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## **Social Inclusion of Students with Disabilities in Middle School Physical Education Classes**

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### **Abstract**

The purpose of this study was to describe the social interactions of students with and without disabilities in a general physical education (GPE) program. Participants were a girl with Down syndrome and mental retardation, a boy with severe juvenile scoliosis, and their 16 classmates (9 females, 7 males) without disabilities at a rural middle school. Research method was qualitative case study (Bogdan & Biklen, 1994). Data were gathered with nonparticipant observations, a behavioral coding system, and interviews. We found that students with and without disabilities engaged in mostly positive (e.g., friendly, cooperative) yet infrequent social interactions. Overall findings lend support to inclusive GPE practices.

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By and large, inclusion practice in general physical education (GPE) means educating students with disabilities (mild to severe) using special resources as needed, in safe, successful, and satisfying learning experiences with classmates without disabilities (Block & Vogler, 1994). Scholars have claimed that there are attitudinal, social, and educational benefits to be derived from inclusion practices in GPE for students with and without disabilities (Block, 1998; Sherrill, 1998; Sherrill, Heikinaro-Johansson, & Slininger, 1994). It is often assumed that social interactions between students with and without disabilities in GPE classes are positive and contribute to feelings of acceptance and camaraderie. To date, however, limited research exists that supports this assumption.

Increasingly, scholars have studied the social experiences of students with disabilities in GPE classes. Blinde and McCallister (1998), after interviewing elementary, junior high, and senior high school students with disabilities, reported that some of these students had limited opportunities to participate fully in their GPE classes. Exclusion from class activities led some students to feel like outsiders in their classes and unwelcome by classmates without disabilities.

Along similar lines, Goodwin and Watkinson (2000) studied the experiences of elementary school-age students with physical disabilities in GPE and reported finding a dichotomy in terms of students experiencing

*good days* and *bad days*. To paraphrase, *good days* were described as students with physical disabilities having experiences that were positive (i.e., supportive interactions with classmates and teachers) and meaningful (i.e., those experiences that promoted a sense of belonging, opportunity to share in the benefits of the GPE program, and the opportunity to engage skillfully with classmates). In contrast, students with physical disabilities described their *bad day* experiences as unhappy when they encountered social isolation (i.e., rejected, neglected, or seen as objects of curiosity by their classmates), were perceived as different due to their disability, or had their participation inhibited (i.e., lack of support from teachers, a scarcity of engagement from classmates, constraints imposed by the instructional space, or all three) (Goodwin & Watkinson, 2000, pp. 151-154). Contact theory<sup>1</sup> posits that favorable conditions or *good days* such as those reported by Goodwin and Watkinson would create favorable attitude shifts, while unfavorable conditions (i.e., *bad days*) would create unfavorable attitude shifts.

Further, Goodwin (2001) studied the meaning of help in GPE as perceived by elementary school-aged students with physical disabilities and reported that peer interactions were perceived as self-supporting or self-threatening. More specifically, for students with disabilities assistance from their classmates without disabilities was perceived as either self-supporting (i.e., helpful in terms of assistance with equipment, mobility, and active participation in activities) or self-threatening resulting in a loss of independence, concerns for self-esteem, or restricted participation. Although not conceptually examined in Goodwin's (2001) study, contact theory considers establishing equal-status relationships as important (Slininger, Sherrill, & Jankowski, 2000). Equal-status implies that both students with and without disabilities engage in helping behaviors with one another, rather than only those students without disabilities unilaterally providing help to their classmates with disabilities (Sherrill et al., 1994; Slininger et al., 2000).

Place and Hodge (2001) examined the behaviors of three eighth-grade girls with physical disabilities and their classmates without disabilities in a GPE program at an urban middle school relative to social inclusion. Their findings indicated that students with and without disabilities infrequently engaged in social interactions. Two themes emerged from interviews with the three girls with physical disabilities: (a) *segregated inclusion* (i.e., referred to times when students with disabilities were separated from classmates without disabilities in terms of proximity) and (b) *social isolation* (i.e., referred to group separateness between students with and without disabilities). These girls interacted with each other to a greater degree than with classmates without disabilities.

Today, much is still unknown about the social dynamics of inclusive practices. Thus, the purpose of this case study was to describe the social interactions of students with and without disabilities in a GPE context at a rural middle school. The theoretical framework for this study was contact theory (Allport, 1954). Specifically, we used the *structured contact variables* of contact theory (Slininger et al., 2000) to best understand and explain our findings. Our research objective was to determine what types of (e.g., social talk, hands-on help) and how much social interaction occur between students with and without disabilities in an inclusive GPE setting.

## Methods

### **Research Method**

A qualitative case study approach (Bogdan & Biklen, 1994) was used in this study. According to Patton (1996), case studies are most useful where the researcher(s) seeks to understand a particular group (e.g., students with disabilities), a particular issue, or unique situation in great depth (e.g., social inclusion in GPE classes), and where the researcher(s) can identify cases rich in information. In our case study, the GPE class consisted of a girl with Down syndrome concomitant with mild mental retardation, a boy with juvenile scoliosis, and their 16 classmates without disabilities. The GPE program was not manipulated nor changed to meet the theoretical framework for this study. Rather our purpose was to describe the social interactions of students with disabilities in a GPE setting as they naturally occurred without systematic intervention.

### **Participants**

Participants ( $N = 18$ ) were sixth grade students at a rural middle school in the Midwestern United States (USA). The sampling design was purposeful using the logic of operational construct sampling. Operational

construct sampling means that the researcher(s) samples for exploring real-world examples of the constructs of interest (Patton, 1996). The class under study was judged as an example of inclusive GPE classes found in rural schools across the USA.

More specifically, participants selected were females ( $n = 9$ ) and males ( $n = 7$ ) without disabilities and two students with disabilities. The students with disabilities were Rita (pseudonym), a girl with Down syndrome concomitant with mild mental retardation, and Ben (pseudonym), a boy with juvenile scoliosis (i.e., physical disability). These students were the only students with identified disabilities in this class. All participants met the following criteria to participate in the study: (a) sixth grade student; (b) included in the same GPE class; and (c) had returned a signed consent form from their parent(s) indicating permission to participate.

Rita was a 13-year old Native American girl described by her mother, teachers, and herself as having Down syndrome concomitant with mild mental retardation. Her educational records confirmed this claim. Rita's teachers and mother described her as a very social and outgoing child, who had been included in GPE classes since kindergarten. They stated that "Rita likes to participate in regular physical activities." When interviewed, Rita stated that she "...enjoys running, jumping rope, line soccer, parachute, acrosport, playing volleyball, singing, and especially dancing." In addition, Rita told the lead researcher that she participates in cheerleading and ballet outside of school.

Ben was a 13-year old White American boy, who was described by his teachers and mother as having a physical disability known as juvenile scoliosis. Ben wore a Charleston brace (used for nonweight bearing) to support his back. However, Ben usually did not wear the brace in GPE, as it would inhibit his participation. Ben has also been included in GPE since kindergarten. During his interview, Ben stated that he "loves to play basketball and also likes dodge ball, parachute, relays, flag football, and dancing."

The classes under study were typically team taught by a male and a female teacher, both White Americans. The male was a certified physical education teacher in his first year of teaching. The female was a veteran special education teacher, not certified in physical education, who had also taught Rita and Ben in special education classes in previous years.

### ***Research Site and Setting***

An inclusive sixth grade GPE class at a rural middle school located in a small midwestern town served as the site for the study. Traditional lead-up games, activity stations, and group activities (e.g., kickball, basketball four-square, volleyball) were taught on a daily basis for 53 min. per class session in the spring of the school year. Class sessions followed a routine of students changing into their GPE uniforms in the locker room (~ 3 to 5 min.), warming-up (5 min.), engaging in physical activities (32 to 38 min.), and returning to the locker room to change clothes (5 min.). The boys and girls were routinely separated from each other and engaged in different activities. In such instances, the male teacher taught the boys (including Ben) and the female teacher taught the girls (including Rita). Both teachers utilized the gymnasium or an area outside of the building that had a playing field and blacktop area with basketball goals.

### ***Instrumentation***

The primary data collection method was nonparticipant observations. We also quantified students' social behaviors using the *Analysis of Inclusion Practices in Physical Education* (AIPE) (Hodge, Ammah, Casebolt, LaMaster, & O'Sullivan, 2000) observational system. In addition, the lead researcher interviewed Rita and Ben.

***AIPE Form S.*** The AIPE instrument (Hodge et al., 2000) was used to systematically quantify students' behavioral interactions from randomly selected lessons. Evidence of content validity for AIPE has been reported in terms of (a) representativeness, (b) completeness and accuracy, (c) appropriateness and suitability, and (d) utility of the instrument for measuring students' social behaviors in inclusive GPE (Hodge et al., 2000; Place & Hodge, 2001). AIPE, Form S measures the occurrence of social behaviors across eight categories. The eight categories are (a) initiates or engages in social talk with peer (*T*), (b) models or demonstrates for peer and/or asks peer to model or demonstrate for her/him (*D*), (c) praises peer for effort and/or achievement (*P*), (d) uses

peer's first name (*FN*), (e) gives appropriate feedback to peer (*FB*), (f) gives or asks for hands-on help (*H*), (g) has peer interaction (e.g., gives peer "high five") not covered by specific behaviors (*I*), and (h) makes no interaction (*N*) (Hodge et al., 2000).

The directions for scoring behaviors emitted on AIPE during the designated time allocated is based on frequency recording techniques in which key behaviors are recorded each occasion emitted during a designated time period (Hodge et al., 2000), in this case 53 min. class sessions. The observer watches the targeted student's behaviors and records the data directly on an observation sheet. Data for all categories (key behaviors) are recorded and expressed as frequency of occurrence and percentages of the total observed time per class period (Hodge et al., 2000). For example, if a student without a disability provided feedback to a peer with a disability at any time during the lesson, *FB* (feedback) was recorded. If a student unjustly criticized the performance of a peer with a disability, *FB* was recorded and circled to indicate a behavior that was inappropriate (Hodge et al., 2000). In our study, a measure of occurrence indicated the occurrence and type of appropriate and inappropriate behaviors initiated by peers. Coding occurred live during six randomly selected data collection sessions (i.e., three each for Rita and Ben). Data were coded and eventually analyzed relative to individual interactions of Rita and Ben and their classmates without disabilities.

**Interviews.** The lead researcher interacted informally on several occasions during the four-week period and conducted brief interviews to ask follow-up questions with Rita and Ben. These semistructured interviews (Patton, 1996) were conducted at the end of the four-week data collection period. The independent interview schedules consisted of open-ended questions gleaned from an examination of the observer's field notes. In that way, the interview questions were directly related to what the lead researcher had observed, with the intent to individualize and enhance the relevancy of the questions asked (Patton, 1996). The lead researcher explained to Rita and Ben that their participation was voluntary and that they could withdraw from the interview at any time without prejudice or penalty. Rita's interview was held in the GPE office. Next, Ben was interviewed outside on the bleachers near the basketball courts a few feet away from the class.

### **Procedures**

Data were collected over a four-week period from 20 inclusive 53-min. class sessions. The lead researcher was present at the school and took extensive field notes that focused on behavioral interactions between and among participants with and without disabilities relative to (a) who initiated social and other behavioral contacts, (b) with whom, and (c) what was the nature of such interactions. Notes were taken also with regard to the participants' personalities, lesson context, and unusual occurrences within the GPE classes (Place & Hodge, 2001). While taking these field notes, the lead researcher sat on the bleachers in the gymnasium or moved unobtrusively around the lesson area. Students were informed that she was there to observe their classes as a learning experience. These field notes were later reflected upon by both researchers and analyzed to determine behavioral and contextual patterns (Bogdan & Biklen, 1994).

At the end of the four-week period, the lead researcher conducted and audiotaped interviews with Rita and Ben. The interview tapes were transcribed verbatim and content analyzed (Patton, 1996). To augment these qualitative data, quantitative data were gathered using AIPE, Form S from six randomly drawn 53-min. lessons of the 20 total. That is, we randomly selected three separate lessons *each* for Rita and Ben, representing 30% of all classes taught during the four-week period. The decision to select 30% of all class sessions for quantitative analysis was somewhat arbitrary, but sampling using smaller percentages (e.g., 20 to 25%) of all classes has been used in related research (e.g., Place & Hodge, 2001; Vogler, Koranda, & Romance, 2000). Our strategy allowed us to quantify and analyze behaviors exhibited by students without disabilities toward both Rita and Ben, in separate random class sessions over the duration of a four-week period.

### **Data Analysis and Triangulation**

Data were collected and analyzed using quantitative and qualitative methods. Quantitative analysis involved quantifying students' social behaviors, that is, social interactions derived from the AIPE system were converted to percentages. Qualitative data included nonparticipant observer field notes and descriptive narratives based on themes emerging from Rita and Ben's responses to open-ended (audiotaped) interview questions.

Triangulation (Patton, 1996) was used in combining both quantitative and qualitative data sources to strengthen the analysis and interpretations of the participants' views, behaviors, and contextual events.

## Results

### *Social Interactions of Students*

The following results concern the social behaviors of students with and without disabilities. AIPE results for Rita and Ben's interactions with classmates without disabilities are presented in Figure 1. Specifically in Figure 1, we present the average percentage across randomly drawn lessons (i.e., six separate lessons averaged, three each for Rita and Ben). Percentages do not sum to 100% because some of the behaviors overlapped and/or occurred simultaneously. For example, the specific behavior, *Demonstrate*, can also be recorded simultaneously as *Social Talk*, if the participant was talking and demonstrating at the same time (Hodge et al., 2000).

**Findings Specific to Rita's Behaviors.** Randomly drawn Lesson 1 for Rita included station work: basketball (knockout), four square, and kickball outside on the black top. Student activity at each station lasted approximately five min. and then the students rotated. The female teacher led a kickball game at one of the stations. Rita was not dressed for class that day so the female teacher instructed her to walk laps around the black top area, but Rita did not follow her instructions. For the entire class Rita sat on some benches adjacent the playing area, while singing. From time to time Rita would stand up and dance around by herself. The lead researcher coded Rita's behaviors for that class as no interaction because she did not interact with her classmates at any time. Moreover, the teacher did not appear to adequately attend to Rita's lack of preparedness (i.e., failure to change into her physical education uniform) nor desist her off-task behaviors (Field notes, randomly drawn Lesson 1 for Rita).

Volleyball was the second randomly drawn lesson for Rita and she seemed to really have enjoyed this activity (Field notes, randomly drawn Lesson 2 for Rita). The male teacher appeared to arbitrarily have chosen the teams. Rita was on a team of all females and one male. The teams would rotate to the next net if they won and stayed in place if they lost, there were a total of four courts with nets set up. Throughout the volleyball games Rita was verbal with her classmates. She would talk (19%) to her classmates either about how she was going to hit the ball if it came to her or how she would serve the ball. Several teammates praised (3.7%) Rita for her serves, but retrieved most of the balls hit over the net. When Rita served successfully, the male on her team would say, "Nice serve Rita," and would give her a high five. A few times her classmates would physically go through hitting the ball with her so she was prepared for the next time it came her way. Rita did not hit many balls that came in her direction; rather she would just stand in place. This helps account for the high percentage in no interaction (68%). Rita's name was called (2.8%) when she either needed to hit the ball or help block a ball coming over the net. When she missed the ball a few times, a classmate made criticizing remarks (1%) "Why can't you hit the ball?" Despite such criticism Rita seemed to enjoy volleyball overall, even though she was not that active during the games (Field notes, randomly drawn Lesson 2 for Rita).

The third randomly drawn lesson with Rita was dodge ball, a game she did not like very much. She expressed this concern to the female teacher who was leading that activity for the day. Most of the time Rita's social talk (32.4%) with classmates was unidirectional. For example, she was verbally prompted by a few classmates to "Move to the right, Rita" or "Watch out," when dodging the balls. Her interactions (16.2%) during the activity were often accidental, that is, running into classmates in her efforts to dodge the balls. Rita's percentage of no interaction was 47%, which was partly because she appeared not to have enjoyed playing dodge ball and at times would go off to the side, not interacting with the group (Field notes, randomly drawn Lesson 3 for Rita).

**Findings Specific to Ben's Behaviors.** The male teacher had set up different stations in the gymnasium (Field notes, randomly drawn Lesson 1 for Ben). The stations consisted of handball, scoop ball, jumping rope, scooter races, hula-hoops, and badminton toss with birdie. The male teacher arbitrarily selected small groups to go to a specific station. Students either worked as partners or solo, depending on the activity at that particular station. Station work lasted approximately 5 min before students were instructed to rotate (Field notes, randomly drawn Lesson 1 for Ben).

On several occasions throughout randomly drawn Lesson 1 (17%) the students without disabilities talked to Ben about the activity in which they were engaged. The talk was noted as playful conversation by the researcher. The students also praised (i.e., “Nice catch”) Ben when he made a successful catch during the scoop toss station; in addition, his classmates gave him general (e.g., “That was good, but try it again”) and specific feedback (0.6%) on his jumping skills. This was coded as appropriate behavior because the students without a disability did not criticize Ben; rather this student encouraged Ben to jump again to improve from the first time. One of Ben’s classmates also jumped with him once and physically held his hand (i.e., hands on) so he would know when to jump (Field notes, randomly drawn Lesson 1 for Ben). Ben had opportunities for interaction with the other students in class because he often retrieved balls for other group members and during transitions from one station to the next. Although Ben had opportunities for interaction with his classmates without disabilities, much of the time he did not interact with them. That is, specific to randomly drawn Lesson 1 for Ben, no interaction was calculated at 64% of the observed time.

Moreover, during randomly drawn Lesson 2 for Ben, students' opportunities to engage in social interactions were reduced, to the degree that the male teacher spent a considerable amount of time explaining the tasks and game rules to the students before each activity started (i.e., thereby reducing the time available for interactions). In addition, it appeared that Ben wanted to be alone at certain times for some activities. For example, Ben engaged in the hula-hoop station alone and on the scooters he tended to pull off to the side by himself, he rarely raced with anyone. It did not appear that the male teacher made an attempt to hold Ben accountable for his separateness from classmates or his off-task behaviors (Field notes, randomly drawn Lesson 2). Ben's no interaction behaviors were coded and calculated at 87% for this lesson.

During randomly drawn Lesson 3, the male teacher took the class outside onto the black top. The students engaged in basketball (knockout), four square, and kickball (led by the female teacher). In this lesson Ben had more opportunities for interaction with his classmates compared to randomly drawn Lessons 1 and 2. Furthermore, Ben's social talk (23%) was highest in this lesson compared to randomly drawn Lessons 1 and 2. Ben received praise (i.e., “Nice shot”) (28%), for example, when he made a shot in the basket. A few times throughout the basketball activity, Ben’s classmates called out his name (3.2%), usually when it was his turn or when he made a basket. While Ben played four squares there were a few classmates that helped him (i.e., hands-on) with placing the ball directly in the opponent’s square. Ben’s interaction percentages increased by the third randomly drawn lesson. This could be due to Ben enjoying basketball (his favorite activity, Ben, interview transcription) more so than he did other activities. No interaction was coded at 59% of the observed time for Ben in this lesson. No data were coded as *inappropriate behavior* for Ben.

Overall, Rita and Ben’s classmates exhibited appropriate, yet generally *unidirectional*, behaviors towards them across all observed lessons, including the six randomly drawn lessons for Rita and Ben. Interactions between students with and without disabilities were not consistently reflective of equal status behaviors.

### ***Major Themes from Interviews***

Four themes emerged from field notes and interviews with Rita and Ben: (a) fun and cooperative interaction, (b) friendships, (c) aggressive male classmates without disabilities created feelings of uneasiness, and (d) favorite class. These themes were extracted from content analysis procedures (Patton, 1996) and are summarized below.

In regard to the first theme, fun and cooperative interactions, both Rita and Ben discussed how much fun they had in “PE” class and how their classmates would help them in some activities. Rita and Ben stated that they had “fun” in GPE and that they felt a part of the class because their classmates (without disabilities) helped them when needed. A second theme was that Rita and Ben developed friendships in the class and called some classmates their best friends. A third theme was that both Rita and Ben felt uneasy with some of their male peers without disabilities in this GPE class because these particular boys would play aggressively with them and/or criticize their level of skill while participating in some activities. In these situations these students with disabilities perceive their contacts with classmates without disabilities to be unfavorable (i.e., competitive in nature, tension laden) and as a result they would limit their interactions with such classmates. The fourth theme was that Rita and Ben considered GPE one of their favorite classes. They felt that the GPE class was fun

because of the activities they engaged in, such as volleyball, basketball, and football and because their friends were in this class with them. Overall, three of the four themes indicate that Rita and Ben held favorable attitudes toward being included in GPE with classmates without disabilities. There is the expressed concern of some male classmates playing overtly aggressive or criticizing Rita and Ben for their perceived low motor skill.

## **Discussion**

The purpose of this study was to describe the social interactions of students with and without disabilities in a rural middle school GPE setting. We found that students with and without disabilities engaged in limited social interactions that were mostly positive (e.g., pleasant, friendly, cooperative, respectful, meaningful), but were typically unidirectional. This finding is consistent with previous research (Place & Hodge, 2001) and according to contact theory (Allport, 1954; Slininger et al., 2000), if these students with disabilities perceived their limited contacts with classmates without disabilities as rewarding, meaningful, and cooperative they would develop favorable attitudes toward them.

In terms of social behaviors, observational data revealed that students with and without disabilities engaged in limited, yet mostly positive social interactions. Moreover, although limited in occurrence, structured contact opportunities were pleasant, cooperative, interactive, respectful, and deemed meaningful. That is, when either of the students with disabilities did interact with classmates without disabilities by talking, demonstrating, receiving feedback, and other interactive behaviors, most of these interactions were appropriate, pleasant, and friendly. This supports contact theory, which posits that such structured conditions would tend to impact attitudes and behaviors favorably (Allport, 1954; Sherrill et al., 1994; Slininger et al., 2000).

Inappropriate behavior was documented only once during the observational period relative to Rita and a classmate without disability. In that instance, inappropriate behavior was identified when a student without disabilities was disparaging of Rita and her low motor skill. More prominent, however, were high percentages of no interaction between the students, which might have been due to a number of confounding variables, such as a lack of teacher effectiveness, high transition times, excessive waste of instructional time, and at times lack of interest in the planned activities by Rita and Ben. In one lesson with Rita, for example, the teacher appeared not to adequately address Rita's lack of preparedness (i.e., failure to change into her physical education uniform) for class. Moreover, the teacher did not hold Rita accountable for her actions nor did she find alternative ways to allow Rita to interact with her classmates. For example, although not dressed properly Rita could have monitored stations and served as timekeeper. Based on contact theory, to the degree that structured contacts are not provided, student engagement in pleasant, meaningful, interactive, and focused common goals will likely not occur (Sherrill et al., 1994; Slininger et al., 2000). Moreover, whenever students with disabilities perceive their contacts with classmates without disabilities to be unfavorable (i.e., competitive in nature, tension laden) they will invariably limit their interactions with such classmates (Kunesh, Hasbrook, & Lewthwaite, 1992). In our study at times, students with disabilities felt uneasy with some of their male peers without disabilities because these particular boys would play aggressively with them and/or criticize their level of skill while participating in some activities. In such instances these students with disabilities perceive their contacts with classmates without disabilities to be unfavorable (i.e., competitive in nature, tension laden) and as a result they would limit their interactions with such classmates. Furthermore, teacher-directed structured contacts were not always evident and Rita's lack of effort to engage in interactions with her classmates, at least in one lesson, might have reduced the likelihood of favorable attitudes developing between Rita and her other classmates.

On the other hand, we observed situations where structured contacts occurred in accord with contact theory's structured contact variables. For example, teacher-directed organized volleyball play allowed for frequent interaction, pleasant experiences (e.g., fun and cooperative), focus on common goals (e.g., teamwork at hitting the volleyball over the net), meaningful (friendships developed) and respectful interactions between Rita and her classmates. In other words, structured contacts did occur albeit inconsistently between Rita and her classmates without disabilities during the volleyball unit.

Prior to data collection, the teachers in this study were made aware of the purpose of the research. However, we made no attempt to change or manipulate the environment. It is therefore important to note that the teacher-directed physical activities as presented were not structured specifically to promote social interactions or favorable attitudes toward classmates with disabilities and, in fact, on some occasions may have limited opportunities for students to engage in appropriate and meaningful social behaviors. Furthermore, it is important to note that direct contact does not always create favorable attitudes, which can be attributed to poor planning and/or inadequately structured environments (Donaldson, 1980; Sherrill et al., 1994; Slininger et al., 2000). This appeared to have occurred to some degree in the current study. For example, during randomly drawn Lesson 2 (with Ben), students' opportunities to engage in social interactions were reduced, to the degree that the male teacher spent a considerable amount of time explaining the tasks and game rules to the students before each activity started (i.e., thereby reducing the time available for interactions). He could have increased interactive behavior during this time by allowing Ben and his classmates to demonstrate the stations, in turn holding Ben more accountable for his lack of cooperative participation.

Although there were relatively high percentages of no interaction for both students with disabilities, the interactions that did occur were mostly positive and appropriate. Overall, Ben's classmates exhibited appropriate, yet generally unidirectional, behaviors towards him. Our position is that teachers should encourage and find creative ways to foster equal status relationships between and among students with and without disabilities in GPE contexts. In the current study this was not the case. More research needs to be conducted in this area.

### **Summary and Conclusion**

Importantly, this case study provides insight regarding social interactions of students with and without disabilities. We found that when social interactions did occur between students with and without disabilities within structured physical activities, such interactions were mostly pleasant, friendly, and respectful, deemed meaningful, and focused on common goals. Yet, we do not conclude that these structured activities are the sole reason for the students' favorable interactions. There are other plausible explanations. For example, students' favorable interactions may have been a result of prior contact and familiarity with one another from previous classes. Finally, three of the four themes that emerged in this study suggest that students with disabilities held mostly favorable attitudes toward inclusive physical education and their classmates without disabilities.

In conclusion, our findings lend partial support to contact theory structured contact variables and to social inclusion. That is, our findings provide evidence that generally favorable conditions can lead to positive interactions and an emergence of friendly relationships in GPE contexts for both students with and without disabilities. Future research examining the social inclusion of students with disabilities across various grade levels should take into account the curricular models, teaching methodologies, teaching strategies, and other contextual variables within those inclusive GPE classes studied.

### **References**

- Allport, G. W. (1954). *The nature of prejudice*. Cambridge, MA: Addison-Wesley.
- Amir, Y. (1969). Contact hypothesis in ethnic relations. *Psychological Bulletin*, 71, 319-342.
- Blinde, M. E., & McCallister, G. S. (1998). Listening to the voices of students with physical disabilities. *Journal of Physical Education, Recreation, and Dance*, 69(6), 64-68.
- Block, M. E. (1998). Don't forget about the social aspects of inclusion. *Strategies*, 12(2), 30-34.
- Block, M. E., & Vogler, E. W. (1994). Inclusion in regular physical education: The research base. *Journal of Physical Education, Recreation, and Dance*, 65(1), 40-44.
- Bogdan, R. C., & Biklen, S. K. (1994). *Qualitative research for education: An introduction to theory and methods* (2nd ed.). Needham Heights, MA: Allyn and Bacon.



- Donaldson, J. (1980). Changing attitudes towards handicapped persons: A review of research. *Exceptional Children, 46*, 504-514.
- Goodwin, D. L. (2001). The meaning of help in PE: Perceptions of students with physical disabilities. *Adapted Physical Activity Quarterly, 18*, 289-303.
- Goodwin D. L., & Watkinson, E. J. (2000). Inclusive physical education from the perspective of students with physical disabilities. *Adapted Physical Activity, 17*, 144-160.
- Hodge, S. R., Ammah, J. O. A., Casebolt, K., LaMaster, K., & O'Sullivan, M. (2000). *Analysis of inclusion practice in physical education*. Unpublished observational behavioral instrument. The Ohio State University, Columbus, OH.
- Kunesh, M. A., Hasbrook, C. A., & Lewthwaite, R. (1992). Physical activity socialization: Peer interactions and affective responses among a sample of sixth grade girls. *Sociology of Sport Journal, 9*, 385-396.
- Patton, M. Q. (1996). *Utilization-focused evaluation* (3rd ed.). Thousand Oaks, CA: Sage.
- Place, K., & Hodge, S. R. (2001). Social inclusion of students with physical disabilities in general physical education: A behavioral analysis. *Adapted Physical Activity Quarterly, 18*, 389-404.
- Sherrill, C. (1998). *Adapted physical activity, recreation and sports: Crossdisciplinary and lifespan* (5th ed.). Dubuque, IA: Brown.
- Sherrill, C., Heikinaro-Johansson, P. M. & Slininger, D. (1994). Equal-status relationships in the gym. *Journal of Physical Education, Recreation and Dance, 65*(1), 27-31, 56.
- Slininger, D., Sherrill C., & Jankowski, C. M. (2000). Children's attitudes toward classmates with severe disabilities: Revisiting contact theory. *Adapted Physical Activity Quarterly, 17*, 176-196.
- Vogler, W. E., Koranda, P., & Romance, T. (2000). Including a child with severe cerebral palsy in physical education: A case study. *Adapted Physical Activity Quarterly, 17*(2), 161-175.

**Endnote.**

<sup>1</sup> Contact theory considers equal-status relationships as important and asserts that direct contact between individuals with differences creates positive attitudes when such interactions are frequent, pleasant, meaningful, and of long duration. The direction of attitude change depends mostly on the conditions under which contact has taken place; favorable conditions tend to create positive attitude shifts, while unfavorable conditions tend to create negative attitude shifts. That is, conditions that help foster favorable attitudes provide structured contacts when (a) there is meaningful equal-status interaction, (b) the social environment encourages contact, (c) the contact is pleasant and rewarding (d) interactive experiences are encouraged and (e) contact is friendly, cooperative, and focuses on common goals. These conditions represent contact theory structured contact variables. In contrast, contact theory posits that direct contact does not necessarily lead to favorable attitudes, which can be attributed to poor planning and an inadequately structured or nonstructured setting (Allport, 1954; Amir, 1969; Sherrill et al., 1994; Slininger et al., 2000).

### Figures and Tables

**FIGURE 1.** AIPE Average Percentages of Rita and Ben's Social Behaviors with Classmates without Disabilities Across Six Randomly Drawn Lessons

