Reverse Inclusion:
Providing Peer Social Interaction Opportunities to Students Placed in Self-Contained Special Education Classrooms

Kimberly D. Schoger

Reverse Inclusion:
Providing Peer Social Interaction Opportunities to Students Placed in Self-Contained Special Education Classrooms

Kimberly D. Schoger

Abstract

The social and academic benefits of inclusion for students with disabilities have been well researched and well documented. Unfortunately, inclusion opportunities are limited by lack of qualified staff, logistics, scheduling and other difficulties encountered when attempting to meet students' unique needs in the general education setting. As a result of these difficulties, many students with disabilities are served in segregated self-contained classrooms that offer few opportunities for interaction with same-aged peers served in the general education classroom. A special education teacher attempted a unique program of reverse inclusion to bring social interaction opportunities to the students with disabilities. Three students with special needs were chosen to participate in the Reverse Inclusion Program with general education peers. Program goals for these students were identified and monitored. The program proved beneficial to all students.

Keywords

Benefits of inclusion for students with disabilities have been well researched and well documented (Hunt & Goetz, 1997; McDonnell, Thorsen, & Disher, 2003; Renzaglia, Karvonen, Dragsow, & Stoxen, 2003). In addition to academic benefits, Downing, Eichinger, and Williams (1997) pointed out that children with disabilities benefited significantly from inclusion experiences that fostered the development of friendships, enhanced self-respect, and provided peer models. Inclusion with non-disabled peers has been shown to result in increased awareness and responsiveness, increased skill acquisition, gains in communication skills, development of friendships, and an enhanced sense of belonging (Fisher & Meyer, 2002; Burstein, Sears, Wilcoxen, Cabeloo, & Spagna, 2004; Salend & Duhaney, 1999). Alper and Ryndak (1992) noted that I.E.P. objectives became more age-appropriate for students with disabilities who had been integrated into the general education setting. After all, children with disabilities are first and foremost children; children who will benefit from the same experiences that are desirable for all children. In turn, general education students develop respect for others with diverse characteristics and unique abilities; they increase their understanding of other children's needs, and become more comfortable around persons with disabilities (Renzaglia et al., 2003). Most importantly, they learn how to be friends with people who are different from themselves and to value human differences. This in turn prepares them for living and working in a pluralistic society (Alper & Ryndak, 1992).

Unfortunately, inclusion opportunities are sometimes limited by the lack of qualified staff to accompany students to the general education classroom, logistics and scheduling, and the difficulty accommodating students' unique needs in the general education classroom. According to Causton-Theoharis and Malmgren (2005), the involvement of paraprofessionals may be the crucial support that some children with disabilities require to be included in the general education classroom rather than in more restrictive, segregated settings. Nevertheless, due to a shortage of applicants and funding shortcomings, school districts have often failed to allocate adequate numbers of trained paraprofessionals to support the students with disabilities who require support (Scheuermann, Webber, Boutot, & Goodwin, 2003). The end result may be that students who could benefit from inclusion are denied the opportunity because of lack of sufficient and/or qualified staff.

Scheduling students' days so that all of their needs are met successfully can be a daunting task for the special education teacher. Also, the logistics of providing all of the students served in the special education program opportunities for peer interaction can be extremely complicated. In addition, addressing the needs of students with complex learning, physical, and behavioral issues brings challenges the general education teacher may not be prepared to handle. This is especially significant in the upper grade levels of elementary school (grades 3-5) in which structured academic settings are more difficult to adapt to lower functioning children with disabilities. Cullinan, Sabornie, and Crossland (1992) found the waning social interaction opportunities for children with disabilities in the late elementary grades resulted in feelings of loneliness and increased incidences of victimization when compared to that for non-disabled peers.

Despite the efforts of a school district to move toward the inclusion of children with disabilities, it is not unusual for an elementary school to have a self-contained special education classroom that provides services to chil-

dren with several different categories of exceptionality. The self-contained special education classroom as defined by Leinhardt and Pallay (1982) is a homogeneous classroom in which children with disabilities are taught self-help skills and academic subjects. Often called Lifeskills or AA (Alternative Academics), this model of delivery is not always optimal for the students' social/emotional growth (Fisher & Meyer, 2003; Walker & McLaughlin, 1992). A significant percentage of the students in the self-contained setting may be nonverbal, which may inhibit language development for other students. Also, maladaptive behaviors may be modeled by fellow students, and the students do not have the opportunity to develop and maintain meaningful friendships with same-age students. Gresham (1982) stressed the importance of children with disabilities learning appropriate social skills and contended that the success of inclusion students is dependent on their social adaptability. Social skills are chiefly learned through modeling, and students require increased opportunities to model the socially acceptable, age-appropriate behaviors that their general education peers exhibit (Alper & Ryndak, 1992). Strully and Strully (1996) found that friendships between nondisabled children and children with disabilities do not happen spontaneously; they have to be facilitated. Special educators struggle for ways to facilitate the social/emotional growth of their students, while ensuring their students' emotional health, safety, and progress on I.E.P. objectives.

Such was the case for Karen, Adrian, and Sam, three students in a large suburban school district placed in a Lifeskills class in an elementary school. Karen was an 8-year-old girl with cerebral palsy. She was learning to use a power wheelchair and a facilitated communication device, but progress was hindered due to the limited range of motion caused by her severe spasticity. Karen also had several health problems that needed specialized attention throughout the day. Adrian was a 10-year-old boy with autism. His verbal and social skills were improving steadily, but large groups of people terrified him. Previous attempts to integrate Adrian into large groups had resulted in inappropriate and sometimes violent behavior. A third student, Sam was a 6-year-old boy with Down Syndrome. He was verbal, but unintelligible most of the time, and was moderately developmentally delayed. Although Sam was included in a general education kindergarten class for half of his day, his behavior necessitated a paraprofessional be present, and one was not always available. The teacher of these students was well aware that Karen, Adrian, and Sam would benefit from interaction with non-disabled peers who received their instruction in general education classrooms, but due to the lack of staff and the challenges involved in meeting each student's unique needs, full inclusion proved difficult. In Adrian's case, previous attempts at inclusion had been detrimental. The question, therefore, became, "How could the teacher provide positive social interaction opportunities for students served in a more segregated educational placement that might replicate the benefits children with disabilities receive from inclusion with peers in the general education classroom?"

Reverse Inclusion

A unique program, the Reverse Inclusion Program, was developed by the special education teacher. The program's purpose was to provide Karen, Adrian, and Sam with the valuable peer interaction opportunities that they lacked, while providing the support services they required. The Reverse Inclusion

Program involved bringing several general education students out of their classrooms for short periods of time to interact socially with students with disabilities. These interaction opportunities were provided when the students were involved in a wide range of activities conducted in various settings. When developing the model, the teacher knew that program success would depend on: 1) proper recruitment and preparation of students for the program; 2) effective scheduling of interactions; 3) identification and selection of appropriate activities; and 4) the development of measurable program goals. Clearly articulating each element was necessary to assure that success of the Reverse Inclusion Program could be documented and replicated.

The students with disabilities selected for involvement in the program were students receiving educational services in the self-contained AA Classroom at a large metropolitan, elementary school (Karen, Adrian, and Sam). These students were chosen according to the social/emotional goals on their I.E.P.s and the teacher's assessment that they would benefit from the program. The students' I.E.P. goals included specific peer interaction objectives that when met, would ready them for future inclusion experiences. The special education teacher concluded that students chosen would need to have a mode of communication, an ability to follow one-step basic instructions, and an ability to focus on an activity with other students present. These students were also considered good candidates for the Reverse Inclusion Program because they had each experienced difficulty when full inclusion had been attempted previously. Parental permission was obtained for each child.

General education peers were selected through recommendations solicited from grade level, general education teachers. Specifically, the general education teachers were asked to identify reverse inclusion peers who demonstrated an ability to cooperate in group situations, model appropriate social behavior, and accept others' individual differences. Three students from each grade level - Kindergarten, second grade, and fourth grade (to match Karen, Adrian, and Sam's grade levels) - were chosen to be involved in the program. Parental permission was obtained for each child.

The special education teacher met with the students to prepare them for Reverse Inclusion Program participation and familiarize them with the program and the children with whom they would be involved. Perhaps the most difficult part of the process was identifying a schedule in which the students could have uninterrupted time together to interact. The general education teachers did not want their students to miss academic instruction or have reduced time to complete assignments. Therefore, recess times and free-choice periods provided the general education students time to meet three times a week for 30-45 minutes. The fear that students might not want to miss their recess or free time was unfounded. In reality, the students wanted to participate every opportunity they were offered.

Selecting age-appropriate and enjoyable social interaction activities in which the students with disabilities could be successful was the next challenge. The goal was to have students work together equally, rather than having the general education student in the role of facilitator or helper to the student with special needs. In this way, it was hoped that the participants would develop mutually reciprocal friendships. Of course the activities varied for each age level, but adapted art projects, stories with coordinated activities, board games, activity based games, science experiments, music, and cooking were the

most popular activities and seemed to achieve the program goals most successfully. Figure 1 details some of the specific program activities, along with the adaptations made for the students with disabilities and the learning objectives for each activity. While it is not readily apparent from the chart, the setting for activities also varied. The library, music room, playground, motor lab, computer lab, and self-contained classroom all worked well, and were individually determined based on the nature of the activity.

It was also important to develop goals for the program so that success could be monitored and evaluated. Of course, the program was individualized for each child with special needs involved, and each child's I.E.P.

Figure 1. Examples of Activities, Adaptations, and Learning Objectives

Activity	Adaptations	Objectives
Spin Art	Karen operated the paint spinner with a switch while a friend squeezed the paint; Sam needed easy squeeze paint bottles; Adrian needed the procedure depicted in pictures	Taking turns, color identification (Kindergarten), choice making, fine motor skills, sharing results
Making Smoothies	Karen operated the blender with a switch; Sam needed a large-handled knife to cut fruit; Adrian needed the procedure depicted in pictures	Taking turns, choice making, learning new words (ingredients), following directions, measurement
Board Games	Karen used a switch-operated spinner or dice; Sam moved his piece while his friend counted; Adrian used visual cues	Taking turns, learning procedure of game, learning good sportsmanship
Music	Karen controlled the music with a switch and a friend helped her dance	Gross motor movement, fun with friends
Story time and puppet making	Karen "read" part of the story with a previously recorded tape, and chose details for her puppet while a friend put it together; Sam needed adaptive scissors	Listening, discussing story, fine-motor skills, sharing materials
Basketball	Karen operated her own power wheelchair, but her friend helped her catch and throw; Adrian needed to "shadow" another child	Gross motor movement, sports skills, communication between players, good sportsmanship
Science experiment-magnetism	Karen needed a friend to help manipulate objects while she held the magnet	Learn about magnetism; sharing materials; communication between partners; fine motor movement
Circle Time	Karen used a facilitated communication device pre-programmed with appropriate responses; Sam used a communication wallet and sign language; Adrian used visual reminders to stay on task	Learn days of the week, months of the year, seasons, holidays, singing songs, participation in active songs (like Hokey-Pokey)

objectives were considered when implementing the specific activities. The broad goals of the program were:

1. Students will greet group members appropriately.
2. Students will choose activities or parts of activities with appropriate choice-making strategy.
3. Students will take turns.
4. Students will participate in activities and respond appropriately to other members of the group.
5. Students will share materials and request needed materials appropriately.
6. Students will praise peers' accomplishments.
7. Student will say goodbye to group members in an appropriate way.

Benefits

The Reverse Inclusion Program spanned a period of eighteen weeks, and then its effectiveness was evaluated. The three students with disabilities showed remarkable improvement in their appropriate social interaction behaviors. They started to initiate social interactions with not only their reverse inclusion friends, but other peers as well. Also, they evidenced improved participation and communication skills. They began to identify the general education students as their friends. Adrian had the most successful results. He mastered every social/emotional behavioral objective to the level indicated on his I.E.P. After the initial 18 week implementation period, the Admission, Review, or Dismissal (ARD) committee reconvened to adopt new, more advanced objectives for the remainder of the year. The following year, Adrian was able to participate in the general education classroom for P.E. and music classes with few problems. The social skills

he had learned and practiced in the Reverse Inclusion Program gave him the confidence necessary to interact successfully with his peers. Karen's progress was hindered by absences due to illness, but she mastered three of the five social/emotional objectives indicated on her I.E.P. and was steadily meeting performance benchmarks on the other two. The program also proved beneficial to Sam who mastered six out of eight objectives after two semesters in the program.

The general education students reported in interviews that they had learned that just because a student looks or acts differently doesn't mean that they can't be friends and have fun together. In fact, the students sought out the students with disabilities when they were on the playground together, and greeted them with high fives and smiles in the hallways. Unexpected results were reports from parents that the students with disabilities had shared their excitement at home about their new friends. In addition, Adrian and Sam had played with their new friends outside of the school setting, and had been invited to birthday parties by their general education peers.

Challenges

The Reverse Inclusion Program was considered a success, and was implemented as a permanent part of the special education program. Nevertheless, the special education teacher encountered several challenges during the semester. The first was maintaining the program and planning appropriate activities. It was essential to maintain communication with the general education teachers and students to remind them to attend the sessions and reschedule when necessary. As every elementary school teacher knows, flexibility is a must! Sometimes it would seem easier to skip the session, but continuity was one of the

keys to success. Also, time to plan activities was in short supply. The special education teacher was required to tap into the talent and knowledge of the general education teachers, borrow many activities from them, and adapt them to the abilities of the student with special needs.

Another challenge was training the paraprofessionals that were assigned to facilitate the reverse inclusion interactions. This was accomplished through modeling by the special education teacher, reviewing and checking understanding of each lesson's goals, and explaining record keeping techniques so that the paraprofessional could report on accomplishments or trouble areas (see Figure 2 for a record keeping chart for reverse inclusion sessions). The proper handling of inappropriate behavior was also reviewed, although few behavior problems were encountered. The students learned quickly what was expected, and the general education students served as excellent peer role models.

Recommendations

The special education teacher who implemented this program has some suggestions for other teachers who may want to implement the Reverse Inclusion Program in their classrooms. First, make inclusion a priority. Sometimes the mission of educating children with a variety of special needs and unique medical conditions can seem overwhelming. Finding the time to arrange inclusion opportunities and provide lesson plans is very difficult and stretches the available staff thin. Realize, though, that inclusion will benefit students with special needs beyond the level that might be imagined. Not only will inclusion help students meet social/emotional goals, they will bloom! The influence of students having friends and making connections with other children will be felt for years to come.

Another recommendation is to facilitate communication for students who are nonverbal, unintelligible, or inappropriate. For Karen, this meant a dual switch augmentative communication device. For Adrian, it meant visual reminders to decrease audible self-talk, make eye contact, and initiate and maintain conversations, while for Sam it meant a picture wallet or board with picture symbols to help clarify what he needed or wanted. Sam also required the use of sign language until his articulation improved. For many students, communication offers the control over their environment that helps them become more successful and feel more competent.

Lastly, with any program it is important that the participants feel ownership of the program. In the last six weeks of the trial of the Reverse Inclusion Program, the special education teacher began allowing the students to choose the next week's activities and make suggestions for future activities. One of the general education students even had her mother come in to share her doll collection with the group. Tapping into the students' interests also encouraged ownership of the program. Adrian's interest was superheroes, and the rest of the group enjoyed doing several lessons devoted to that topic. Karen loved popular music, and enjoyed sharing her CD collection with the other children. Common interests encouraged communication and friendship. Also, the approach allowed all of the students to show off their talents. Adrian was an amazing artist, Karen loved to choose jokes to tell in funny voices with the computer, and Sam's excellent gross motor skills allowed him to show off his athletic prowess. The reaction from the other students had amazing effects!

Figure 2. Record Keeping Chart for Reverse Inclusion sessions

Reverse Inclusion Record

Student's Name: _____

Date of session: _____

Length of session: _____

Activity: _____

Objective	*Did Not Demonstrate*	*Demonstrated w/ prompt*	*Demonstrated w/o prompt*	*Frequency*
Student will greet group members appropriately.				
Student will choose activities or parts of activities with appropriate choice-making strategy.				
Student will participate in activity.				
Student will take turns.				
Student will respond appropriately to other students when addressed.				
Student will share materials.				
Student will request materials from other students.				
Student will praise other students' accomplishments.				
Student will say goodbye to group members in appropriate way.				

Frequency: **"3": Demonstrated every opportunity**
"2": Demonstrated most opportunities
"1": Demonstrated a few opportunities
"NA": Not Applicable

Comments: _____
_____

Final Reflections

The Reverse Inclusion Program at the elementary school continued into the next year with several more students. The growth that the general education and special education students experienced was not only observed in school, but also by parents at home. The program provided an invaluable setting for the promotion of age-appropriate behaviors and social skills that helped students meet their I.E.P. goals. More importantly, though, students felt empowered by their newly acquired skills and formed friendships that would endure beyond the classroom walls.

References

Alper, S., & Ryndak, D.L. (1992). Educating students with severe handicaps in regular classes. *The Elementary School Journal, 92*(3), 373-387.

Burstein, N., Sears, S., Wilcoxen, A., Cabello, B., & Spagna, M. (2004). Moving toward inclusive practices. *Remedial and Special Education, 25*(2), 104-116.

Causton-Theoharis, J.N., & Malmgren, K.W. (2005). Increasing peer interactions for students with severe disabilities via paraprofessional training. *Exceptional Children, 71*(4), 431-444.

Cullinan, D., Sabornie, E.J., & Crossland, C.L. (1992). Social mainstreaming of mildly handicapped students. *The Elementary School Journal, 92*(3), 339-351.

Downing, J.E., Eichinger, J., & Williams, L.J. (1997). Inclusive education for students with severe disabilities: Comparative view of principals and educators at different levels of implementation. *Remedial and Special Education, 18*, 133-402.

Gresham, F.M. (1982). Misguided mainstreaming: The case for social skills training with handicapped children. *Exceptional Children, 48*, 422-433.

Fisher, M., & Meyer, L.H. (2002). Development and social competence after two years for students in inclusive and self-contained educational programs. *Research and Practice for Persons with Severe Disabilities, 27*, 165-174.

Hunt, P., & Goetz, L. (1997). Research on inclusive educational programs, practices, and outcomes for students with severe disabilities. *Journal of Special Education, 31*, 3-35.

Leinhardt, G., & Pallay, A. (1982) Restrictive educational settings: Exile or haven? *Review of Educational Research, 52*(4), 557-578.

McDonnell, J., Thorson, N., & Disher, S. (2003). The achievement of students with developmental disabilities and their peers without disabilities in inclusive settings: An exploratory study. *Education & Treatment of Children, 26*, 224-236.

Renzaglia, A., Karvonen, M., Drasgow, E., & Stoxen, C.C. (2003). Promoting a lifetime of inclusion. *Focus on Autism and Other Developmental Disabilities, 18*(3), 140-149.

Salend, S.J., & Duhaney, L.M.G. (1999). The impact of inclusion on students with and without disabilities and their educators. *Remedial and Special Education, 20,* 114-126.

Scheuermann, B., Webber, J., Boutot, E.A., & Goodwin, M. (2003). Problems with personnel preparation in autism spectrum disorders. *Focus on Autism & Other Developmental Disabilities, 18*(3)*,* 197-206.

Strully, J.L., & Strully, C. (1996). Friendships as an educational goal: What we have learned and where we are headed. In S. B. Stainback & W. C. Stainback (Eds.), *Inclusion: A guide for educators* (pp. 141-154). Baltimore, MD: Brookes Publishing.

Walker, J.G., & McLaughlin, T.F. (1992). Self-contained versus resource room classroom placement of mildly mentally handicapped children: A review. *Journal of Instructional Psychology, 19*, 214-225.

About the author:

Kimberly Schoger is a doctoral student in the Educational Psychology Department at the University of Houston in Houston, Texas