

# Teacher Engagement With Students With Disabilities: Differences Between Paraprofessional Service Delivery Models

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*The level of engagement that general education teachers have with students with disabilities in their classrooms has been identified in the literature as a key factor effecting the success of inclusive educational experiences. This study describes differences in teacher engagement identified within two approaches to providing paraprofessional supports in general education classrooms; program-based and one-on-one. Findings were based on the observed and reported experiences of 103 school personnel (e.g., teachers, special educators, paraprofessionals, administrators) from four schools (Grades K-12). The study describes characteristics of teacher engagement and disengagement, the involvement of special educators, and phenomena associated with teacher disengagement when one-on-one paraprofessional service delivery was used. The discussion presents implications of these data for school improvement.*

**DESCRIPTORS:** teacher engagement, students with disabilities, paraprofessionals, service delivery models

There is no question that paraprofessionals play an increasingly prominent role in educating students with disabilities in general education classrooms (Downing, Ryndak, & Clark, 2000; Doyle, 1997; Giangreco, Broer, & Edelman, 1999; Pickett, 1999; Welch, Richards, Okada, Richards, & Prescott, 1995). Their number has increased steadily over the past two decades, partially in response to the shortage of professionals (Pickett, 1999). Concurrently, their role in the classroom has expanded, based on the belief that they are a key sup-

port mechanism to operationalize inclusive education efforts, particularly for students with severe disabilities (Werts, Wolery, Snyder, Caldwell, & Salisbury 1996; Wolery, Werts, Caldwell, Snyder, & Liskowski, 1995).

As students with disabilities are being placed in general education classes with supports, the professional literature has called repeatedly for the clarification of the role of paraprofessionals, better training, and supervision (Jones & Bender, 1993; Pickett, 1999; Pickett & Gerlach, 1997; Wadsworth & Knight, 1996). Not only are training and supervision of paraprofessionals logical and appropriate, both are required under the Individuals With Disabilities Education Act Amendments of 1997 (20 U.S.C. 1412 (a) (15) (B) (iii)).

Concerns have been voiced in the literature that current approaches to paraprofessional support may be insufficient to ensure that students with disabilities receive a free appropriate public education, even given training and supervision. Brown, Farrington, Knight, Ross, and Ziegler (1999) expressed their concern that existing paraprofessional service delivery models place the least qualified personnel in the position of providing the majority of instruction and other key supports to students who present the most complex learning challenges.

These concerns have been substantiated in corresponding descriptive research that identified a series of inadvertent detrimental effects related to the use of paraprofessionals as primary instructors of students with disabilities in general education classrooms. Some of these problems include separation from classmates, interference with peer interactions, dependence on adults, loss of personal control, and limited access to quality instruction (Giangreco, Edelman, Luiselli, & MacFarland, 1997; Marks, Schrader & Levine, 1999).

Another key problem identified in the literature is the assignment of a paraprofessional who functions one-on-one with a student with a disability or as the student's primary instructor, that can have adverse effects on classroom teacher engagement with students with disabilities. For example, Young, Simpson, Myles, and Kamps (1997) reported that teacher initiated interactions with three students with autism were infrequent given the close proximity of a paraprofessional. Simi-

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larly, Giangreco et al. (1997) reported that the assignment of paraprofessionals in close proximity to students with multiple disabilities interfered with general educators developing a sense of ownership and shared responsibility for educating these students. Marks et al. (1999) reported similar findings. They indicated that paraprofessionals, rather than general education teachers, bore the primary responsibility for educating students with behavioral challenges who were placed in general education classes.

For this study, teacher engagement means both direct contact with students with disabilities and active involvement in planning and implementing instruction in the general education classroom. Teacher attitudes of shared ownership for their students who have disabilities and their engagement with them in the classroom are critical variables that can effect the appropriateness and quality of a general education placement (Giangreco, Dennis, Cloninger, Edelman, & Schattman, 1993; Hamre-Nietupski, Hendrickson, Nietupski, & Shokoohi-Yekta, 1994; Kozleski & Jackson, 1993; Olson, Chalmers, & Hoover, 1997; Salisbury, Palombaro, & Hollowood, 1993; York-Barr, Schultz, Doyle, Kronberg, & Crossett, 1996). The teacher is likely to be the only certified professional in the classroom throughout the school day because special educators often are spread across several classrooms in consultative or co-teaching roles. Therefore, it is the teacher, as the leader of the classroom team, who sets the tone for the inclusion of students with disabilities, establishes instructional expectations, and serves as a model who is observed by staff and students alike.

The literature suggests strongly that the level of ownership and engagement of general education teachers with their students with disabilities are vital to the successful education of students with disabilities in inclusive classrooms. At the same time, teachers expect and deserve support. Yet, often they report discrepancies between the supports they need (e.g., staff, training, support from a team of professionals) and the supports they receive (Werts et al., 1996). Therefore, it is important to explore the types of support that effect both students with disabilities and those responsible for providing their education, especially general education classroom teachers.

Our initial research question was purposely general and open ended: How are paraprofessionals utilized to support students with disabilities in general education classrooms? Our question was general because we were learning systematically about four schools by observing and interviewing school personnel as part of a larger project. During the first school year of this project (1998–1999), we collected and analyzed descriptive data, some of which is reflected in this study. In the second year (1999–2000), a team from each of the four schools participated in a self-directed process to assess their school's status on 28 indicators of paraprofes-

sional support, prioritize their needs, and develop and implement plans to address their self-identified needs. Although the first and third authors knew a few of the schools' administrators, we did not have in depth or firsthand knowledge of the schools studied.

We explored our general research question by relying on categories identified in the professional literature (e.g., roles, training, interactions with students). These are described in more detail in the Method section. We did not set out to study characteristics of teacher engagement in various service delivery models. Through the process of collecting and analyzing the data over 2 years, the theme of teacher engagement in different service delivery models became prominent and we believed it was deserving of analysis and reporting.

This study fills a gap in the existing research literature by describing characteristics of teacher engagement with students with disabilities when two models of paraprofessional service delivery were utilized: one-on-one and program-based paraprofessionals. These data also provide examples of the consequences in the classroom when teachers are less engaged with their students with disabilities. These data extend the research by reporting on paraprofessional issues for students across Grades K–12, disability categories, and levels of severity. The findings have implications for service delivery, support service decision making, role clarification, and training of all team members.

## Method

This study employed a descriptive, qualitative design.

### Setting

The study was conducted in four Vermont schools. They were selected because they were part of the same K–12 system, they had a history of including a full range of students with disabilities in general education classrooms, and they employed paraprofessionals to provide educational supports for students with and without disabilities.

Three of the schools (i.e., Grades K–2, 3–5, 6–8) were a K–8 school district. Students in these schools numbered from 430 to 526. Older students from this district (Grades 9–12) attended the fourth school, a union high school that also received students from two other districts. This high school served 1,410 students. Across the schools, approximately 5% of the students were from minority cultural backgrounds and about 10% received free or reduced lunch. Class size across all four schools averaged 20–25 students.

Paraprofessionals in the four schools were assigned to support students as one-on-one or as program-based paraprofessionals. One-on-one paraprofessionals were assigned to support the educational needs of students with disabilities, either part-time or full-time. They worked most often with students with low incidence

disabilities (e.g., autism, multiple disabilities, and severe/moderate intellectual disabilities).

Program-based paraprofessionals supported the educational needs of students with and without disabilities. Most were assigned to general education classrooms, primarily under the direction of a classroom teacher who worked collaboratively with a special educator. A few were assigned to special education resource rooms under the direction of a special educator or speech/language pathologist. Program-based paraprofessionals worked most often with students with high incidence disabilities (e.g., learning disabilities, attention deficit hyperactivity disorder [ADHD]).

Both one-on-one and program-based paraprofessionals were well represented in all four schools. All students with disabilities served by the paraprofessionals were included in general education classrooms as their primary or exclusive educational placements.

### Study Participants

Data were collected from 103 individuals, including 41 general education teachers, 38 paraprofessionals, 12 special educators, 2 speech/language pathologists, and 10 school administrators (e.g., superintendent, special education administrators, principals). The number of participants from the four schools was about the same. Three study participants were from the district's central office.

### Data Collection

A three person research team, comprised of the three authors, collected all data between October 1998 and June 1999. Each researcher had graduate level coursework in qualitative research methodology and previous experience using qualitative methods. The research team brought two significant viewpoints to the research that could have a bearing on their interpretation of the data. First, all are proponents of extending inclusive educational opportunities to students with the full range of disabilities. Second, based on their previous research and field experience, they had general (not site specific), ongoing concerns and questions about whether paraprofessional supports were being provided in ways that were appropriate and beneficial for educating students with disabilities in general education classrooms.

Two sources of data were collected throughout the 1998–1999 school year, semi-structured interviews and observations. Approximately 22% of the study participants ( $n = 23$ ) were interviewed and observed, 46% ( $n = 47$ ) were observed only, and the remaining 32% ( $n = 33$ ) were interviewed only. The first author collected the data at the elementary (Grades 3–5) and middle schools (Grades 6–8), the second author collected the data at the high school (Grades 9–12), and the third author collected all data at the primary school (Grades K–2).

**Semi-structured interviews.** Fifty-six semi-structured interviews were conducted, ranging in length from 35 to 120 minutes. Most lasted between 45 and 60 minutes. All interviews were conducted individually in a private setting in offices or classrooms in the schools.

Participants volunteered to be interviewed. Questionnaires were distributed to all 302 school faculty (e.g., teachers, paraprofessionals) across the four schools. One of the questions was: Would you be willing to participate in a voluntary, confidential interview to share your perspectives on issues related to paraprofessionals supporting students with disabilities? If their response was “Yes,” they were asked to list days and times that were convenient for them to be interviewed along with a preferred method and time to be contacted (e.g., work phone, home phone, e-mail).

This questionnaire yielded 176 responses. Ninety-two individuals indicated a willingness to be interviewed. Time and resources limited the number of interviews to 56 of those 92 individuals. We interviewed those who responded to our contacts first and were scheduled for interviews. The subjects interviewed were unknown to the research team prior to the study period, with the exception of four of the school administrators. They were known by two members of the research team. As allocation of the research team's time and resources for interviewing were considered, a plan was made to seek double digit representation from each of the four categories of respondents (i.e., general education teachers, special educators, paraprofessionals, administrators) and from each of the four schools.

Participants interviewed included 17 teachers, 17 paraprofessionals, 12 special educators, and 10 school administrators. All interviews were audiotaped with written permission of the participants and transcribed verbatim. In an effort to help respondents feel comfortable, the following steps were taken: interview times were selected by the interviewees; interviews were held in the school for the convenience of school personnel; interviews were conducted in private spaces with closed doors; confidentiality was ensured; permission to audiotape was requested; and each interview session began by asking the person to talk a bit about his or her role in the school.

The first author conducted 30 interviews, including 14 each at the elementary and middle schools and 2 with central office administrators (i.e., the special education coordinator for Grades 9–12 and the superintendent for Grades K–8). The second author conducted 12 interviews at the high school. The third author conducted 14 interviews, including 13 at the primary school and 1 with the special education coordinator for the K–8 district.

A topical interview guide, developed from current literature pertaining to paraprofessionals in general education classrooms (Giangreco, CichoskiKelly, et al.,

1999; Marks et al., 1999; Pickett & Gerlach, 1997) was used flexibly as the basis for all interviews. Questions addressed the following paraprofessional topics: acknowledging their work, training, hiring and assigning, interactions with students and teachers, roles and responsibilities, supervision, and impact of paraprofessional support. Each topic was related to the initial overarching research question about the utilization of paraprofessionals to support students with disabilities in general education classrooms.

**Observations.** The research team conducted 51 hours of observation during 22 school visits spread across the 1998–1999 school year from October through June. Seventy school personnel, including 33 general education teachers, 31 paraprofessionals, 4 special educators, and 2 administrators, were observed directly in typical school settings (e.g., classrooms, labs, hallways, cafeteria, gymnasium, school yard) and activities (e.g., large group lessons, small group lessons, independent work, transitions between classes). The 70 individuals included only those who played a substantial role in the settings during observations. Individuals who came in and out of classrooms for purposes not related to classroom operation (e.g., to ask a question, get materials) were not included.

The investigators observed paraprofessionals in as many situations as possible where they supported students with disabilities, including settings where some faculty had not been interviewed. School administrators and special educators directed the research team to classrooms where paraprofessionals supported students with disabilities. Observers positioned themselves in locations suggested by the teachers where they could easily observe, while being minimally intrusive on the normal operation of the classroom. In most cases, they sat quietly at the back of the room and recorded notes on a laptop computer with minimal direct interaction with students. Because the teaching style of teachers differed, some teachers preferred that the observer interact with students. In these cases, the observer alternated between taking notes and interacting with students involved in activity based learning (e.g., science lab, math game, social studies project). Fieldnotes were recorded for all observations. Interview transcripts and observation fieldnotes consisted of approximately 2,000 pages of double spaced text.

### Data Analysis

The first author analyzed inductively the observational and interview data using categorical coding (Bogdan & Biklen, 1992). Transcripts of both interviews and field notes were read and marked by hand using 76 initial codes that included words descriptive of text content (e.g., proximity, acknowledging, location). Particularly descriptive passages were highlighted and separate notes were maintained on emerging themes. Each transcript was imported from a word processing program

into HyperQual3 (Padilla, 1999), a computer application designed to manage and sort qualitative text data. Each transcript was reread and data were rearranged into 24 codes (e.g., teacher involvement, special educator roles, personal connection) by grouping related codes. For example, text chunks coded previously as “job description,” “responsibilities,” and “assistance” were collapsed into a single code, “roles.” HyperQual3 was used to sort the data by code into 24 code specific reports. This sorting is the computerized equivalent of cutting and separating coded data into folders. Inductive analysis (Bogdan & Biklen, 1992) was applied to the code specific reports to assist in the identification of themes. As themes emerged from the data over a 2-year period spanning the 1998–1999 and 1999–2000 school years, the research team discussed them on an ongoing basis. They discussed whether there was agreement that initially identified themes were present in all four schools, prominent, and important enough to warrant reporting. Once team members agreed on these points, they continued the process of identifying exemplars from the data that reflected the themes. As the theme emerged regarding differences in teacher engagement, they verified the subthemes by identifying exemplars and nonexemplars of the same phenomenon (Table 1). The research team regularly circulated subsets of data and responded to drafts of findings before finalizing the reporting of the data.

### Findings

The roles of one-on-one and program-based paraprofessionals included a major emphasis on instruction. To a lesser extent, they supervised students in group settings (e.g., playground, cafeteria, arrival/dismissal) and performed clerical duties. When needed, one-on-one paraprofessionals provided personal care supports (e.g., feeding dressing, mobility) for students with physical, sensory, or intellectual disabilities. They also provided social/behavioral supports for students who exhibited challenging behaviors.

A major theme emerged from the data, indicating substantially different levels of general education teacher engagement with students with disabilities. Differences in levels of general education teacher engagement varied between the two methods of paraprofessional service delivery. General education classroom teachers were more engaged with students with disabilities when those students were supported by a program-based paraprofessional. Conversely, classroom teachers were less engaged with students with disabilities when those students were supported by one-on-one paraprofessionals. As a paraprofessional explained, “There are some (general education teachers) on both ends (of the engagement spectrum) and there are some in the middle.”

We do not assert that the differences in general edu-

Table 1  
Characteristic Variations in Teacher Engagement With Students With Disabilities in General Education Classes

When teachers are more engaged with students with disabilities	When teachers are less engaged with students with disabilities
<ul style="list-style-type: none"> <li>• Expressed attitude of ownership and responsibility for the education of all students in the class, with and without disabilities</li> <li>• Highly knowledgeable about the functioning levels and learning outcomes of their students with disabilities</li> <li>• Collaborated closely with paraprofessionals and special educators based on clear roles</li> <li>• Planned lessons and activities for paraprofessionals to implement</li> <li>• Retained instructional decision making authority for their students with disabilities</li> <li>• Spent approximately the same time with students with and without disabilities</li> <li>• Had substantial instructional interactions with students with disabilities</li> <li>• Communicated directly with students with disabilities</li> <li>• Directed the work of paraprofessionals in class</li> <li>• Provided mentorship to paraprofessionals and maintained an instructional dialogue with them</li> <li>• Pursued fading out paraprofessional supports or declined such services if perceived as not needed</li> </ul>	<ul style="list-style-type: none"> <li>• Expressed attitude of ownership and responsibility primarily for the education of students without disabilities in the class</li> <li>• Less knowledgeable about the functioning levels of their students with disabilities</li> <li>• Deferred communication with parents to paraprofessionals</li> <li>• Limited collaboration with paraprofessionals and special educators; roles were unclear</li> <li>• Did not plan lessons and activities for paraprofessionals to implement</li> <li>• Relinquished to paraprofessionals instructional decision making authority for their students with disabilities</li> <li>• Spent substantially less time with students with disabilities</li> <li>• Had limited instructional interactions with students with disabilities</li> <li>• Communicated indirectly with students with disabilities</li> <li>• Did not direct the work of paraprofessionals in class</li> <li>• Did not provide mentorship to paraprofessionals nor maintained an instructional dialogue with them</li> <li>• Did not pursue fading out paraprofessional supports or declining such services; perceived as always needed</li> </ul>

cation teacher engagement were necessarily the result of using both approaches to paraprofessional service delivery alone. Rather, the data suggest a strong pattern of co-occurrence between the various levels of general education teacher engagement and the two approaches to paraprofessional service delivery that warrants consideration. We also present characteristics of general education teacher engagement and disengagement with students with disabilities (Table 1) as well as phenomena associated with lower levels of teacher engagement with students with disabilities.

### Characteristics of Teacher Engagement

General education teachers who were most engaged with students with disabilities expressed attitudes that reflected high levels of ownership and responsibility for the education and inclusion of students with and without disabilities. As one general education teacher explained:

Ultimately, I'm responsible for what happens in my classroom. I don't expect them [paraprofessionals] to carry much of the load. If a paraeducator is assigned to my classroom, then that paraeducator and I work as a team so that we share the instruction, not the planning. We are both responsible. By that I mean we share the time and physical labor and the contact with that child [with disabilities] as well as all the other children.

Although these general education teachers welcomed support when they believed it was necessary, they were comfortable declining supports they believed were un-

necessary. This was reflected in the comments of a general education teacher who stated:

I had a student who was diagnosed EBD [emotional/behavioral disability]. He came in my class and an assistant came with him for the first three weeks. He was absolutely fine in class. We got along. It just worked out really, really well. At the end of the three weeks I asked to have the assistant not come to class. It [being accompanied to class by a paraprofessional] was embarrassing to him and there was no reason for it. He was able to manage his behavior in class just fine. So she [the paraprofessional] didn't come to class with him anymore.

General education teachers who used less paraprofessional support for students with disabilities relied on active approaches to teaching (e.g., group projects, educational games, lab activities, activity based learning). In describing one such classroom, an administrator explained, "This kid is doing great! He doesn't need it [one-on-one paraprofessional support]. The classroom he's in is a very hands-on, very creative classroom. I think it provided him with an environment where he could learn well."

General education teachers who were more engaged with their students with disabilities were knowledgeable about their students' functioning levels across curricular areas, learning outcomes, and activities. These general education teachers collaborated with special educators and shared decision making about curriculum and instruction. As a general education teacher explained: "What I've always tried to do is to have a special educator sit down with me and we plan a unit;

these are the kinds of books we are going to be using and the kind of topics we are going to be covering.”

General education teachers who had program-based paraprofessionals in their classrooms were more likely to review unit and lesson plans with them and to provide initial and ongoing on-the-job training, modeling, and mentoring. For example, they trained the paraprofessionals to implement a reading program, demonstrated lessons, observed them, maintained an instructional dialogue with them, and provided feedback until they reached a level of proficiency where the teacher was comfortable giving them greater autonomy.

General education teachers who were more engaged also spent time teaching students with disabilities. They retained accountability, especially for teaching new skills. As one general education teacher from the primary school explained, “Paraeducators are not supposed to be teaching new skills. I do that. She is used to reinforce them and provide practice.”

During instructional periods (e.g., whole class lessons, small group activities, independent seatwork), general education teachers who were most engaged interacted equally with their students with and without disabilities. They spoke directly to the students with disabilities, asked them questions, tailored their questions to the students’ ability levels, checked their work, and provided prompts and specific supportive and corrective feedback. A paraprofessional from a program-based model stated, “He [the general education teacher] involves the student [with disabilities] very much. He’ll call on him during class even if his hand is not raised.”

General education teachers who were engaged interacted socially with their students with disabilities by greeting them, joking with them, and inquiring about noninstructional aspects of their daily lives. In other words, the engaged general education teachers interacted with their students with disabilities in substantively the same ways as they did with their students without disabilities. Although engaged general education teachers collaborated with special educators and paraprofessionals to provide specially designed instruction to students with disabilities, they did not relinquish their instructional roles as teacher and classroom leader. They were keenly aware of happenings in the classroom with all students and were described as being “in charge.”

### **Characteristics of Teachers Who Are Less Engaged**

Conversely, less engaged general education teachers indicated that special educators and paraprofessionals bore the primary responsibility for educating students with disabilities. In reference to including and teaching students with disabilities, less engaged general education teachers were described by respondents as those who “don’t want to,” “don’t think they are supposed

to,” or “don’t know how to.” Several faculty members identified this as problematic. As one special educator stated:

There are still teachers who host kids [with disabilities] in their classroom. I think some teachers defer too much responsibility to paraprofessionals and they [paraprofessionals] have too much undue ownership of kids and decision-making. That is not a sign of health to me.

Unlike program-based paraprofessionals who had more collaborative interactions with the general education teacher, one-on-one paraprofessionals reported little collaboration with classroom teachers. They functioned as the primary instructor of the student with a disability to whom they were assigned. One paraprofessional stated, “I would say definitely I function much more as a teacher.” Another indicated, “I was told I had fairly free reign.”

For some faculty, utilization of one-on-one paraprofessionals as primary instructors of students with disabilities represented a fairness issue. As a general education teacher stated, “They [paraprofessionals] need supervision and support. They are not trained teachers and they can’t be expected to do that [function as teachers]. It’s not fair to them and it’s not fair to the kids to just expect them to take on that responsibility.” A special educator echoed these fairness concerns for students, “Is the school providing appropriate education to that child [with a disability] by giving reading instruction from an uncertified teacher?”

A seeming inverse relationship was reported and observed between paraprofessional autonomy and general education teacher and paraprofessional ownership, responsibility, and decision-making. The more exclusive ownership, responsibility, and decision-making the paraprofessional assumed, the less the classroom teacher was engaged with students with disabilities. A general education teacher stated, “Paras shouldn’t have the sole responsibility, but too often they do.” A special educator explained, “We rely too heavily on them [paraprofessionals] for making educational decisions, doing things they are really not supposed to be doing—that is a danger. You just fall in to that and I think we have to be careful about that.”

Less engaged general education teachers deferred communication with parents of students with disabilities (e.g., daily journals, phone calls) to paraprofessionals. As a general education teacher explained, “I’m not really part of the daily exchange unless it is something that Susan [the paraprofessional] feels is pretty significant. It is available for me to read. I just pretty much don’t have the time to do that [participate in the home-school communication exchange].”

General education teachers who were less engaged were less clear about the roles of paraprofessionals and

the boundaries for utilizing their services. Several paraprofessionals were keenly aware of the discrepancy between their actual and idealized roles. As one paraprofessional asked, “Do you want me to tell you what I am supposed to do or what I actually do?” A general education teacher at a high school explained it this way:

Sometimes their role is unclear. That kind of concerned me a little bit because my understanding of the position was that they are sort of there for everybody even though they are supposedly attached to the one student. And I think some of that needs to be defined more clearly. Frankly, I’m not sure if I know what their full responsibilities are. There are times I would like to ask them to do more, but I’m not sure if I’m within my rights to do that.

Most of the general education teachers and one-on-one paraprofessionals reported amiable, although not highly collaborative, relationships. However, a few reported disaffection and disengagement under specific circumstances. For example, a general education teacher from the middle school said that she had become quite used to having paraprofessionals in her classroom and she appreciated having someone available to supervise the class if she needed to leave the room for some reason. However, she explained her concern in this way:

The only problem I had was when a paraeducator talked to a teacher about what I was doing in class. It made me realize that this person is in my room and is then going back and talking to other people. She was observing me and reporting to the special educator about me. I didn’t like that! The way I approach it is, I just ignore them.

Several general education teachers acknowledged that one-on-one paraprofessionals played a large role in planning instruction and designing accommodations, “I know that is done.” A paraprofessional concurred, “A lot of people say that we are being asked to do things that we really shouldn’t be doing like developing our own lesson plans and figuring out the physical needs of kids.” A special educator confirmed this scenario for one-on-one paraprofessionals:

They [paraprofessionals] are pretty much responsible for everything, for finding the materials for those kids, for setting up the programs for those kids, if the kids have a behavior issue they are the ones that deal with them, the special ed teacher basically runs the paper route.

In response to questions about how they felt about making so many decisions and having so much respon-

sibility, some paraprofessionals said things like, “Well, I’ve gotten used to it.” Others indicated, “I’d rather be told what I’m expected to do.”

Acknowledging the extremely busy culture of the schools, an administrator conceded, “In some cases paraeducators are simply told, ‘This student has a phonetic reading program, you’re seeing them at 10:00 everyday.’ And then they run around and find materials and get it going. I don’t think that’s OK.” A paraprofessional offered a similar scenario, “I had to sit down and read the book and figure out what to do.” Another paraprofessional agreed, “It’s pretty much up to me to determine curriculum accommodations. I do most of the modifying for the student.” A third stated, “I have no written plan given to me.”

In the absence of written plans or very general verbal directions, paraprofessionals reported being expected to watch the general education teacher and make adaptations. As one paraprofessional explained, “Especially in math class, I’ll be in the classroom to observe what’s being presented and I take it from there. I call it ‘translating’ for the students.”

During instructional periods of the day (e.g., large group lessons, small group activities, independent seatwork), less engaged general education teachers interacted infrequently with the students who had one-on-one paraprofessional support. The following comment of a one-on-one paraprofessional characterized the remarks of several respondents, “The classroom teacher really doesn’t do any teaching work with Allen [a student with severe disabilities].”

When less engaged general education teachers interacted with these students, the interaction was brief and typically noninstructional (e.g., “How is it going, Sammy?” “Nice work Marcy!”). They were observed speaking through or to paraprofessionals about students when the students were present. This occurred even when students had no communication difficulties that might require interpretation or translation. For example, during one observation when the student and paraprofessional were seated together, the general education teacher approached them, looked directly at the paraprofessional, and said to her, “How is John doing on his math? Remind him that his assignment from yesterday still needs to be completed.”

In summary, the less engaged general education teachers interacted with their students with disabilities in substantively different ways than they did with their students without disabilities. Sometimes willingly and sometimes reluctantly, less engaged general education teachers relinquished their roles as teacher and classroom leader to one-on-one paraprofessionals. One general education teacher from the middle school worried that lack of teacher engagement would perpetuate itself: “One of my fears is that we will just keep getting

more and more paraeducators and the teachers will spend more and more time supervising paraeducators. I am concerned that we will get farther and farther away from students.”

### Special Educator Involvement

When general education teachers were less engaged, they sometimes assumed that the paraprofessional worked closely with the special educator. They reported being surprised when they discovered that some one-on-one paraprofessionals functioned on their own, often without professionally prepared plans. “I thought the paras were working on IEP goals!” exclaimed one general education teacher.

Although some paraprofessionals reported close, productive working relationships with special educators, others reported limited contact. As one paraprofessional stated, “Sometimes all I get is a wave in the hall. I don’t see the special educator very often. She’s never in there [the classroom with students with and without disabilities] to observe and see how I’m doing.” As another paraprofessional explained:

My special educator asked me for a list of things we had been working on in math and reading. She sat down with me very briefly at one of the meetings that we finally had and said, “Where is this kid [functioning]? What’s this kid doing?” I explained it to her. She took the information and put it in the new IEP.

As a special educator reported, “Most of the special educators see their kids [with disabilities] in a pull-out in their offices still.”

In most cases, paraprofessionals were clear in identifying the perceived reasons for their limited interactions with special educators. “They [special educators] are stretched too thin, . . . they are overloaded, . . . they don’t have any more time to give.” Special educators concurred, indicating that they “don’t have enough time” and feel “frazzled.” Special educators reported spending much of their time doing paperwork, conducting evaluations and re-evaluations, case coordination, attending meetings, and “dealing with crises.”

Special educators said that in order to be good consultants, they needed to know the child well. For example: “Unless I have relationship with the students I’m of no use to them” and “I have no prep period, I’m working during lunch.”

Given these conditions, paraprofessionals reported being empowered by special educators to make decisions on their own, out of necessity. As one special educator conceded, “Unfortunately, I don’t think she [the paraprofessional] is always comfortable with that power.”

### Phenomena Associated With Teacher Disengagement

**Isolation.** Students with disabilities were often isolated in classrooms with less engaged general education teachers and one-on-one paraprofessionals. Students assigned one-on-one paraprofessionals spent much of their time doing different activities from the rest of the class and following a semi-independent schedule, typically determined and adjusted at the discretion of the paraprofessional.

In many instances, students with disabilities and their one-on-one paraprofessionals functioned autonomously. They were located physically at the “fringe” of the group, on the side or at the back of the room, with the paraprofessional positioned nearby (e.g., within 1 ft of the student with a disability). For example, these students worked at a computer in the back of the room or were read to by the paraprofessional while the teacher conducted a large group lesson with the rest of the class.

Although many paraprofessionals expressed feelings of connection to the school staff, other expressed feelings of isolation, “I feel like an outsider.” A high school administrator expressed concern that isolation problems may be exacerbated in a large school.

Unfortunately, one-on-one paraprofessionals almost assume an identity with the student. The example I would offer to illustrate it would be a conversation that might go something like this: “You know who he is. He’s the guy that walks with so and so [student with disabilities].” We often don’t even know their names. They move through the buildings like shadows sometimes.

Sometimes, this isolation prompted paraprofessionals to create their own networks to support each other. As one of the special educators conceded, “I think the day to day supervision [of the paraprofessionals] gets entirely lost in the shuffle.” Several paraprofessionals and educators alike reported that a primary orientation approach, as well as ongoing support for paraprofessionals, came from “para to para job shadowing without much, or any, educator involvement.” Respondents indicated that this was more prevalent for one-on-one paraprofessionals. A classroom teacher explained, “Typically, you’ve got people that are very poorly trained, or not trained at all, working with the most challenged students, providing the most technical kinds of programs we have in schools and not being observed at all.” Recognizing the practice of having one-on-one paraprofessionals working autonomously and in isolation as the primary instructors for students with disabilities as problematic, one principal stated, “So you can see why this has become a real concern to me.”

**Insular relationships.** Through the extended time spent together, many respondents indicated that paraprofessionals developed special relationships with and a

strong commitment to students with disabilities. Paraprofessionals made statements such as, “Sharon is mine. I’m an advocate for her. You become attached and have a bond.” “I spend all day with Allen except for a few specials. We’re a pair!” Although many respondents acknowledged the value of that bonding, it was perceived as problematic when the relationship became so insular that students with disabilities spent nearly all of their time with the paraprofessional to the exclusion of the teacher and classmates.

An administrator explained, “We’ve had glaring examples. We had an absolutely lovely woman [a paraprofessional], highly intelligent, very devoted, who absolutely took over the child’s program.” Insular relationships that persisted over a period of years reportedly presented “some significant adjustment difficulties” for both the paraprofessionals and the students when transitions occurred that resulted in a parting of the ways between the paraprofessional and the student.

Insular student-paraprofessional relationships posed additional problems. Some classroom teachers and special educators reported difficulty in asserting their professional roles. The following scenario from a classroom observation exemplifies this problem:

Following a large group lesson, the teacher directs the students to form small groups and work together to complete corresponding math activities. The teacher stops at a table where the paraprofessional has taken a student with disabilities. Noticing that the paraprofessional has separated the student and is working on different activities, the teacher suggests, “Why don’t you have Janie join a math game with one of the groups of students?” The paraprofessional acknowledges the teacher’s suggestion, but over the 20 minutes of the activity period never has the student join the group. Later the paraprofessional explains to me that she feels free to not follow instructions from the teacher. The teacher never presses the issue.

A special educator said that when she was new to the school, she found it difficult to have some paraprofessionals respond to her instructions.

There are some paraeducators that have been here quite a while. They are very valued and very good at what they do. They didn’t perceive that they needed me or needed to see me. They weren’t interested in hearing my suggestions. There is almost a sense that learning specialists [special educators] aren’t part of the loop with the teachers. It is an interesting thing. I really had to build relationships with the paraeducators. I had to spend months proving myself to develop credibility with them in order to impact kids’ instruction.

As another special educator shared:

I think a lot of times paraeducators are given way too much responsibility, and they want it, and they want to do what is best for the kids. But you need to say, “Well, who is really in charge?” It was just awful to try to wrest that away from her.

**Stigma.** Several respondents indicated that the assignment of a one-on-one paraprofessional, and the close adult proximity that accompanied it, was stigmatizing for some students with disabilities. As an administrator said, “Some kids just don’t want to be associated with special ed. programs or special ed. paras.” A middle school paraprofessional explained, “Mike didn’t want me sitting right next to him so that he wouldn’t stand out from the other students.” Paraprofessionals reported ambivalent feelings about the potential effects of their proximity. “The most challenging aspect of my job is knowing when to back off. When I backed off I was worried that I was letting everyone down.”

As a classroom teacher stated, “many of our students with disabilities have a strong desire to be perceived by others as normal. Being singled out can be embarrassing.” One paraprofessional in her early 20s took a student’s perspective.

I’m not all that far out from middle school or high school myself — I can remember back then. I know I would not have wanted an adult sitting right next to me — that would have affected me socially. These kids are at an age where the slightest comment in a group of friends could mean social disaster for them one day. So I try to respect that. When I’m in the classroom, I’ll back up and give them space and try real hard to interact with the whole class.

At times, students with disabilities reacted overtly to unwanted proximity. A respondent described a scenario in which a student with ADHD repeatedly told a paraprofessional, “Get out of my face!” The paraprofessional’s decision not to respond to the student’s request provoked a confrontation and an aggressive reaction. He “got out of control” and eventually screamed at the paraprofessional, “GET THE F--- OUT OF MY FACE!” Eventually, the assistant principal stepped in to de-escalate the situation.

Other respondents reported that a few students with disabilities described some paraprofessionals as “spies.” One such student explained to a teacher that he felt he was unfairly singled out because things other students did without consequence resulted in negative consequences for him. He said his behavior was not that much different than that of many other students. He believed that the paraprofessional constantly watched him, waited for him to do something wrong, and reported everything he did.

## Discussion

The findings present discernible differences in the levels of teacher engagement with students with disabilities. These differences co-occurred with the two paraprofessional service delivery approaches (i.e., one-on-one and program-based) utilized in the four schools studied. The data offer more frequent exemplars of general education teacher engagement with students who have disabilities when paraprofessional support was program-based in general education classrooms. Conversely, lower levels of general education teacher engagement were observed and reported more frequently when paraprofessionals were assigned to students with disabilities in a one-on-one model of service delivery.

Lower levels of teacher engagement were associated with detrimental, albeit unintended, effects (i.e., isolation, insular relationships, stigmatization). These findings extend existing research on the proximity of paraprofessionals (Giangreco et al., 1997; Marks et al., 1999; Young et al., 1997).

In presenting these data, we are not suggesting that the two forms of paraprofessional service delivery we studied always, or necessarily, result in teacher engagement or disengagement. The identified patterns and regularity of occurrence were sufficient to suggest a strong relationship between the two under the conditions described in this study. At the same time, it is appropriate to consider alternative explanations for the differing levels of teacher engagement associated with one-on-one and program based paraprofessional supports. For example, because most of the students served in the one-on-one service delivery approach had low incidence disabilities (e.g., autism, multiple disabilities), several questions were raised. Are general education teachers less engaged when they encounter students with more severe disabilities, regardless of the service delivery option? Do general education teachers, in general, perceive themselves as less prepared or capable of teaching students with more severe disabilities so that they defer to others? Are teachers less engaged as a result of historical practices whereby students with severe disabilities tend to be assigned one-on-one paraprofessionals based on parent and teacher advocacy? We suspect that a variety of factors influence the level of engagement by general education teachers with their students who have disabilities. Future research may further clarify the relationships between these potentially influential variables by studying students with severe disabilities who receive one-on-one paraprofessional support compared with those who receive program based supports.

These findings are limited to the four schools studied. Any generalization to other situations should be approached cautiously, especially given the local geographic scope of the sites and the similarity of the

schools' demographic characteristics. It is conceivable that these forms of service delivery, given other practices, supports, or demographic characteristics, might yield different findings.

These findings are potentially important to teachers, special educators, administrators, parents, and students with disabilities. First, awareness can be raised regarding various models of paraprofessional service delivery and their impact on factors that affect both the social/personal and academic/functional aspects of schooling. Models of paraprofessional service delivery may be one factor that affects teacher engagement, which arguably is a key factor in the successful inclusion and education of students with disabilities in general education classes (Hunt & Goetz, 1997; McGregor & Vogelsberg, 1998). Therefore, it is essential for educational teams and administrators to consider whether the roles of paraprofessionals and existing models of service delivery contribute to, hinder, or replace teacher engagement.

Second, the characteristics of teacher engagement (Table 1) can be utilized by educational team members as a form of self-assessment or as reflective prompts to advance local practices. If teachers are less engaged with students with disabilities than team members believe is appropriate or necessary for successful inclusion in the general education classroom, selection of a reasonable supportive course of action will require further understanding of the reasons for teacher disengagement. Is it that the teachers "don't want to," "don't think they are supposed to," "don't know how to," or experience some combination of reasons? Understanding these reasons will allow plans to be developed and implemented that match the identified need.

If a general education teacher does not believe that she should be involved in the instruction of a student with disabilities in her classroom, the situation might call for role clarification among the team members. If a teacher expresses a willingness to engage instructionally with her students with disabilities, but indicates she does not know how to, the response might call for capacity building. This might involve training, collaborative supports, or structural changes (e.g., class size, ratios of students with and without disabilities). These changes would develop the teacher's skills and create reasonable conditions to apply those skills in the classroom for students with and without disabilities.

When teachers express an unwillingness to be more engaged instructionally with students with disabilities, administrators may facilitate the development and ongoing clarification of a shared framework, often reflected in their mission statement, policies, and guidelines.

Expressions of unwillingness of teachers to engage instructionally with students with disabilities will require ongoing supportive supervision. Ultimately, schools cannot function effectively or meet their public mission if teachers retain the right to choose the stu-

dents they will or will not work with in their classrooms. Simultaneously, the legitimate concerns of teachers should be understood and acted on to ensure that they have appropriate working conditions to instruct the students placed in their classrooms.

The lack of role clarity presented in this study extends beyond paraprofessionals to encompass the roles of general education teachers and special educators. In response, we suggest that school teams reconceptualize the roles of teachers, special educators, and paraprofessionals to match a collective vision of what the school seeks to provide for all its students. Realizing that paraprofessional supports have evolved in many schools in response to perceived needs, the problem remains that the paraprofessional solution may not address the root causes of the need, but merely shift them from one set of people to another. Assigning paraprofessionals to support students with disabilities in general education classes does not necessarily change teacher attitudes about students with disabilities, increase the skills of teachers to provide differentiated instruction to a diverse set of learners, or ensure that students with disabilities receive quality instruction.

Models for managing complex change, such as educational service delivery to educate students with disabilities, typically begin with clarifying the vision of the desired change (Knoster, Villa, & Thousand, 2000). Without a clear vision and sound rationale, the result is often confusion. Lack of a clear, educationally defensible vision is compromised further when gaps exist in skills, incentives, resources, or action planning (Knoster et al., 2000). By attending to each component of the change process, schools can increase their possibilities of providing appropriate supports to students with disabilities and avoid the unintended detrimental effects associated with lower levels of teacher engagement (e.g., isolation, insular relationships, stigma). Future research should seek to identify conditions that encourage engagement of general education teachers with students with disabilities, as well as clarify and implement roles for teachers, special educators, and paraprofessionals that contribute to positive student outcomes. These data, which are not yet available, may provide examples upon which local initiatives may be based.

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