discussion shifted over time from a focus on interpersonal problems to discussion on academic content.

The second aspect, the teacher's ability to respond to student's learning needs, was evident in the direct support that she provided to Erica and Gabe. Support provided to students with disabilities have been purported to benefit their peers without disabilities as well (Vaughn, Gersten, & Chard, 2000). Consistent with these kinds of findings, the support provided to Erica and Gabe also had positive effects on other students in the class who were struggling and not identified with special needs. For example, the framework for discussion on topics such as, predator/prey relationships, or protection from elements, was supported by the teacher as she had students generate questions relevant to these topics. She assisted students by having them categorize types of questions. This guided students in how they framed relevant questions as well as in the sequence of questions that were presented (e.g., connections in content from one question to the next). The teacher's modeling of how to frame a question was reflected in students' use of grammatical patterns as they generated additional questions (e.g., questions that began with the same interrogative and questions that were related in content). Erica and Gabe benefited from the teacher's explicit and direct support in language as this was one area in which they both struggled.

The last aspect, classroom climate and equity among students, was especially vital to supporting the core tenets of inclusion. Establishing a climate that genuinely valued students' different propensities was important to achieve, and there was evidence that this classroom teacher addressed this on an ongoing basis. Although the teacher specifically addressed issues of membership for Erica and Gabe as newcomers to the class, her actions and verbal responses were geared toward the class as a whole in terms of how students were to work together, problem-solve, and share responsibilities. The teacher clearly conveyed a sense of equity in the classroom through recognition of students' needs and

importantly, their skills and strengths. She referred students to each other and had students solicit help from their peers rather than seeking adult assistance. Referring a student to another student for assistance was done 'authentically.' For example, the teacher referred students who were struggling with word processing to the student whose strength was operating computers. The teacher thoughtfully paired students with objectives of addressing the academic task as well as fully utilizing students' skills and talents. Capitalizing upon opportunities to recognize student's strengths and have those skills and talents put to use reinforced individuals and strengthened the classroom community.

In summary, inclusion will not successfully occur by simply having students with disabilities present in general education classrooms. In making decisions about how to structure learning experiences, classroom teachers must carefully orchestrate social and curricular access for all students. Incorporation of instructional strategies that lead students toward becoming independent and strategic learners are essential in supporting students with disabilities so that they not only are exposed to the general education curriculum but also benefit from instruction (Gersten, 1998; Polloway, Patton, & Serna, 2005). From the experiences of the children in this study, it appears that selecting and incorporating techniques that promote positive reciprocal peer relationships is essential to supporting students' engagement in academic activity.

#### *Implications for Future Research*

Students with disabilities need to have knowledge and skills, both academic and interpersonal, in order to successfully navigate the challenges faced in a general education classroom. The experiences of the children in this study indicate that the type of social and academic support provided by their teacher was effective. Future research could further examine the relative effectiveness of these methods and others in supporting students with disabilities in inclusive settings. However, researchers must keep in mind that interventions need to be pragmatic so that classroom teachers can easily implement procedures as part of their instruction. One area that can be addressed is related to the

social processes that are central to educational approaches such as FCL. Cooperative learning, capitalizing upon students as resources for each other, is a technique that has been recognized to be valuable for classes comprised of students with diverse needs and talents. It also a technique recognized to support inclusive education (Stainback, Stainback, & Stefanich, 1996). Further investigation into the best methods for facilitating peer collaboration, therefore, could have both social and academic implications.

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