Peer Interactions and Friendship Opportunities Between Elementary Students With and Without Autism or Developmental Disability

Zachary Rossetti

Abstract

This article describes a qualitative examination of the interactions between 2 students, 1 with autism and 1 with a developmental disability, and their peers without disabilities in 2 inclusive, public school elementary classrooms in the northeastern United States. Data were collected by naturalistic observation, semi-structured observation, and semi-structured interviews. Examining the quality and quantity of interactions, as well as the facilitating effects of educators, the goal was to identify conditions that support the development of friendship opportunities. The findings indicated that inclusive education and having classmates who accepted them were not enough to result in consistent friendship opportunities for the 2 focal students. Findings included (a) the identification of missed opportunities for educator intervention to support friendship opportunities, and (b) the success of several educator strategies to facilitate friendship opportunities. Implications and considerations to improve conditions to support friendship opportunities in inclusive elementary classrooms are shared.

Key Words: *Autism; developmental disability; peer interaction; friendship; inclusion*

Friendships are vital relationships in all of our lives. Friendships among children and adolescents are defined as reciprocal relationships in which two individuals want to spend time together, share affection, and have fun (Bukowski, Newcomb, & Hartup, 1996). For younger children Buysse (1993) defined friendship as "a dyadic relationship between peers, characterized by repeated interest in spending time or playing together and enjoying the time with each other" (p. 381). Friendships result in greater opportunities for social, emotional, and cognitive development, aiding in the acquisition of interpersonal skills, future social success, and emotional well-being (Newcomb & Bagwell, 1996). In one study it was found that having reciprocal and meaningful peer relationships resulted in positive outcomes in school engagement and general self-esteem (Liem & Martin, 2011). Supporting and examining friendships between students with and without disabil-ities has been a focus of special education in the United States (Meyer, Park, Grenot-Scheyer, Schwartz, & Harry, 1998; Perske, 1988; Strully & Strully, 1985).

Inclusion is an integral component and the practical reality of special education services in public schools in the United States. Recent data indicate that 95% of students with disabilities receiving special education services spend at least a portion of the day in general education class-rooms, and over half (61%) now spend 80% or more of the day in general education classes (U.S. Department of Education, 2013). Proponents of inclusion have stressed that students with and without disabilities benefit socially–and may develop friendships–from interacting together in age-appropriate general education classrooms (Bi-klen, 1992; Jorgensen, Schuh, & Nisbet, 2006; Schnorr, 1990).

The rationale for inclusive education typically includes social interactions and friendships between students with and without disabilities (e.g., Jorgensen, Schuh, & Nisbet, 2006). Inclusion increases social interactions, social contact, social support, and the size of social networks between students with and without disabilities (Bunch & Valeo, 2004; Kennedy, Cushing, & Itkonen, 1997). More time together reduces stigmatization (Goffman, 1963), preserving the potential for friendships. Friendships between students with and without intellectual and developmental disabilities (IDD) are thought to be more prevalent in elementary than in secondary settings (Carter & Hughes, 2005; Staub, 1998). This is in large part due to more inclusion in elementary school where 63.4% of students ages 6 through 11 are educated in general education classes for 80% or more of the day (U.S. Department of Education, 2010). In a study of preschool students with and without developmental disabilities (DD), Dietrich (2005) found that students developed friendships described as qualitatively different from "special friends" due to participation in naturally occurring activities over time in their inclusive classroom. These friendships were mutual and reciprocal, valued by teachers and parents, and manifested by the children seeking each other out and playing together in multiple activities across multiple times of day.

Students with autism spectrum disorders (ASD) are typically perceived to struggle in the area of social interactions and friendship development (Volkmar & Wiesner, 2009). Though the core challenge in autism is social (American Psychiatric Association, 2013), some individuals with autism have reported and shown that they do desire social interactions and friendships despite these difficulties (Bauminger & Kasari, 2000; Calder, Hill, & Pellicano, 2013; Causton-Theoharis, Ashby, & Cosier, 2009; Howard, Cohn, & Orsmond, 2006). However, students with ASD are among those who experience far fewer social invitations and involvement compared to peers with other disabilities (Cadwallader & Wagner, 2002; Wagner, Cadwallader, & Marder, 2003). In one study, researchers found that elementary students with ASD had smaller social networks, less reciprocal and lower quality friendships than neurotypical peers, and some students experienced social isolation (Kasari, Locke, Gulsrud, & Rotheram-Fuller, 2011). In another study, adolescents with ASD experienced lower quality social networks and friendships, as well as loneliness, compared to neurotypical peers (Locke, Ishijima, Kasari, & London, 2010). Analyzing national data, researchers found that young adults with ASD continued to experience social isolation at higher rates than comparison groups with other disabilities (Orsmond, Shattuck, Cooper, Sterzing, & Anderson, 2013).

Friendships may not just happen in inclusive classrooms, especially for students with autism or other DD, without extra efforts by educators (Kluth, 2003). Observing two students with autism in inclusive kindergarten classes, Laushey and Heflin (2000) found that participation in a buddy program elicited more appropriate social skills in the students with autism than the passive proximity approach (depicted as baseline). Thus, simply being included was not enough for social interactions. A promising approach to address this problem of social isolation and lower quality relationships is *friendship facilitation* (Schaffner & Buswell, 1992). Friendship facilitation refers to intentional actions to create or increase *friendship opportunities* by implementing a series of general and/or individualized strategies. Because friendship develops naturally and cannot be forced, friendship opportunities refer to positive and reciprocal peer interactions that may eventually lead to friendship if repeated over time. In a case study of an adolescent boy with Asperger's syndrome, researchers found that his friendship was facilitated by his mother through providing multiple social activities (e.g., playdates) and specific social advice during teachable moments (Howard et al., 2006). In another study children with ASD all had at least one mutual friendship, and researchers documented facilitation of friendships by parents through scheduling play dates, providing social prompting, and initiating contact with the other child's parents (Bauminger & Shulman, 2003). The study included suggestions for ways that teachers may facilitate friendships such as adding friendship to the curriculum, teaching social skills, and informing parents about school friendships.

Friendship facilitation is effective when individualized to each student's strengths, needs, interests, and social context (Rossetti & Goessling, 2010), though some general strategies have been identified as successful. Turnbull, Pereira, and Blue-Banning (1999) describe a facilitation framework based on Schaffner and Buswell's (1992) work that includes a foundation of unconditional

acceptance of the child with disabilities and three general facilitation strategies: (a) creating opportunities for interactions, (b) making interpretations (of the child with disabilities to others), and (c) making accommodations (for the child with disabilities to participate with others). Specific facilitation strategies include identifying potential pairs of students based on shared interests or demonstrations of mutual interest in one another (Bauminger & Shulman, 2003) and "building bridges" between them (Causton-Theoharis & Malmgren, 2005; Rossetti, 2011). Building bridges means individualizing strategies to connect students such as through shared projects (Bauminger & Shuman, 2003), peer tutoring with reciprocal roles (Hart & Whalon, 2011), or other peer support strategies with educator monitoring and modeling (Carter, Asmus, & Moss, 2013). Facilitating friendships may include strategies to help students with autism understand and negotiate social situations (Kluth, 2010) such as the use of visual supports or video modeling (Hart & Whalon, 2011). It may also include strategies to help peers without disabilities learn how best to interact with students with autism or developmental disability (Chadsey & Han, 2005; Hollingsworth & Buysse, 2009). There is a need to further explore strategies that facilitate friendship opportunities between students with and without ASD or DD.

Recognizing the importance of friendships and the potential for educators to facilitate them, this article describes a qualitative examination of the interactions between two students, one with autism and one with a DD, and their peers without disabilities in two inclusive elementary classrooms. I (author) chose elementary schools because of the increased rates of inclusion and the common belief that friendships and friendship opportunities are more prevalent there. Examining not just the quantity but the quality of interactions, as well as the possible facilitating effects of educators, the goal was to identify conditions of inclusive elementary classrooms that support friendship development. The following questions guided this research:

1. What do interactions look like for elementary school students with autism or developmental disability in inclusive classrooms?
2. What conditions of inclusive classrooms facilitate friendship opportunities between students with and without autism or developmental disability?

Method

Setting and Participants

A flyer describing this study was sent to schools across the state, and administrators or teachers could voluntarily nominate classrooms. Public school elementary (K-5) classrooms were nominated and chosen based on these criteria: (1) Classroom has a student who receives special education and related services under the IDEA category of Intellectual Disability, Autism, or Developmental Delay; (2) The student is educated inside the general education class 80% or more of the time. Since I aimed to conduct an in-depth, qualitative study of the interactions, friendship opportunities, and facilitating effects of educators in inclusive classes, convenience sampling to identify two to three classrooms was deemed appropriate.

The settings were an inclusive general education classroom in each of two public elementary schools in one state in the northeastern United States. Study participants included all students enrolled in both classrooms and their educators (classroom teachers, special education teachers, and paraprofessionals). Additionally, I chose one participant in each classroom to serve as a "focal student" (i.e., the one student with autism or DD) which allowed me to examine all of the interactions and possible friendship opportunities for each of these students. See Table 1 for a description of schools (including demographic information), participants, and data collection.

The first setting was a kindergarten classroom at Smith Elementary School (Smith) in a large, urban school district. Jack, who received special education services under the Individuals with Disabilities Education Act (IDEA) category of Autism, was the focal student at Smith. Jack read fluently and possessed advanced math skills. He loved to study maps and read them to adults. Time with maps was the reward in the behavior intervention plan used to help him respond more flexibly to change and to develop delayed gratification with preferred items. He memorized maps and directions, and became visibly distraught when those routes were not exactly followed or when his mother did not park in his favorite parking spots. He sat in the green triangle on the Morning Meeting rug, had a sensory cushion at his desk chair, and liked Buzz Lightyear.

Table 1
Study Settings, Participants, and Data Collection

	Smith Elementary School	Jones Elementary School
Setting		
School size	466 students	290 students
Grades	K-5	PK-4
Classrooms	25	20
Free/Red. Lunch	82%	5%
Students w/ IEPs	43%	17.2%
Racial/Ethnic:		
African American	19%	< 1%
American Indian	1%	< 1%
Asian American	5.6%	2%
Euro. American	13%	96%
Hispanic/Latino	61%	1%
Participants		
Classroom	Kindergarten	First Grade
Class Size	25 students	14 students
Students w/ IEPs	9 students (36%)	4 students (29%)
Focal Student	**Jack** (Euro. American)	**Crosby** (Euro. American)
General Educator	Mrs. Morris	Mrs. Grace
Experience	22 years: 13 years Elem. ESL, 9 years kindergarten	11 years 1st-3rd grades
Special Educator	Mrs. Henley	Mrs. Thomas
Experience	15 years	15+ years
Paraprofessional	Ms. Martinez	Mrs. Reed
Data Collection		
Observations	14	21
Observation Length	30–90 min each	45–75 min each
Observation Time	825 min	1050 min
Interviews	2	2
Interviewees	Two with Mrs. Morris and Mrs. Henley together	One each with Mrs. Grace and Mrs. Thomas

Note: Red. = Reduced; IEP = Individualized Education Program; Euro. = European; Elem. = Elementary; ESL = English as a Second Language

The other setting was a first-grade classroom at Jones Elementary School (Jones) in a small, suburban school district. Crosby, who received special education services under the IDEA category of Developmental Delay, was the focal student at Jones. His special education teacher believed he would eventually be diagnosed with autism, describing him as possessing "significant autistic tendencies." Crosby's teachers believed he had strong academic skills, but they were unsure because difficulties with attention and impulsivity hindered his task completion. He required redirection, especially during writing. He focused on numbers, especially in the date and on clocks. He enjoyed manipulating numbers, and his favorite joke was to write the date one day or year off. His favorite movie was *Finding Nemo* (Gotoh, Lasseter, Walters, Stanton, & Unkrich, 2003), and he liked to count all of the fish on screen. He possessed spontaneous speech, but much of what he spoke at school was scripted based on movie quotes and his repetitive jokes about numbers and dates.

Data Collection

In this study, data were collected by three procedures: naturalistic observation, semi-structured observation, and semi-structured interviews. Adhering to a primary quality indicator for qualitative research (Brantlinger, Jimenez, Klingner, Pugach, & Richardson, 2005), I entered the field to collect data by naturalistic observation of the participants. This procedure yielded descriptive data on the classroom culture, quality of Jack's and Crosby's interactions (content and contexts), and facilitation by educators. I observed primarily in the classroom during academic instruction, snack, and free time, and, for the purpose of triangulation, outside of the classroom during lunch (once at each school) and recess (three at Smith; two at Jones). This study included 35 observations in the two classrooms over a 5-month period during the academic year captured by over 350 pages of descriptive field notes and researcher memos. The duration and total number of observations reflected saturation points with confirmation by the educators.

Additionally, to support the descriptive data on classroom culture, quality of interactions and educator facilitating effects, I catalogued each interaction involving Jack or Crosby when it occurred using the qualitative model of semi-structured observation (Creswell, 2009). This procedure yielded frequency and duration data on the quantity and types of interactions. For each interaction, I noted on a specially designed data sheet (a) who it was with (educator, peer with disability, peer without disability), (b) how long it lasted, and (c) who initiated it (educator, peer with disability, peer without disability, Jack or Crosby). I also noted its (a) content (academic, behavioral, social), (b) its type (request, initiation, prompt, response), and (c) the proximity of the nearest educator (general educator, special educator, paraprofessional, none). See Table 2 for definitions of the components of interactions. Friendship opportunities were operationalized as interactions that were (a) with peers, (b) social in content, and (c) reciprocal (included a response).

The third procedure for data collection was semi-structured interviews. This procedure yielded data on the teachers' perspectives of their classes, the focal students, and friendships among their students. I conducted two interviews with the teachers at each school during their lunch periods (details can be found in Table 1). Teachers in both settings were asked about the focal students' friendships and

Table 2
Definitions for Semi-Structured Observations

Component	Definition
Interaction	Any verbal or nonverbal behavior directed toward another with no longer than 5 s between initiation and response.
Academic interaction	Interactions related to the instructional content or task.
Behavioral interaction	Interactions focused on the observable behavior of at least one interaction partner.
Social interaction	Interactions consisting of a conversational topic or act of companionship.
Request	Asking for something.
Initiation	Starting a new interaction preceded by at least 5 s without an interaction.
Prompt	A verbal reminder or nonverbal cue to do something.
Response	Any verbal or nonverbal behavior responding within 5 s to an initiation.
Educator proximity	A teacher or paraprofessional being within 3 feet (i.e., arm's length) of the student at the time of the interaction.

social interactions, the social climate of their classes, and any strategies they implemented to support friendships. All interviews were recorded and transcribed verbatim with transcription checks completed prior to data analysis.

Data Analysis

Qualitative data analysis was inductive and ongoing, beginning during data collection to allow the analytical framework to systematically narrow during the course of the study (Bogdan & Biklen, 2003). The multi-stage process of data analysis adhered to grounded theory procedures (Creswell, 2013) and included open, axial, and selective coding of descriptive field notes and interview

transcripts. To develop the codebook, a trained undergraduate research assistant (who joined the study after data collection) and I read all data twice to gain familiarity. We then reviewed all of the interviews ($n = 4$) and 20% of the field notes ($n = 7$), giving a description or open code to topics related to the research questions, to those that were frequently repeated, and to those suggesting a unique participant perspective. We proposed codes that "fit the data" (Bogdan & Biklen, 2003), compared across interviews and observations, discussed discrepancies until agreement, and developed a codebook with definitions, examples, and non-examples for all codes. Constant Comparison (Corbin & Strauss, 2008) allowed for the systematic exploration of possible variations in codes until saturation. This process included combining and refining codes, resulting in the reduction of 101 initial codes to 55 codes in the codebook.

To begin the intercoder reliability process, the research assistant and I coded one observation and one interview using the codebook with an intercoder reliability score over 80%. This score was calculated by dividing the number of agreements for each codable unit and specific code chosen by the total number of agreements and disagreements and multiplying by 100. We then recoded the remaining three interviews and 20% of the field notes ($n = 7$) with the codebook. Using Cohen's kappa (Cohen, 1960), which is appropriate in qualitative studies (Creswell, 2013), intercoder reliability was calculated at .836. I (author) coded the remaining field notes in the same manner.

In addition to examining the code frequencies, the axial coding phase resulted in thematic organization of the 55 codes as sub-codes into five conceptual categories based on patterns in the data (see Table 3). I inductively analyzed the data in each category and discussed until consensus with the research assistant and another researcher not involved in this study to confirm the data in each category, identify possible cross-category themes, and explicate the relationships among themes. The selective coding phase included identifying the core theme around which the other categories, concepts, and codes were structured in order to strengthen the schematic framework.

Results

The results of this study indicated that friendships between the focal students and their classmates

Table 3
Codes, Categories, and Frequencies

Code	Category	Frequency (Crosby/Jack)
Prompting (behavioral, academic)	ES	259
Facilitation (social strategy)	ES	109
Asking a question (adult to student)	CC	65
Adult interaction	B	58 (45/13)
No peer interaction	B	56 (44/12)
Collaboration	CC	48
Focus on numbers	SD	48 (45/3)
Peer acceptance	CB	40
Reading	CC	38
No reaction/response to peer	B	37 (27/10)
Smiling	SD	35
Encouragement	CC	32
Understanding	CC	32
Initiation	SD	30
Excitement/yelling	B	30 (24/6)
Asking a question (student to adult)	SD	29
Crying	B	27 (3/24)
Peer acting as adult	CB	26
Joking	SD	25 (18/7)
Peer interaction (reciprocal)	CB	24
Talking to self	SD	24 (17/7)
Focal student interest (not numbers)	SD	22 (20/2)
Social skill difficulties	B	17
Adult modeling	ES	17
Acting "Bossy"	B	15 (0/15)
Peer disapproval	CB	12 (11/1)

Note: ES = Educator Supports; CC = Classroom Context; B= Barrier to friendship, SD = Student Description; CB = Classmate Behavior.

were difficult to achieve, even in inclusive classrooms at the elementary level. The thematic findings will be reported in response to the two research questions. First, regarding the focal students' interactions, Jack and Crosby remained on the social periphery of their classrooms. Analysis yielded examples of problematic patterns of interaction with classmates and resultant signs

of stigmatization. Second, regarding the conditions of inclusive elementary classrooms that facilitate friendship opportunities, educators in each classroom demonstrated (a) general inclusive practices and (b) effective strategies for facilitating friendship opportunities.

On the Social Periphery

Despite being in inclusive settings at the elementary level where friendships are thought to be easier and more prevalent, friendship opportunities for the focal students occurred infrequently across all observations. In short, Jack and Crosby remained on the social periphery of their classes, at risk for social isolation. Why did this happen? They each experienced *problematic patterns* of social interactions with their classmates that resulted in early signs of *social stigmatization*.

Problematic patterns. The problematic patterns were ongoing interactions that made the possibility of consistent friendship opportunities more difficult to achieve. In fact, these patterns took the place of friendship opportunities. They included (1) limited contact with classmates, (2) squandered interactions, and (3) stalled interactions.

Jack and Crosby each experienced *limited contact with their classmates* because they tended to interact with adults. At Smith, over two thirds (68.1%) of Jack's 144 interactions were with adults. At Jones, over three fourths (75.8%) of Crosby's 384 interactions were with adults. The paraprofessionals routinely sat or stood within arm's length proximity. Though Jack did not often seek adult interaction, the educators often responded to his frustration or crying with short prompts; almost all (99.3%) of his adult interactions were under 30 s. Quite differently, Crosby actively gravitated toward and sought out adults; a majority (73.8%) of his *initiated* interactions was with adults. Although many of these interactions were in the academic context and thus reflected instructional supports, almost half (48.8%) of Jack's and over half (66.1%) of Crosby's *social* interactions with *classmates* occurred in the absence of educators.

Though over half (56.4%) of Jack's *initiated* interactions were with peers, many were *academic* or *behavioral*, revolving around Jack's interests and resulting in him acting bossy toward classmates about what he wanted to have or needed to happen. On a daily basis Jack called out to teachers about his classmates (e.g., "I want to be first!"; "She has my ball!") and yelled directly at them (e.g., "Why are you at our table?"; "You

can't do that!"). Jack's *social* interactions tended to occur with one particular student, David, but he focused exclusively on him to the point his teachers joked that he "stalked him." Mrs. Morris explained that this intense focus strained their relationship:

> David is very nice and very good to him, but, like one day I could see and I asked him, "Is he starting to bother you a little?" He said, "A little bit." Because he follows him around, asks to sit near him, but David is very good with him and he doesn't try to get away from him. He might quietly move away, but he accepts it.

Though they played at recess most days, Jack tended to be most bossy with David and did not seem to outwardly notice when David became upset about it.

Crosby similarly focused on his interests, especially related to numbers. He typically spoke aloud about what he was doing, often not to anyone in particular, or sought out adults. Mrs. Grace interpreted this as Crosby struggling to interact socially:

> When I see kids coming in for recess and they are talking about what happened at recess, Crosby won't be a part of that….Maybe it will become natural for him, but I think for other kids they will, like, naturally go to lunch together and sit together and it won't be like an effort will have to be made for that.

Crosby was bright, active, and talkative, though he did not often initiate interactions with others. Of all of his interactions, 73.39% were *initiated* by educators or classmates.

Squandered interactions occurred daily across settings. These were quick greetings and social initiations from classmates to which Jack and Crosby did not outwardly respond and that went unnoticed by their teachers. Following are some typical examples. At recess one of Jack's male classmates smiled and wrapped his arms around him in a friendly bear hug. Jack slowed enough to allow it, but kept walking past him without any outwardly apparent reaction. Another example occurred during free time in class when Jack drew a treasure map, speaking to himself, "X marks the spot." David asked "What treasure is buried there?" Jack did not look up, repeating more

softly, "X marks the spot." David walked away, joining a pair of boys to the right.

Crosby experienced similar squandered interactions at Jones. One day at recess he ran around the playground making car sounds and timing himself with a timer. One girl in a group of classmates raised her arm in his path as if hoping for a high-five or wanting to stop him. He ran past her without any outwardly apparent acknowledgement. Another day, a female classmate, Kaya, handed out the writing folders and said, "Crosby, Crosby, here's yours!" She handed it to him smiling, and he took it without any outwardly apparent response. She paused and then moved on. The squandered interactions transpired quickly but were clear and discrete social opportunities that ended without responses from Jack and Crosby and the lack of wait time from classmates.

Stalled interactions occurred predominantly at Jones with Crosby. These were a series of social situations during lessons with paired work in which interactions between Crosby and his partner slowed and, without educator intervention, eventually ceased. One example occurred during a writing lesson in which Kaya asked him to read her paper after Mrs. Reed (Crosby's paraprofessional) prompted her to do so. He read the date as February 26th, though it was the 27th. She replied, "No, it's the 27th." He said it was the 26th, and she responded, "No, it's not." This repeated again, and then she took her paper back and walked away. Another day, Crosby and his partner, Haley, looked at animal picture books to find characters for their math game. Haley asked, "What animals do you want?" Crosby replied, "Froggies." Haley, holding a book about penguins suggested, "Penguins. You like that." Then Crosby repeated several times, "Four kittens and four froggies." Haley seemed bewildered and/or resistant. She asked, "What about doggies?" Crosby *repeated*, "Four doggies," but then *responded*, "Four kittens and four froggies." They each looked at their books separately. A female classmate asked, "Are you done?" Haley responded, "I don't know. Kind of. Crosby is kind of crazy right now." Crosby moved to the corner looking at a book, and the girls left to show Mrs. Grace their games. Haley turned back and said, "Crosby, you can look at some books now." During stalled interactions, which were longer than squandered interactions, there were multiple opportunities for intervention to support students to understand the other and interact more

effectively. Without that support, the stalled interactions resulted in Crosby's classmates typically walking away from him to interact more smoothly with others.

Social stigmatization. The entrenchment of these problematic patterns of interactions over time resulted in early signs of social stigmatization. These signs themselves became routinized as part of the problematic patterns, manifesting the challenge of friendship even in these inclusive elementary classrooms. At Smith, Jack's classmates accepted him, but they *no longer sought him out socially*. Mrs. Morris described,

> I don't think they stay away from him, but I don't think they gravitate either. I think if they brush up against him or end up in his space they are fine about it, but they don't seek him out.

Both teachers described that Jack's classmates decreased initiations with him during the year. Even David's interactions with Jack decreased, as he avoided him during recess and free time.

At Jones, Crosby's classmates, especially the girls, interacted with him *as if they were teachers rather than peers*. On multiple occasions he was shushed, redirected, or given a disapproving look by them in ways that they did not use with others. During positive interactions, Crosby's classmates helped him during lessons, but it looked and sounded as if they were adults compared to their interactions with other classmates. Mrs. Thomas described the interactions: "They tend to, like, mother him a little bit. They will go over and talk to him. They try to get him to play on the playground. So yeah, I would say they are his friends." Mrs. Grace described the nature of these relationships:

> I see Crosby having a few kids who might take him under their wing, especially with helping him out and playing games, too, sometimes. It's not as natural as with other friends they have, but they know it's something he needs, and they're in this classroom to help him with that, like they have a role to play for Crosby.

These interactions did not match definitions of friendship (i.e., reciprocal relationships with repeated interest in playing together); they were inconsistent and hierarchical with his classmates acting as his educators did.

General Inclusive Practices

Transitioning from the first to the second research question, the educators in each classroom demonstrated effectiveness in several general inclusive practices. The findings reported in this section do not reflect an exhaustive list of inclusive practices. Rather, they are tied to the analysis and code frequencies as defining characteristics of each inclusive classroom. They are shared to describe the context of the students' interactions.

Collaboration in co-teaching. The teachers in the current study worked very well together. They operated smoothly and efficiently. They helped each other and were flexible, focusing on what they thought was best for students. Mrs. Morris explained:

> You'd think we have been working together for years, but we just met this year. We just clicked from the start. Usually inclusion doesn't work. When one person teaches, the other leaves and they don't get along and they do different things. Not with us. It feels like we have known each other and been together for years.

The collaborative partnership at Jones similarly blossomed during their first year of collaboration. So, why and how did these teachers collaborate so successfully? Key components that stood out included (1) general educators' recognition of the special educators' strengths, and (2) a shared focus on teaching all students.

The *recognition of strengths* and resultant excitement about working together went both ways, but each general educator stressed how impressed she was with her special education co-teacher. First, Mrs. Morris' perceptions:

> It's been a great connection. This is my first experience with inclusion, and Mrs. Henley has been an amazing support. She knows lots of things. I never taught special education. However, you always have kids with special needs in your room and you just go forward. She has taught me a lot and helped me a lot. Sometimes when she's not here I think, "Oh, what would Mrs. Henley do?!"

Mrs. Grace similarly raved about her co-teacher's skills:

> Mrs. Thomas, I don't know how she does all that she does in the hours of the day that we have. She must stay up until three in the morning! It's incredible. I mean, I figured a lot of work went into it, but she's fantastic. She's full of resources, and these kids are really getting a lot – A LOT! – of service from her.

Recognizing these strengths raised the quality of their collaborative partnerships and inspired the general educators to improve their own practices. Mrs. Morris cherished learning about positive behavior supports from Mrs. Henley and implemented them in her teaching. Mrs. Grace improved her lesson plans by considering Crosby, as well as finishing them earlier. She embraced this responsibility: "I knew I had to change my own teaching to be more organized and to get plans ready for the special educator, which I thought, 'Well, that could only help me and could only make me more organized!'"

The second component of their collaborative partnerships was that the educators in each room took *ownership of all students*. Mrs. Henley and Mrs. Morris each saw herself as teaching all students as Mrs. Henley described: "We each have our own jobs and specific subject areas to teach. We work together to plan lessons and activities, and watch for each other's students." They each taught whole class and intervention lessons and attended meetings for all of their students. At Jones, Mrs. Grace frequently taught and interacted with Crosby (and others with disabilities). This emphasis on all of her students was evidenced by her appreciation for their progress: "I just get so excited about the littlest things. Like today when Crosby was doing some work much more independently than what I expected I ran around trying to find Mrs. Thomas to show her!"

Class culture. The educators in each setting intentionally and actively worked to establish welcoming environments in which all students were valued. Based on their camaraderie and sense of togetherness, these two classes acted as *family units*. Mrs. Grace described her perceptions of this:

> I love first grade! It's like I have 14 children of my own in here. It's one big family to me. They call me mom all the time, and I'm sure Mrs. Thomas gets that as well, but just because they feel so comfortable in here.

The teachers at Smith typically prompted students in conflict to remember that, "We are a

family in here!" The general rule – explicitly at Smith, implicitly at Jones – stated that students did not need to be friends with each classmate but they were to treat each other with respect. As such, the educators consistently stated that their classes were filled with "very caring kids."

In this family-oriented class culture *all students belonged* as they were. Each student filled a valued role in these classrooms, as Mrs. Henley described:

> The kids are very accepting. When Jack has his outbursts or a meltdown on the rug, they sit there quietly, and they seem concerned and give him time to calm down. They know what he is like so it doesn't bother them. They don't like to see him upset, and when he calmed down they allowed him to take the next turn.

This example reveals not just acceptance, but an understanding based on shared time together. At Jones, when Crosby led Morning Meeting he laughed, clearly excited to engage with lots of numbers (i.e., the date, number of school days). He changed the date so it was one off. When a classmate complained, "He's not doing it right," Mrs. Grace, in a demonstration of flexibility, explained, "He doesn't need to. It's okay." Another classmate added emphasis on acceptance and understanding, saying, "He's just Crosby."

Facilitating Friendship Opportunities

Also in response to the second research question, the educators explicitly focused on peer interactions in their teaching. Although the infrequent friendship opportunities were due, in part, to missed opportunities for intervention during the squandered and stalled interactions, the teachers also demonstrated several effective strategies for facilitating them. At Smith, recognizing that the kindergarteners were still learning how to be students and because they valued the social interactions and social-emotional learning among the students, Mrs. Morris and Mrs. Henley intentionally maximized opportunities for student social engagement. By making time for partner reading, play centers, free time, and recess, they created opportunities for interactions among all students. Jack's *social* interactions took place primarily during these times.

At Jones, Mrs. Thomas facilitated friendship opportunities for Crosby with two exemplar strategies. First, she consistently supported him to practice needed social skills by role playing specific social interactions that naturally occurred in the classroom:

> I have a book and it shows him how to ask someone to play a game. I'll go through the scripting and I show him the right and wrong way to get someone's attention. You get a game, go up to the person, tap them on the shoulder, say their name, "Would you like to play?" and then you wait for them to say yes or no.

Mrs. Thomas discussed notable improvement in these skills during the school year.

The second strategy included visual supports and a structured routine to ask a classmate to sit with him at lunch. With a prompt (i.e., pointing) from Mrs. Thomas, Crosby retrieved the clipboard with pictures of his classmates and the script to ask one of them to lunch. Mrs. Thomas also provided conversational cues to use during lunch:

> I noticed that he was just sitting there without talking so we do the basket questions at lunch and during the mornings as a way to help start talking about something he knows about or is interested in. It's a prompt without me needing to be there….At snack time he'll be perfectly happy to sit and eat on his own and not interact with anybody so now we pass the basket around so that he has to pick a question and ask the person next to him and then the person in front of him would ask him in that way, so you know, it forces the conversation.

His peers enjoyed the basket of questions as much as Crosby enjoyed and needed them. Crosby's longest *social* interactions *with classmates* were at lunch with these supports.

Discussion

The goals of this study were to examine the quality and quantity of interactions that occurred in two inclusive elementary classrooms and to explore conditions of inclusive classrooms that support friendship opportunities. The findings indicated that friendship opportunities occurred infrequently for Jack and Crosby despite inclusive education, skilled educators, and caring classmates. This alone emphasizes the immense challenge of supporting

friendships. The fact that the settings were elementary classrooms where such relationships are typically presumed to be easier and more prevalent reveals a more pressing concern. The findings from this study contribute to and extend the literature by helping us to understand the true challenge of friendship. Implications of these findings include considerations for supporting students and facilitating friendships between students with and without autism or developmental delay.

First, *inclusive education alone is not enough*. Inclusion refers practically to students with disabilities being placed full-time in general education classrooms where they receive special education and related services, participate in all instructional and social activities with their classmates, and make progress in the general education curriculum (Jorgensen et al., 2006). Both classrooms met this definition, yet Jack's one relationship became unilateral and strained while Crosby did not have a friend. Inclusive education maximized opportunities for interactions, but it was not enough to ensure that the potential translated into friendship opportunities.

Second, *acceptance of students with disabilities is just the beginning*. Similar to students in the Calder et al., (2013) study, Jack and Crosby were on the social periphery, but they were not actively rejected. All of the educators in this study remarked at how caring and accepting Jack's and Crosby's classmates were. The classmates were flexible with Jack's and Crosby's disruptive behavior and unique interactions. However, due to the eventual patterns of their interactions with Jack or Crosby, they also learned to view them differently than their other classmates. Jack's classmates decreased initiating social interactions with him, and David began to show signs of not enjoying the relationship or being Jack's only friend. Crosby's classmates acted as if they were adults, consistently filling the role of helper but not a peer. The acceptance was a positive foundation for future friendship opportunities, but the problematic patterns needed disruption prior to stigmatization as not a possible friend. If their classmates viewed Jack and Crosby as potential friends (i.e., peers) then they may have felt more comfortable to voice occasional frustration with them. Though conflict and conflict management typically manifest in early adolescent friendships (Berndt, 1996), minor disagreements occurred among their peers.

The shared humanity that leads to belonging and friendship includes disagreement, not just helping and benevolence.

Third, *examining the quality of student interactions* helps maintain a focus on friendship opportunities, not just peer interaction opportunities. The quantity of peer interactions alone does not tell the entire story and may result in the illusion of friendship. Crosby experienced some positive peer interactions, which his teachers called friendship, but they tended to be one-sided, helping interactions. Other researchers have emphasized distinguishing between helping or tutorial roles/relationships and friendships (Staub, Schwartz, Gallucci, & Peck, 1994; Turnbull, Blue-Banning, & Pereira, 2000). Likewise, examining the deteriorating quality of interactions between Jack and David may have supported their friendship. In addition to avoiding the illusion of friendship, examining the quality of interactions is useful to identify specific, needs-based strategies to facilitate friendship opportunities.

Fourth, the findings support the benefits of individualized strategies to *facilitate friendship opportunities* between students with and without autism or DD. Others have highlighted the impact educators can have on friendships (Jorgensen et al., 2006; Kluth, 2003). The related strategies of teaching social skills (e.g., Bellini, 2008) and implementing peer support strategies (e.g., Carter & Kennedy, 2006) are well-established. Facilitating friendship opportunities may include these strategies, and it extends what special educators already do: individualizing supports to achieve a specific goal. The strategies implemented by educators in this study reflect the potential to make progress in the challenging area of friendships. These results extend the findings of facilitation for adolescent friends with and without ASD (Bauminger & Shulman, 2003; Howard et al., 2006) and Rett syndrome (Evans & Meyer, 2001) with examples at the elementary level. Highlighting a specific example, these results suggest that educator proximity with the focal students hindered peer interactions. Other researchers have suggested that a key facilitation strategy is for adults to fade proximity (Causton-Theoharis & Malmgren, 2005; Giangreco, Edelman, Luiselli, & MacFarland, 1997).

Wolfensberger's (2011) theory of Social Role Valorization provides a useful theoretical framework for friendship facilitation. The premise is

that individuals with IDD are more likely to experience social belonging and friendships when they hold socially valued roles. Socially valued roles may be achieved by enhancing one's "social image" (i.e., as a peer) and one's "competencies" or skills, such as social skills (Wolfensberger, 2011). A successful facilitation process would require culture change to focus on the quality of interactions and to look for opportunities for educator intervention. Areas of intervention include (a) supporting students to interact with peers rather than adults and (b) teaching *all* students social skills to avoid the squandered and stalled interactions which led to social stigmatization, or the lack of socially valued roles. Jack and Crosby experienced social opportunities in their inclusive classrooms, but they (and their classmates) needed more direct supports in order to interact more positively and preserve the potential for friendship.

Limitations

Several limitations of this study should be addressed by future research. First, I did not collect data on the interactions involving the focal students' classmates. There was a clear qualitative difference in Jack's and Crosby's interactions as compared to their peers, but these additional data would have provided a more detailed context. Future studies should include qualitative and quantitative comparison to peers without disabilities. Second, I interviewed the educators but not the students themselves. I captured student conversations and comments in the field notes, but this study would have benefitted from the perspectives on friendships by Jack, Crosby, and their classmates. Third, the findings may reflect characteristics unique to these two classroom settings. Although the challenge of friendship is universal, researchers should examine interactions in other inclusive classrooms to identify effective strategies and conditions for friendship development.

In conclusion, the findings from this study indicate the challenge of friendships, even in inclusive elementary school settings. Inclusion is necessary, but not enough, for consistent friendship opportunities between students with and without autism or developmental delay. The ways that educators think about and support friendships play a key role in the prevalence of friendship opportunities between students.

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Author:
Zachary Rossetti, Boston University.

Correspondence concerning this article should be addressed to Zachary Rossetti, Early Childhood, Elementary, and Special Education Cluster, Boston University, Two Silber Way, Boston, MA 02215, USA (e-mail: zsr@bu.edu).