 *Journal of Classroom Interaction,* ISSN 0749-4025. © 2016. Vol 51.2, pp. 4-19

# There's No "I" in Team: Building a Framework for Teacher-Paraeducator Interactions in Self-Contained Special Education Classrooms

**Christina Cipriano**
*University of Massachusetts at Dartmouth*

**Tia N. Barnes**
**Michelle C. Bertoli**
**Lisa M. Flynn**
**Susan E. Rivers**
*Yale University*

*"This is a work relationship, don't get me wrong, but you're with each other every day; there has to be something more than that. And you have to have each other's back no matter what. Being a teacher or paraeducator, you have to be on the same team."*

*Paraeducator, 6 years of experience*

## INTRODUCTION

Students educated in self-contained special education classrooms and the teachers who serve them are in crisis. Self-contained classrooms are separate from general education classrooms and may be resource classrooms housed within general education schools or separate schools or districts serving primarily students with disabilities. Under-researched and excluded from most large-scale efficacy and response to intervention (RTI) trials, students in self-contained classrooms make little progress academically and behaviorally (Lane, Wehby, Little, & Cooley, 2005; Siperstein, Wiley, & Forness, 2011). These outcomes are poorest among the approximately 362,000 students in American public schools who are categorized as having an emotional and/or behavioral disorder (EBD; US Department of Education, 2015). Students with EBD face many academic and behavioral challenges in schools including school failure, a higher likelihood of conflict with peers and school personnel, and the highest drop-out rates among students in both general and special education settings (Wynne, Ausikatis, & Satchwell, 2013). Our interest is in improving outcomes for students in these restrictive educational settings (i.e., classrooms, schools, or facilities serving students with disabilities in settings separate from their nondisabled peers).

Among the promising strategies for improving student outcomes is ensuring that their instruction occurs in settings with high quality teacher-student interactions (Curby, Rudasill, Edwards, & Pérez-Edgar, 2011). Although there is some research examining teacher practice in self-contained classrooms (e.g. Causton-Theoharis, Theoharis, Orsati, & Cosier, 2011), there is a lack of research investigating the quality

of interactions between individuals in the self-contained classroom. Moreover, an important component of classroom interactions in special education classrooms has been ignored in the research—the interactions between educators in the classroom. A key distinguishing feature of the self-contained special education classroom is the regular presence of multiple educators, namely a special education teacher and one or more paraeducators.

Paraeducators are essential members of the special education team and contribute to and support student learning (Council for Exceptional Children, 2012). In 2010, U.S. public schools employed more than 429,000 paraeducators (U.S. Department of Education, 2010) and this figure is conservatively predicted to grow at a rate of 15 percent through 2022 (Bureau of Labor Statistics, 2012-2013). The increase in reliance on paraeducators has been attributed to the changing role of the classroom teacher (Colgan, 2004), a continued shortage of qualified special educators (Boe & Cook, 2006), and expanding educational testing and related service demands to support student learning needs (Council for Exceptional Children, 2012). Despite paraeducators assuming expanded roles and responsibilities, the literature pertaining to the relationship between paraeducators and teachers remains scarce (Morrissette, Morrissette, & Julien, 2002), and the ways in which to promote such relationships have yet to be fully defined.

Research from general education classrooms has identified teaching practices and classroom interactions as a significant pathway for improving both student and teacher outcomes. Classroom observation tools, such as the Classroom Assessment Scoring System (CLASS; Pianta, Karen, La Paro, Hamre, 2008), the Framework for Teaching (Danielson, 1996), and the Marzano Teacher Evaluation Model (Marzano, 2007), predominate across the research and practice communities as means to support teacher effectiveness. These tools delineate categories of interactions, behaviors, and characteristics of classrooms, instructional methods, and interactions which may improve student outcomes. The value of these tools lies in their ability to support researchers and administrators in identifying what teachers do well to help children learn and what changes can facilitate improvements.

Classroom quality, as well as student and teacher outcomes, in self-contained special education classrooms may be improved by targeting the interactions between the special educator and paraeducators. Drawing from evidence that quality teacher-student relationships lead to positive student outcomes (Battistich, Schaps, & Wilson, 2004; Rimm-Kaufman, Curby, Grimm, Nathanson, & Brock, 2009), we argue that positive teacher-paraeducator relationships support student learning in important ways (Goddard, Goddard, & Tschannen-Moran, 2007) and also provide students with a model for positive interaction styles.

The first step in supporting the relationship between teachers and paraeducators in self-contained special education classrooms is to identify the full range of interactions that may promote or inhibit this relationship. This research builds a framework of teacher-paraeducator interactions in restrictive settings with an aim of improving student and teacher outcomes.

## *COLLABORATIVE PRACTICES IN EDUCATION*

Professional collaboration is not a new idea in the education arena (Cook & Friend, 1995) and the general and inclusive education literature is replete with examples of how teachers can not only effectively work with their colleagues (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010; Walther-Thomas, 1997), but also evidence of how vital this working relationship is both for educator productivity (Friend et al., 2010; Murawski & Swanson, 2001) and for student outcomes (Friend et al., 2010; Mastropieri et al., 2005; Murawski & Swanson, 2001). The traditional American classroom model

of one teacher instructing a homogeneous group of students began fading 30 years ago (Brophy, 1988). Co-teaching and team teaching models have become a common way to accommodate models of instruction to best serve the needs of all students over the last three decades (Cook & Friend, 1995; Friend et al., 2010).

Co-teaching relationships refer to two or more education professionals providing instruction in a single classroom (Cook & Friend, 1995). Available literature on co-teaching in inclusive classrooms suggests the characteristics of quality professional relationships include: (a) mutual respect, (b) clear delineation of instructional roles and responsibilities, (c) adequate time for individual and team planning and instructional preparation, (d) regular communication and support from administration, and (e) collegiality among staff (Buckley, 2005; Cook & Friend, 1995; Mastropieri et al., 2005; Murawski & Swanson, 2001; Rice & Zigmond, 2000; Scruggs, Mastropieri, & McDuffie, 2007; Walther-Thomas, 1997). These features of collaborative relationships have demonstrated success in promoting quality co-teaching relationships.

Quality co-teaching has numerous benefits for students including the potential for improved academic performance and decreases in problem behaviors (Cook & Friend, 1995; Rea, McLaughlin, & Walther-Thomas, 2002; Zigmond & Matta, 2004). Compared to students in classrooms with a single educator, students in co-taught classrooms feel that they have a better understanding of classroom material and greater access to help (Conderman, 2011; Zigmond & Matta, 2004). Students also benefit from the modeling provided by educators as they work together to manage and instruct the classroom (Conderman, 2011; Zigmond & Matta, 2004). Students internalize the morality exemplified by the adults around them, particularly those with whom they hold in high esteem, such as their teachers (Lunenberg, Korthagen, & Swennen, 2007; Scruggs et al., 2007; Walther-Thomas, 1997). Through a range of activities, such as praising each other, giving all students and educators equal and adequate attention, managing their emotions in productive ways, and encouraging the classroom to be an inclusive environment, educators can work together to be positive, engaging role models for students (Lunenberg et al., 2007; Rea et al., 2002; Walther-Thomas, 1997).

Educators also benefit from collaborative professional relationships (Scruggs et al., 2007). In addition to reports of increased professional satisfaction, personal support, and opportunities for professional growth (Walther-Thomas, 1997), educators in collaborative classrooms have reported improved feelings of efficacy, increased positive attitudes toward teaching, and higher levels of trust resulting from collaborative teaching experiences (Goddard, Goddard, & Tschannen-Moran, 2007). This may be the result of sharing ideas and responsibilities in the classroom which can lead to an increase in expertise and a reduction of teacher burnout (Conderman, 2011; Walther-Thomas, 1997).

## *COLLABORATION IN SPECIAL EDUCATION CLASSROOMS*

Despite the theoretical and empirical support for the effectiveness of collaborative models in general and inclusive classrooms, there is scant information available specific to the relationships among educators in self-contained special education classrooms. The critical point of differentiation between these two classrooms settings is the hierarchy of adults in the room. In an inclusive classroom there is a general education teacher working alongside a special education teacher. Paraeducators also may be present to support specific student needs. In inclusive classrooms the general and special education teacher are on the same professional level—they are both certified teachers. In contrast, in a self-contained special education classroom, the special educator works regularly alongside while also supervising one or more paraeducators. Given the status differential of the teacher and paraeducators in special education classrooms, this working relationship may be subject to unique challenges in addition to those faced in co-taught inclusive classrooms.

Negative emotions can further pose a challenge to collaboration in special education classrooms (Roth & Tobin, 2005; Scruggs et al., 2007). Teachers report negative feelings in response to having additional staff members present in the room, including feeling like they are being watched and judged (Mastropieri et al., 2005; Scruggs et al., 2007; Walther-Thomas, 1997). Further, negative emotions about additional educators in the classroom are present most readily when teachers have little to no involvement in determining who they will work with (Roth & Tobin, 2005; Walther-Thomas, 1997). Other challenges to teacher-paraeducator collaboration are that some teachers feel unprepared to take on a supervisory role (Wallace, Shin, Bartholomay, & Stahl, 2001) and they may not be clear on the responsibilities of the paraeducators (Fisher & Pleasants, 2011). Researchers and educators also report an increased demand on time and energy in establishing and maintaining collaborative educator relationships (Roth & Tobin, 2005; Scruggs et al., 2007) and such time generally is not made available by school administration (Fuchs, 2010). Such feelings can promote a hostile working environment and inhibit educators' ability to serve as warm, appropriate role models for their students (Mastropieri et al., 2005; Scruggs et al., 2007).

Faced with aforementioned challenges to creating high quality collaborative relationships, support is needed to cultivate quality teacher-paraeducator interactions for self-contained special education classrooms. To inform efforts for building support, we start with the creation of a framework of teacher-paraeducator interactions.

### *THE PRESENT STUDY*

The present study is part of a larger project to develop a classroom observation tool for examining interactions in the special education classroom (the *Recognizing Excellence in Learning and Teaching* (RELATE) *Tool*). We describe this tool briefly in the "Implications for Research" section and focus this paper on the development of the teacher-paraeducator framework, which later informed the RELATE Tool development. To create a framework of teacher-paraeducator interactions in self-contained special education classrooms, the present research systematically examined interactions among teachers and paraeducators working within special education settings. The specific research question guiding this work is: within self-contained special education classrooms, what are the full range of interactions related to teacher-paraeducator collaboration that occur? By capturing the full range of interactions among teachers and paraeducators in special education classrooms, the framework for teacher-paraeducator interactions can inform future empirical investigations aimed at identifying interactions that matter most for student and educator outcomes.

## METHOD

To build a framework for teacher-paraeducator interactions in special education classrooms, we adopted a mixed methods approach that included a content analysis for existing classroom observation tools, systematic classroom observations of special education classrooms, and interviews with special education teachers, paraeducators, and administrators.

### *CONTENT ANALYSIS*

We conducted a content analysis of existing tools used for classroom observation to identify co-teaching practices currently identified by researchers and practitioners. We used three means to locate tools. First, we conducted a literature review of peer-reviewed journals using electronic databases (e.g. ERIC Assessment Clearinghouse, PsychInfo) with the search terms: classroom observation tool, classroom assessment, teacher evaluation, teacher observation, and classroom protocol. We also examined the reference list from a large published literature review of classroom observational

measures (Volpe, DiPerna, Hintze, & Shapiro, 2005). Next we searched the federal website www.ed.gov to access all the classroom evaluation tools presently adopted at the state level. Finally, we searched the special education literature for additional classroom observation tools that had not been captured in the initial review. For example, those tools focused on observing and informing clinical evaluations of the students within the classroom (e.g., classroom observation of autism symptoms). This search yielded 104 classroom observation tools.

Three senior researchers narrowed our sample of 104 tools to nine representative tools through close reading and assessment of the face validity of the tools to ensure that our sample encompassed the range of interactions assessed on all 104 tools. We then extracted individual items from each of the nine tools, yielding a total of 184 items. Items reflected specific actions, behaviors, or interactions (e.g. "There is regular teacher participation with colleagues to share and plan for student success"). Items ranged from general statements of observed behavior (e.g. "Routines and procedures for providing support to students within the co-taught environment run smoothly with minimal prompting from the special education teacher") to statements that specified a level or amount of observed behavior (e.g. "The paraeducator never detracts from the classroom teacher's instruction").

We used a classic Q-sort methodological practice to organize the items according to their similarities or redundancies (Block, 1961). This method allowed us to sort items into subjectively meaningful categories. Prior to sorting, we removed all information that could link specific items to the tool that they originated from so that behaviors would not be categorized based on the tool from which they came. We then had five researchers who were not directly involved in this project independently sort items into groups by reviewing each item, grouping the items based on meaning, and generating a descriptive name for each group. This process yielded six to nine groups per researcher.

Reductive analyses were then conducted in NVivo10 (QSR International Pty Ltd., 2010) to analyze the interrelationships among the groups created in the Q-sort and further reduce the data (Hutchison, Johnston, & Breckon, 2010). By setting the criteria for inclusion at >80% inter-observer reliability (Hintze, 2005), the NVivo analysis revealed percentages of co-occurrence among the groups. This analysis resulted in five broad groupings of indicators that consisted of a large range of indicators (9 to 57 items). To summarize these behavioral interactions into larger categories (or actions), we examined the content groups and used cluster analysis (Onwuegbuzie & Leech, 2005). To ensure parsimony within the categories, we used principal component factor analyses (Nie, Bent, & Hull, 1975). Constructs were then applied to classroom observation video footage, which will be described below in the next section.

### *SYSTEMATIC CLASSROOM OBSERVATIONS*

To observe the interactions between teachers and paraeducators, we recruited and videotaped special education classrooms and systematically analyzed the observed behaviors. To recruit classrooms to participate, initial site visits with each interested school were conducted during which we held meetings with school leadership, teachers and parents to obtain formal agreement to participate. We also conducted initial, informal classroom observations of 15-30 minutes to introduce ourselves to teachers and students, gain a sense of logistical considerations related to videotaping, and ensure that we would be including a range of classrooms in our sample (e.g., teachers with different teaching styles, students with different socioeconomic backgrounds). Fourteen classrooms (grades 5-9; median grade level = sixth grade) in seven schools from three districts in the Northeast agreed to participate and obtained a rate of parental consent that made data collection feasible. Table 1 presents descriptive information about the districts and classroom participants. Participants were students (85.1% male), teachers (93% female), and paraeducators (68% female).

Table 1
*Descriptive Statistics for Classroom Observation Participating Districts*

| | | District 1 | District 2 | District 3 |
|---|---|---|---|---|
| District Level | | | | |
| | School Organization | 57 | 37 | 37 |
| | Sites | 350 | 36 | 7 |
| | Student:Teacher:Paraprofessional Ratio | 10:1:1 | 6:1:1 | 6:1:1 |
| Classroom | Ethnicity | | | |
| Teachers | White | 69% | 64% | 57% |
| | Black | 19% | 12% | 15% |
| | Hispanic | 9% | 15% | 22% |
| | Asian or Pacific Islander | 3% | 8% | 5% |
| | Other | - | 1% | 1% |

Across a five-month period, researchers visited each classroom on two separate occasions (on average, 8 weeks apart) and collected video footage (117 videotapes, M = 43.6, SD = 11.2 minutes in length) and made field notes documenting the observations. Each classroom was observed for two to four periods at a time, across two separate days. Once all videotapes had been collected, data sampling was initiated. Videotapes were dropped from subsequent analyses if they were shorter than 30 minutes or if they featured a teacher other than the regular classroom teacher (e.g., a teacher of special subjects such as art or health) for the majority of the videotape. Of the remaining 95 videotapes, two or three videotapes per time point per teacher (four-six tapes total per teacher) were sampled randomly, yielding 59 videotapes (62% of the total pool of viable tapes) to include in coding. The 59 videotapes were split digitally into 169 segments ranging from 12 to 20 minutes in length ($M$ = 15.74, $SD$ = 2.42 minutes, total length of sampled footage = 44.35 hours).

### *INTERVIEWS*

We conducted 17 semi-structured individual interviews and one group interview with special education administrators, teachers, and paraeducators. The purpose of the interviews was to ensure that the concepts identified from the content analyses and coding exercise (such as solidarity) resonated with practitioners and captured the full range of their interactions between teachers and paraeducators in special education classrooms. Participants were recruited and interviewed over a five-month period, while videotaping and coding analyses were being conducted. Complete descriptive statistics for interview participants can be found in Table 2 (see next page).

Each interview lasted approximately 90 minutes and followed the same pattern of exchanges between interviewee and participants. First, participants were asked to reflect upon what a high quality and low quality classroom look like (e.g., "Imagine a high quality classroom, what is the teacher doing, what are the students doing?"). Next, participants responded to broad questions about their classroom interactions with collaborators (e.g., "How would you describe your working relationship with your paraeducator/with the teacher?"). Upon completion of this question and subsequent follow-up prompts (such as, "How long have you worked together?"), participants viewed flash cards containing specific constructs and statements derived from the aforementioned content analyses (solidarity, etc.).

Participants considered each card separately and shared reactions to the terminology and how, if at all, each item reminded them of their own classroom experiences. Once all of the cards had been discussed, participants were prompted to sort the cards into meaningful groups. Finally, participants were asked to reflect on their views of being evaluated as an educator in the special education classroom (e.g., "What does it feel like to be observed?"). All interviews were audio recorded and then transcribed.

Table 2
*Descriptive Statistics for Interview Participants*

| Variable | | Interview Participants | | |
|---|---|---|---|---|
| | | *M%* | *Min.* | *Max.* |
| Teacher[1] | | | | |
| | Gender Female | 91% | | |
| | Age | 44.4 | 24 | 63 |
| | Race[4] | 91% | | |
| | Years of Experience | 17.3 | 1.5 | 37 |
| | Years of Education | 17.8 | 16 | 18 |
| Paraeducator[2] | | | | |
| | Gender Female | 40% | | |
| | Age | 42.4 | 26 | 61 |
| | Race[4] | 60% | | |
| | Years of Experience | 13 | 1 | 26 |
| | Years of Education | 14.8 | 14 | 16 |
| Administrator[3] | | | | |
| | Gender Female | 0 | | |
| | Age | 57.4 | | |
| | Race[4] | 100% | | |
| | Years of Experience | 27 | | |
| | Years of Education | 19 | | |

*Note.* [1]$n = 13$; [2]$n = 4$; [3]$n = 2$; [4]Participant is White

### *ANALYTIC APPROACH*

Six researchers first reviewed data gathered from the content analysis and interviews in NVivo10 software (QSR International Pty Ltd., 2010) for common themes. To analyze the interrelationships among the themes we applied the matrix queries function in NVivo, allowing for a principal component factor-like analysis across the respective thematic groupings (see Hutchison, Johnston, & Breckon, 2010). We set the matrix queries criterion for inclusion at >80% inter-observer reliability (Hintze, 2005), the NVivo matrix query revealed percentages of co-occurrence among the groups. The six researchers then applied the thematic groupings to the classroom observation data using the similar pattern of iterative analyses in NVivo—comparing instances of co-occurrence and inter-observer agreement across video clips and themes. Reorganization of themes happened several times; final themes represent "indicators" or "items" aligned with teacher-paraeducator interactions.

## RESULTS

### *CONTENT ANALYSIS*

Of the 104 tools identified in the content analysis, only thirteen (12.5%) tools focused on special education classrooms. Each of these tools focused on the evaluation of specific actions of the paraeducator with the student or classroom environment (e.g., The paraeducator never detracts from the classroom teacher's instruction) but rarely described the specific characteristics of, or the quality of, their interactions with teachers (Alabama Public Schools, 2002; Colorado Public Schools, 2009; District of Columbia Public Schools, 2009; McIntosh et al., 1994; Stanovich & Jordan, 1998). Therefore, researchers first assessed the fit of a preliminary framework for Teacher-Paraeducator Interaction, comprised of seven emergent indicators: positive climate, negative climate, sensitivity, solidarity, classroom procedures, behavior management, and time management. Descriptive information for these initial constructs can be found in Table 3.

Table 3
*Preliminary Constructs Informing the Framework for Teacher-Paraeducator Interactions*

| Constructs | Indicators |
|---|---|
| Positive Climate | Relationships, Positive Affect, Positive Communication, Respect |
| Negative Climate | Negative Affect, Disrespect, Severe Negativity |
| Sensitivity | Responsiveness, Empowerment, Fairness |
| Solidarity | Agreement, Consistency, Unified Front |
| Classroom Procedures | Routines and Protocols, Utilizing Professional Support Staff |
| Behavior Management | Clear Behavior Expectations, Proactivity, Redirection of Undesired Behavior, Student Self-evaluation, Student Compliance |
| Time Management | Maximizing Learning Time, Preparation, Routines, Transitions |

A random sample of 15 videos was scored on a 7 point scale and scores were entered into SPSS software for analysis. Observer scores (three trained research assistants) were judged in respect to master observer scorers from three senior researchers. We used a similar method as the CLASS (Pianta et al., 2008) to create master scores; the percentage of agreement between senior researchers was reported, and if scores ranged more than 1 point away they were treated as problematic and warranted discussion and reevaluation. Once arriving at the master codes, this process was duplicated with the trained observers, wherein scores that deviated more than 1 point away from the master codes were brought up for discussion (Pianta et al., 2008).

Table 4 (see next page) reports the descriptive statistics and coding reliability results for the observation video footage. In general, when examining correlations, we found that the elements were not unilaterally correlated within the framework; high correlations among elements within a larger framework would be suggestive that the elements within a framework are approximating the same, bigger picture phenomena, which is ideal for an observation tool (Bell et al., 2012; Hintze & Matthews, 2004). Further review of frequency distributions of scores by relationship found that although all scales use a 7-point scale, the scores were not evenly distributed. This is similar to what the CLASS has found when investigating their scoring trends (see Bell et al., 2012), and these distributions can be representative of observer drift or that interaction elements may simply cluster around certain points. For example, in our results, the range of positive climate was 2.0 to 6.0, which is smaller, on average, than the elements, such as classroom procedures or behavior management, which was 1.0 to 7.0. This distribution suggests that the positive climate demonstrated between teachers and paraeducators in these classrooms may be more moderate, on average than the range of classroom management behaviors observed. To measure consistency, the observers' agreement with one another (intraclass correlation coefficient, ICC) was examined. Observers' scores were within 1 point of the master observers on 70% of all elements. Observer agreement varied between 70.83% and 100%, depending on the element. There was full agreement (100%) among observers when observing negative climate and there was the greatest level of disagreement when observing classroom procedures. Furthermore, although there is no current standard for how to interpret the ICC for observation protocols (see Bell et. al., 2012), considering an 80% agreement is customary as an indication of good agreement (Cicchetti & Sparrow, 1981). For this data, the ICCs ranged from 0.13-1.0. Only three of the elements (time management, behavior management, and negative climate) met the 80% agreement threshold. These results reflect the potently incomplete nature of the preliminary model resulting from the existing tools alone- evident of the need to consider other variables elements to more accurately reflect the range of teacher-paraeducator interactions in self-contained special education classrooms.

Table 4

*Descriptive and Reliability Statistics for Coding of Content Analysis Constructs on Classroom Observation Footage for Teacher-Paraeducator Interactions*

| | Descriptive Data | | | | Reliability Estimates | | | |
|---|---|---|---|---|---|---|---|---|
| **Scale** | ***M*** | ***SD*** | ***Min.*** | ***Max.*** | ***f*** | ***%1 off*** | ***ICC*** | ***r*** |
| Teacher-Paraeducator Interactions | 4.28 | 1.31 | 2.0 | 7.0 | 26 | 85.00 | 0.11 | 0.37 |
| Positive Climate | 3.96 | 1.73 | 1.0 | 7.0 | 53 | 92.45 | 0.78 | 0.95 |
| Negative Climate | 2.03 | 0.38 | 1.0 | 4.0 | 45 | 100.0 | 1.0 | 1.0 |
| Sensitivity | 4.17 | 1.53 | 1.0 | 6.0 | 53 | 89.36 | 0.66 | 0.91 |
| Solidarity | 4.00 | 1.38 | 2.0 | 7.0 | 26 | 84.00 | 0.16 | 0.46 |
| Classroom Procedures | 4.63 | 1.53 | 2.0 | 7.0 | 25 | 70.83 | 0.13 | 0.44 |
| Behavior Management | 3.07 | 1.67 | 1.0 | 6.0 | 16 | 80.00 | 0.85 | 0.97 |
| Time Management | 2.78 | 1.39 | 1.0 | 5.0 | 9 | 88.88 | 0.89 | 0.98 |

*Note.* ICC: Intraclass correlation; *r*: Pearson correlation coefficients; All segments were coded 5 times unless noted; a score of 1.0 indicates complete agreement amongst codes and coders.

### *CLASSROOM OBSERVATIONS AND EDUCATOR INTERVIEWS*

From the classroom observations and the interviews with special education classroom staff, interactions not included in the preliminary framework for teacher-paraeducator interactions were identified. Specifically, educators focused on expanding on the constructs of respect and disrespect, which were embedded within the preliminary framework of positive and negative climate as important in the teacher-paraeducator working relationship.

Further, educators encouraged the refinement of classroom procedures, behavior and time management constructs to account for the delegation of responsibilities in the classroom among the educators. Lastly, the preliminary construct of sensitivity was redefined and absorbed across both the emerging respect and solidarity constructs. We continued this iterative development process until we had saturated the data. Reliability estimates for the final elements of the framework for teacher-paraeducator interactions can be found in Table 6 (see page 14). The resulting final construct informs a framework for understanding teacher-paraeducator interactions in special education classrooms that consists of four elements: Solidarity, Delegation of Staff, Respect, and Disrespect and is detailed below.

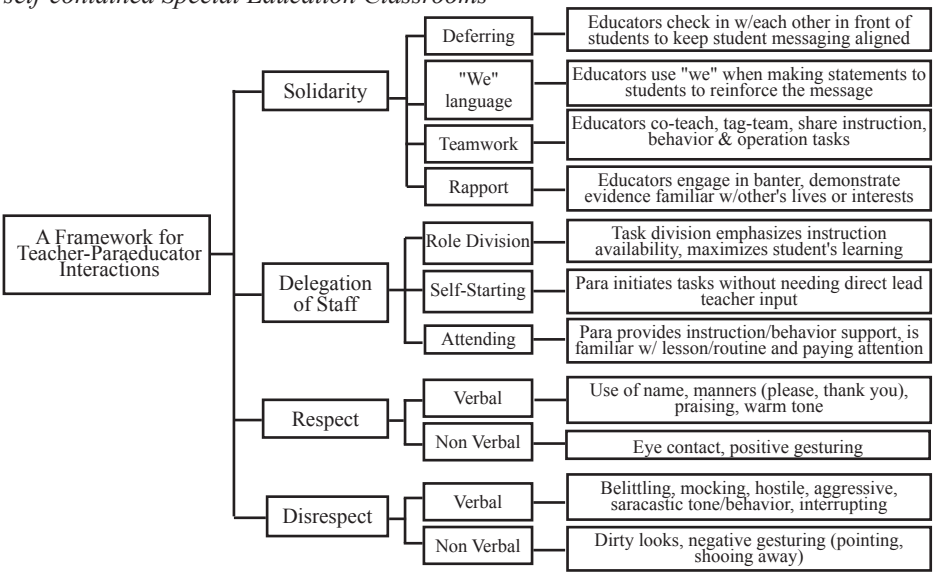
### *A FRAMEWORK FOR TEACHER-PARAEDUCATOR INTERACTIONS IN SPECIAL EDUCATION CLASSROOMS*

Figure 1 presents the resulting framework for *Teacher-Paraeducator Interactions* which describes interactions among classroom educators reflecting unity of purpose, a positive emotional climate, and clear classroom management and instructional strategies. Of the four elements, three may promote quality teaching and learning (Solidarity, Delegation of Staff, and Respect) and one may diminish it (Disrespect). Informed by our systematic mixed-method analyses, we discuss each of these elements next and provide examples from our classroom observations of indicators (i.e., observable actions) that may occur with each element. Additional illustrative content can be found in Table 5.

*"I always say us, so he's a we."*

**Element 1: Solidarity.** Solidarity is the consistent presentation of teamwork among the educators in the classroom. When educators are aligned they demonstrate effective and ongoing communication to deliver a shared message to the students (Cook & Friend, 1995; Friend et al., 2010). The importance of solidarity amongst educators is paramount in special education classrooms for students with emotional and behavioral disorders who may be more likely to challenge the authority of their educators (Wagner,

***Figure 1.*** *The Framework for Understanding Teacher-Paraeducator Interactions in self-contained Special Education Classrooms*




Kutash, Duchnowski, & Epstein, 2005). When educators second guess one another it undermines their credibility to their students, which can jeopardize student performance and functioning (Mastropieri et al., 2005; Scruggs et al., 2007).

Solidarity is defined by educators deferring to one another, such as when a paraeducator reminds a student of the teacher's response when a student asks the paraeducator if he can switch learning centers after already being told by the teacher to wait until the end of the lesson period. Teachers and paraeducators demonstrate solidarity when they use "we" language when speaking with students (e.g., "we (teacher and paraeducator) expect you all to participate in the activity by raising your hand"). As is good practice, educators may reinforce and/or restate one another (Walther-Thomas, 1997). To illustrate, if in the previous example, a student called out a response after the paraeducator asked that all students raise their hands to participate, the teacher may respond by stating, "Remember, we would like you to raise your hand for this activity." When educators reiterate decisions they have made together as a team and maintain resolve when instructing and/or disciplining a student, it provides consistency for students (Reid, Gonzalez, Nordness, Trout, & Epstein, 2004).

*"And we really validate our role in that room and the responsibilities and all that and I think that's one of the key things that really make us a good team."*

Table 5

*Reliability Estimates for Final Elements of the Framework for Teacher-Paraeducator Interactions*

| | *f* | % agreement | ICC |
|---|---|---|---|
| Solidarity | 25 | 98.18 | 0.95 |
| Delegation of Staff | 28 | 98.78 | 0.98 |
| Respect | 24 | 99.07 | 0.98 |
| Disrespect | 8 | 99.38 | 0.98 |

*Note.* All items and levels triple coded. *f:* reflects the frequency of a code being identified across 10 randomly selected segments of data; % agreement: percentage of agreement in codes amongst coders; ICC: Intraclass correlation

**Element 2: Delegation of Staff.** The mere presence of additional educators in the room is not enough to promote quality learning (Lunenberg et al., 2007). Delegation of staff represents how the lead classroom teacher incorporates the support of the additional paraeducator(s) to enable or hinder the smooth functioning of the classroom (Giangreco, Halvorsen, Doyle, & Broer, 2004). The incorporation of the paraeducator is observed when the lead teacher delegates tasks (administrative, clerical, or instructional) not requiring his or her direct involvement. We observed teachers doing this delegation both through direct verbal and physical cuing ("Ms. G, can you please get us the math text books and pencils from the closet" while pointing across the room), as well as through implicit understanding of what one's role is in the classroom (such as observing a paraeducator get up at a predetermined time and start collecting work in anticipation of the next task). This delegation can enable the classroom teacher to maximize his or her availability to provide students with instructional support (Conderman, 2011; Cook & Friend, 1995; Walther-Thomas, 1997).

The ways in which paraeducators are incorporated differ according to the needs of the classroom and the population being served; however, in general, their tasks can be understood as instructionally based (e.g. direct lesson instruction, answering student questions, providing instructional supports; Cook & Friend, 1995; Friend et al., 2010),

Table 6

*Illustrative Exemplars Identified in Classroom Observation and Interview Data*

| **Element 1: Solidarity** |
|---|
| *"And the kids know that they can't split us, there's a very strong structure, we both believe in it" "We act like a husband-wife team"* |
| *"He has my back 100%."* |
| *"… we're all on the same page, we're very consistent, we have a very structured environment"* |
| **Element 2: Delegation of Staff** |
| *"…he supports me in whatever it is that is needed. Whether it's an issue, if he pulls a couple of kids out, that happens very often. Sometimes they do become an issue in the class and before it escalates to something he'll catch that."* |
| *"I have one of my paras teach a science class. So she comes in in the mornings, she plans, she does everything, she does the entire thing, I don't even have to worry about it. You know, we'll collaborate if she needs my help or you know we'll look at the curriculum and what do we need to teach next but then she'll just take it and run with it so that's really nice."* |
| *"They're [Paraeducators] actively engaged with the kids, they're not just standing back. They provide discipline, they provide education, they provide us a support. They make connections with the kids that sometimes they don't have with me because they see me as the big bad guy in the classroom."* |
| *"She understands exactly what I need and anticipates because I can't be wasting my time."* |
| **Element 3: Respect** |
| *"I think the teacher has to be the role model and I think you have to set your expectations of what you expect of your staff and if there is an issue you need to come together respectfully and talk about that and come up with a solution."* |
| *"My working relationship with him is, I adore him. He adores the kids, we both want to be in the classroom."* |
| *"And everybody can brainstorm and kind of share ideas, they all have a vested interest in what is going on in that class and everybody tries to kind of help everybody else to make sure we're doing the best job we can to help the students"* |
| *"We will usually discuss what the lesson is going to consist of and quite often [teacher's name] will say what do you think? Do you think we should do this or what do you think of that? And we'll just discuss it and she doesn't have to do that."* |
| **Element 4: Disrespect** |
| *"You don't want to call out somebody and make them feel bad, you want everyone to feel like, you know, a team thing."* |
| *"A teacher with her back turned to the classroom, writing and talking at the board and a para sitting in her seat, reading the newspaper or on the computer, a teacher and the para, you know speaking …in a disrespectful manner."* |
| *"Even though he was wrong … I have a good relationship with him so I corrected him…and that's what a great working relationship is, because it wasn't me degrading him or me putting him down."* |

behaviorally motivated (e.g. disciplining students, enforcing classroom/student routines, hand-over-hand modeling; (Giangreco et al., 2004) or administrative (e.g. clerical work such as filing paperwork, photocopying, bookkeeping; (Conderman, 2011; Mastropieri et al., 2005).

*"We hash it out, head to toe and we look at each other and we hug and we go on with the rest of it."*

**Element 3: Respect.** Successful collaboration among teachers and paraeducators hinges upon their respect for one another (Conderman, 2011; Murawski & Swanson, 2001). Respect refers to educators positively acknowledging each other's work in the classroom. Respectful educators engage in more productive working relationships than educators who do not respect one another (Clarke, Embury, Jones, & Yssel, 2014; Friend et al., 2010; Mastropieri et al., 2005). The teachers and paraeducators we interviewed unanimously designated respect as a key component to their working relationship. Paraeducators we interviewed specifically discussed how respect is demonstrated explicitly as the teacher using their name when addressing them, or as implicitly as not being "taken advantage of" when organizing classroom time. When respect is present, collaboration is easier as individuals are more likely to be open to working with one another (Friend et al., 2010). Respectful interactions between educators are exemplified by the use of each other's name, making eye contact, displaying manners, or the use of a warm tone when interacting (Conderman, 2011; Cook & Friend, 1995; Friend et al., 2010; Walther-Thomas, 1997). When engaging in these behaviors, teachers and paraeducators are being prosocial models for their students (Lunenberg et al., 2007).

*"And you're there for the kids... if you're opposing each other a lot and they see that, it's not going to work out too well. They're going to see that, there's going to be dissension. The group is going to break apart. Kids read you pretty well too. You know they'll see that, they'll try testing you and see what they can get away with now."*

**Element 4: Disrespect.** Disrespect can undermine successful collaboration among educators (Chopra et al., 2004; Riggs & Mueller, 2001). Disrespect is defined by interactions between teachers and paraeducators that are belittling, mocking, hostile, discriminatory, aggressive, or sarcastic. We observed instances of eye-rolling, whispering, gesturing, and negative body language (shaking head, frowning, and thumbs down) between teachers and paraeducators in our footage, particularly when educators thought they were off camera. In classrooms with students with EBD, a disrespectful interaction can be especially damaging. Student diagnoses may make them particularly sensitive to negative interactions (Evans, Weiss, & Cullinan, 2012), and a belittling interaction between a teacher and paraeducator could excite the students and promote further negativity. Our observation footage demonstrated how sensitive students are to these micro interactions of disrespect, contributing to students stopping academic work in their seat, calling out, following attention gaze on the teacher, smiling, laughing, and gesturing with peers, and getting out of their desk to walk towards the educator to engage in conversation. Indeed, disrespect is cited as one of the main reasons for the high turnover rate for paraeducators (Riggs & Mueller, 2001), and lack of universal training standards and proportionally low wages contribute to a desire to feel more appreciated in the classroom (Chopra et al., 2004; Ghere & York-Barr, 2007). Given the range of vital roles paraeducators fulfill in special education (Rea et al., 2002; U.S. Department of Education, 2004), respect is critical to the functionality of the classroom environment and support of student learning.

## DISCUSSION

The present research suggests that a framework for T*eacher-Paraeducator Interactions* consist of Solidarity, Delegation of Staff, Respect, and Disrespect. Together these components account for the full range of interactions between educators in self-contained special education classrooms which may promote quality teaching and learning in these settings. The categories that comprise the framework for *Teacher-Paraeducator Interactions* are in alignment with what researchers present in the literature as important interactions to ensure effective paraeducator involvement, including promoting supervision and training (Maggin et al., 2009), making time for meeting regularly with paraeducators (French, 2001), effective delegation of classroom tasks (Capizzi & Da Fonte, 2012), and treating paraeducators as respected members of the school community (Daniels & McBride, 2001). Based on these findings we hypothesize that high levels of interactions in these categories (with the exception of Disrespect) maximize the learning potential for the students receiving instruction in special education classrooms as they would create an collaborative environment conducive to quality learning.

In order for teachers and paraeducators to provide students with quality instruction through the use of evidence based teaching strategies, they first must prepare an environment that is ripe for learning (Tseng & Seidman, 2007). This work builds a framework of the interactions between teachers and paraeducators in self-contained special education classrooms to inform future work to identify the quality of teacher-paraeducator interactions in classrooms across the nation, examine the influence of these interactions on student long- and short-term academic, behavioral, and emotional outcomes, and inform intervention, professional development, and teacher preparation efforts for new and experienced special educators working with students with EBD. The working relationship between teachers and paraeducators in these settings is of the utmost importance to the overall functioning of the classroom and student development.

The proposed framework for *Teacher-Paraeducator Interactions* has important practical implications. The No Child Left Behind Act (Bush, 2001), focused attention on the need for the use of evidence-based practices in schools, a focus that will continue with the enactment of the Every Student Succeeds Act (Obama, 2015). The education research community boasts a rich literature base regarding the theory, use, structure, and utility of conducting classroom observations (Pianta & Hamre, 2009; Volpe, DiPerna, Hintze, & Shapiro, 2005), and although replete with examples of observation tools to evaluate teaching and learning, students with special education needs in restrictive settings are notably absent from most investigations (Kane, McCaffrey, Miller, & Staiger, 2013). Given the number of students receiving instruction in special education settings, the quality of the interactions amongst educators working in these environments deserves more attention. This framework for *Teacher-Paraeducator Interactions* fills this void, providing researchers and practitioners with a way to guide their observation of interactions between teachers and paraeducators, informing how these interactions can be improved to promote outcomes for students and the teachers and paraeducators who serve them.

### *IMPLICATIONS FOR RESEARCH*

There is a lack of classroom evaluation measures for special education classrooms and even fewer tools that investigate the teacher-paraeducator relationship. In light of our extensive work in this area, we have developed and are validating a classroom observation tool (i.e., *The Recognizing Excellence in Learning and Teaching* (RELATE) tool for Special Education Classroom Observation (Barnes, Cipriano, Rivers, Bertoli, & Flynn, 2016) for use in special education classrooms that includes this very framework. We are designing the RELATE tool so it can be used to quantify the quality of teacher-paraeducator interactions and provide information that can then be used to investigate how the quality of these interactions influence student academic

and behavioral outcomes. With calls for increased paraeducator training (Maggin et al., 2009), the RELATE tool can serve as a measure of how interactions between the teacher and paraeducator affect training attempts and, in cases where training targets the teacher-paraeducator relationship, this tools can serve as a measure of the intervention's effectiveness. In addition to the possibilities for research, this framework for *Teacher-Paraeducator Interactions* is promising for the practitioner community.

### *IMPLICATIONS FOR PRACTICE*

The adoption of this framework for *Teacher-Paraeducator Interactions* can help school leaders, teachers, and paraeducators identify actionable opportunities to improve their classroom functioning. The extensive, iterative mixed methods used to develop the elements of Teacher-Paraeducator Interactions promote its ecological validity; the elements and corresponding indicators were developed by and for the practitioners the framework will serve. We hypothesize multiple opportunities for adoption of this framework for Teacher-Paraeducator Interactions, including informing school and district professional development programs and complimenting existing statewide observation protocols to support educators and schools in fulfilling their federal accountability requirements. Towards the end of improving special education classroom functioning and instruction, we are presently piloting each of these applications in a larger sample of classrooms and schools to support the utility of this work.

This framework for Teacher-Paraeducator Interactions is built on a value-added model of educational development under the premise that maximizing teacher and paraeducator opportunities to meaningfully contribute to the classroom will support student development. The infrastructure *Teacher-Paraeducator Interactions* provides can support practitioners in improving the quality of interactions in their classrooms, and inform the development, training, and evaluation of collaborative relationships amongst teachers and paraeducators in special education classrooms.

A number of uncertainties exist in ensuring an appropriate education for students in self-contained special education classrooms. This research provides the theoretical foundation necessary to build the evidence-base for effective interactions among teachers and paraeducators in special education classrooms. Promoting positive outcomes requires educators to be on the same team to support students with EBD in thriving academically, behaviorally, and socially. ■

## REFERENCES


Barnes, T.N., Cipriano, C., Rivers, S.E., Bertoli, M., & Flynn, L.M. (2016). *The Recognizing Excellence in Learning and Teaching: Manual for researchers.* New Haven, CT: Yale University.

Alabama State Department of Education. (2002). T*he Alabama professional education personnel evaluation program (PEPE) special education II teacher evaluation system*. Montgomery, AL.

Battistich, V., Schaps, E., & Wilson, N. (2004). Effects of an elementary school intervention on students'"connectedness" to school and social adjustment during middle school. *Journal of Primary Prevention, 24*, 243-262. doi: 10.1023/B:JOPP.0000018048.38517.cd

Bell, C. A., Gitomer, D. H., McCaffrey, D. F., Hamre, B. K., Pianta, R. C., & Qi, Y. (2012). An argument approach to observation protocol validity. *Educational Assessment, 17*, 62-87.

Boe, E. E., & Cook, L. H. (2006). The chronic and increasing shortage of fully certified teachers in special and general education. *Exceptional Children, 72*, 443-460.

Brophy, J. (1988). Educating teachers about managing classrooms and students. *Teaching and Teacher Education, 4*, 1-18.

Buckley, C. Y. (2005). Establishing and maintaining collaborative relationships between regular and special education teachers in middle school social studies inclusive classrooms. In T. E. Scruggs & M.A. Mastropieri (Eds.), *Advances in learning and behavioral disabilities: Vol. 18. Cognition and learning in diverse settings* (pp. 161-208). Oxford, UK: Elsevier.

Bureau of Labor Statistics. (2012-13). Occupational outlook handbook: Teacher assistants (U.S. Department of Labor, Comp.). Retrieved from http://www.bls.gov/oes/current/oes259041.htm

Bush, G. W. (2001). *No child left behind: Executive summary.* Washington, DC: U.S. Department of Education.

Capizzi, A. M., & Da Fonte, M. A. (2012). Supporting paraeducators through a collaborative classroom support plan. *Focus on Exceptional Children, 44*, 1.

Causton-Theoharis, J., Theoharis, G., Orsati, F., & Cosier, M. (2011). Does self-contained special education deliver on its promises? A critical inquiry into research and practice. *Journal of Special Education*

*Leadership, 24*, 61-78.
Chopra, R. V., Sandoval-Lucero, E., Aragon, L., Bernal, C., De Balderas, H. B., & Carroll, D. (2004). The paraprofessional role of connector. *Remedial and Special Education, 25*, 219-231. doi:10.1177/07419325040250040501
Cicchetti, D.V., & Sparrow, S.S. (1981). Developing criteria for establishing interrater reliability of specific items: Applications to assessment of adaptive behavior. *American Journal of Mental Deficiency, 86*, 127-137.
Clarke, L. S., Embury, D. C., Jones, R., & Yssel, N. (2014). Supporting students with disabilities during school crises: A teacher's guide. *TEACHING Exceptional Children*, 169-178. doi:0014402914534616.
Colorado State Department of Education. (2009). *The Colorado state's professional educator evaluation system.* Denver, CO: Colorado State Department of Education.
Council for Exceptional Children (2012). *The Council for Exceptional Children's position on special education teacher evaluation.* Arlington, VA: Author. Retrieved from http://www.cec.sped.org/~/media/Files/Policy/CEC%20Professional%20Policies%20and%20Positions/Position_on_Special_Education_Teacher_Evaluation_Background.pdf
Colgan, C. (2004). Is there a teacher retention crisis? *American School Board Journal, 191*, 22-25.
Conderman, G. (2011). Middle school co-teaching: Effective practices and student reflections. *Middle School Journal, 42*, 24-31. doi:10.1080/00940771.2011.11461771
Cook, L., & Friend, M. (1995). Co-teaching: Guidelines for creating effective practices. *Focus on Exceptional Children, 28*, 1-16.
Curby, T. W., Rudasill, K. M., Edwards, T., & Pérez-Edgar, K. (2011). The role of classroom quality in ameliorating the academic and social risks associated with difficult temperament. *School Psychology Quarterly, 26(2)*, 175. doi:10.1037/a0023042
Danielson, C. (1996). *Enhancing professional practice: A framework for teaching.* Alexandria, VA: Association of Supervision and Curriculum Development.
District of Columbia Public Schools. (2009). *The IMPACT evaluation system for school based personnel special education rubric.* Washington, DC: Department of Education
Evans, C., Weiss, S. L., & Cullinan, D. (2012). Teacher perceptions and behavioral strategies for students with emotional disturbance across educational environments. *Preventing School Failure: Alternative Education for Children and Youth, 56*, 82-90.
Fisher, M., & Pleasants, S. L. (2011). Roles, responsibilities, and concerns of paraeducators: Findings from a statewide survey. *Remedial and Special Education, 33*, 287-297. doi:10.1177/0741932510397762
French, N. K. (2001). Supervising paraeducators: A survey of teacher practices. *Journal of Special Education, 35*, 41-53.
Friend, M., Cook, L., Hurley-Chamberlain, D., & Shamberger, C. (2010). Co-teaching: An illustration of the complexity of collaboration in special education. *Journal of Educational and Psychological Consultation, 20*, 9-27. doi:10.1080/10474410903535380
Fuchs, W. W. (2010). Examining teachers' perceived barriers associated with inclusion. *SRATE Journal, 19*, 30-35.
Ghere, G., & York-Barr, J. (2007). Paraprofessional turnover and retention in inclusive programs: Hidden costs and promising practices. *Remedial and Special Education, 28*, 21-32.
Giangreco, M. F., Halvorsen, A. T., Doyle, M. B., & Broer, S. M. (2004). Alternatives to overreliance on paraprofessionals in inclusive schools. *Journal of Special Education Leadership, 17*, 82-90.
Goddard, Y., Goddard, R., & Tschannen-Moran, M. (2007). A theoretical and empirical investigation of teacher collaboration for school improvement and student achievement in public elementary schools. *Teachers College Record, 109*, 877-896.
Hintze, J. M. (2005). Psychometrics of direct observation. *School Psychology Review, 34*, 507.
Hintze, J. M., & Matthews, W. J. (2004). The generalizability of systematic direct observations across time and setting: A preliminary investigation of the psychometrics of behavioral observation. *School Psychology Review, 33*, 258.
Hoglund, W. L., Klingle, K. E., & Hosan, N. E. (2015). Classroom risks and resources: Teacher burnout, classroom quality and children's adjustment in high needs elementary schools. *Journal of School Psychology*, 53, 337-357. doi:10.1016/j.jsp.2015.06.002
Hutchison, A. J., Johnston, L. H., & Breckon, J. D. (2010). Using QSR-NVivo to facilitate the development of a grounded theory project: An account of a worked example. *International Journal of Social Research Methodology, 13*, 283-302.
Kane, T. J., McCaffrey, D. F., Miller, T., & Staiger, D. O. (2013). *Have we identified effective teachers? Validating measures of effective teaching using random assignment.* (Research Paper, MET Project). Seattle, WA: Bill & Melinda Gates Foundation.
Lane, K. L., Wehby, J. H., Little, M. A., & Cooley, C. (2005). Students educated in self-contained classrooms and self-contained schools: Part II--How do they progress over time? *Behavioral Disorders, 30*, 363-374.
Lunenberg, M., Korthagen, F., & Swennen, A. (2007). The teacher educator as a role model. *Teaching and Teacher Education, 23*, 586-601. doi: 10.1016/j.tate.2006.11.001
Marzano, R.J. (2007). *The Art and Science of Teaching: A Comprehensive Framework for Effective Instruction.* Alexandria, VA: Association for Supervision and Curriculum Development.
Mastropieri, M. A., Scruggs, T. E., Graetz, J., Norland, J., Gardizi, W., & Mcduffie, K. (2005). Case studies in co-teaching in the content areas: Successes, failures, and challenges. *Intervention in School and Clinic, 40*, 260-270. doi: 10.1177/10534512050400050201
McIntosh, R., Vaughn, S., Schumm, J. S., Haager, D., & Lee, O. (1994). Observations of students with

learning disabilities in general education classrooms. *Exceptional Children, 60*, 249–261.
Morrissette, D., Morrissette, P. J., & Julien, R. (2002). Paraeducators in education. *Essays in Education, 3*, 1-12.
Murawski, W. W., & Swanson, H. L. (2001). A meta-analysis of co-teaching research: Where are the data? *Remedial and Special Education, 22*, 258-267.
Nie, N. H., Bent, D. H., & Hull, C. H. (1975). *SPSS: Statistical package for the social sciences* (Vol. 227). New York: McGraw-Hill.
Obama, B. (2015). *Every student succeeds act: Executive summary.* Washington, DC: U.S. Department of Education.
Onwuegbuzie, A. J., & Leech, N. L. (2005). On becoming a pragmatic researcher: The importance of combining quantitative and qualitative research methodologies. *International Journal of Social Research Methodology, 8,* 375-387.
Pianta, R. C., & Hamre, B. K. (2009). Conceptualization, measurement, and improvement of classroom processes: Standardized observation can leverage capacity. *Educational Researcher, 38*, 109-119. doi: 10.3102/0013189X09332374
Pianta, R. C., Karen, M., La Paro, K.M., & Hamre, B. K. (2008). *Classroom Assessment Scoring System (CLASS)*. Baltimore: Paul H. Brookes Publishing.
QSR International Pty Ltd. (2010). NVivo qualitative data analysis software (Version 9).
Rea, P. J., McLaughlin, V. L., & Walther-Thomas, C. (2002). Outcomes for students with learning disabilities in inclusive and pullout programs. *Exceptional Children, 68*, 203-223. doi: 10.1177/001440290206800204
Reid, R., Gonzalez, J. E., Nordness, P. D., Trout, A., & Epstein, M. H. (2004). A meta-analysis of the academic status of students with emotional/behavioral disturbance. *The Journal of Special Education, 38*, 130-143. doi: 10.1177/00224669040380030101
Rice, D., & Zigmond, N. (2000). Co-teaching in secondary schools: Teacher reports of developments in Australian and American classrooms. *Learning Disabilities Research & Practice, 15*, 190-197. doi:10.1207/SLDRP1504_3
Riggs, C. G., & Mueller, P. H. (2001). Employment and utilization of paraeducators in inclusive settings. *The Journal of Special Education, 35*, 54-62. doi:10.1177/002246690103500106
Rimm-Kaufman, S. E., Curby, T. W., Grimm, K. J., Nathanson, L., & Brock, L. L. (2009). The contribution of children's self-regulation and classroom quality to children's adaptive behaviors in the kindergarten classroom. *Developmental Psychology, 45*, 958. doi:10.1037/a0015861
Roth, W., & Tobin, K. (2005). *Teaching together, learning together* (Eds.). New York, NY: Peter Lang.
Scruggs, T. E., Mastropieri, M. A., & McDuffie, K. A. (2007). Co-teaching in inclusive classrooms: A meta synthesis of qualitative research. *Exceptional Children, 73*, 392-416.
Siperstein, G. N., Wiley, A. L., & Forness, S. R. (2011). School context and the academic and behavioral progress of students with emotional disturbance. *Behavioral Disorders*, 172-184.
Stanovich, P. J., & Jordan, A. (1998). Canadian teachers' and principals' beliefs about inclusive education as predictors of effective teaching in heterogeneous classrooms. *The Elementary School Journal, 98*, 221–238.
Tseng, V., & Seidman, E. (2007). A systems framework for understanding social settings. *American Journal of Community Psychology, 39*, 217-228. doi: 10.1007/s10464-007-9101-8
U.S. Department of Education. (2004). *Title I paraprofessionals non-regulatory guidance.* Retrieved from http://www2.ed.gov/admins/tchrqual/qual/paraprofessional .html.
U.S. Department of Education. (2010). *Personnel employed (FTE) to provide special education and related services to children and students ages 3-21 under IDEA, Part B, by personnel type, certification status and state[Data file]*. Retrieved January 20, 2016 from http://www.ideadata.org
U.S. Department of Education. (2015). *Thirty-seventh annual report to Congress on the implementation of the Individuals with Disabilities Education Act*.Washington, DC: Author.
Volpe, R. J., DiPerna, J. C., Hintze, J. M., & Shapiro, E. S. (2005). Observing students in classroom settings: A review of seven coding schemes. *School Psychology Review, 34*, 454-474.
Wagner, M., Kutash, K., Duchnowski, A. J., & Epstein, M. H. (2005). The special education elementary longitudinal study and the national longitudinal transition study: Study designs and implications for children and youth with emotional disturbance. *Journal of Emotional and Behavioral Disorders, 13*, 25-41.
Wallace, T., Shin, J., Bartholomay, T., & Stahl, B. J. (2001). Knowledge and skills for teachers supervising the work of paraprofessionals. *Exceptional Children, 67*, 520-533. doi: 10.1177/001440290106700406
Walther-Thomas, C. S. (1997). Co-teaching experiences the benefits and problems that teachers and principals report over time. *Journal of Learning Disabilities, 30*, 395-407.
Wynne, M.E., Ausikaitis, A.E., Satchwell, M. (2013). Adult outcomes for children and adolescents with EBD: Understanding parents' perspectives. *Sage Open Journals, 3*, 1-14. doi: 10.1177/2158244013483133
Zigmond, N., & Matta, D. W. (2004). Value added of the special education teacher in secondary school co-taught classes. *Advances in Learning and Behavioral Disabilities, 17*, 55-75. doi:10.1016/S0735-004(04)17003-1

**The authors acknowledge, with gratitude, the participating schools and colleagues for their thoughtful and important contributions to this work: James Floman, Bonnie Brown, Bridget Hamre and Marissa McCoy. This study was funded by the William T. Grant Foundation (#180276).**

**Correspondence regarding this article should be directed to Christina Cipriano from University of Massachusetts at Dartmouth. Email may be sent to christina.cipriano@umassd.edu**