

# *Schoolwide Planning to Improve Paraeducator Supports*

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**ABSTRACT:** *This study chronicled the use of a process of planning for paraeducator supports, by teams in 46 schools, in 13 states during the 2000-2001 and 2001-2002 school years. Data reflect the utilization and outcomes of the process along with the perspectives of 331 individual team members. Findings indicated that the process assisted school teams in self-assessing their paraeducator practices, identifying priorities, and developing action plans and implementing them. Individual team members reported that the process did what it purported to do and rated it highly on consumer-oriented variables. Culminating reports documented impact on school personnel and student outcomes. Implications for schools and future use are discussed for improving paraeducator supports and educational supports for students with disabilities.*

**I**ncreasingly paraeducators (also known as paraprofessionals, teacher aides, instructional assistants) are being utilized as a key service delivery support to assist in educating students with a range of disabilities in general education classrooms (Downing, Ryndak, & Clark, 2000; Giangreco & Doyle, 2002; Minondo, Meyer, & Xin, 2001; Riggs & Mueller, 2001). Although the numbers of paraeducators in special education has grown substantially over the past several years (Pickett, 1999), recent literature persistently suggests that they continue to be underappreciated, undercompensated, and asked to undertake critical instructional responsibilities without sufficient role clarification, planning by qualified professionals, supervision, or training (Giangreco, Edelman, Broer, & Doyle, 2001; IDEA Partnerships, 2001).

Ineffective utilization of paraeducators persists in schools even though these same basic issues have been documented in the literature for decades (Jones & Bender, 1993).

Current research data and practical tools are available to address many longstanding paraeducator issues. These include topics such as (a) role clarification, collaboration, and support of paraeducators (Doyle, 2002; Gerlach, 2001; Giangreco, Edelman, & Broer, 2001; Morgan & Ashbaker, 2001); (b) training (CichoskiKelly, Backus, Giangreco, & Sherman-Tucker, 2000; Ghere, York-Barr, & Sommerness, 2002; Institute on Community Integration, 1999); (c) interactions with students (Giangreco, Edelman, Luiselli, & MacFarland, 1997; Marks, Schrader, & Levine, 1999; Werts, Zigmond, & Leeper, 2001); and (d) supervision (French, 2001; Pickett

& Gerlach, 1997; Wallace, Shin, Bartholomay, & Stahl, 2001).

Although having a better trained and supported paraeducator workforce is undoubtedly a preferable alternative to the insufficiencies of the existing status quo, is it enough? Strengthening paraeducator supports without due consideration to strengthening the capacity and working conditions of general and special educators may inadvertently interfere with providing a free, appropriate public education to students with disabilities by sanctioning the least qualified personnel, typically paraeducators, to assume ever greater responsibilities for students with the most complex and significant learning and behavioral challenges (Brown, Farrington, Ziegler, Knight, & Ross, 1999; Giangreco, Broer, & Edelman, 1999). This paradoxical possibility reminds us that examination of paraeducator support of students with disabilities is appropriately considered within broader school improvement efforts where the roles, responsibilities, and working conditions of teachers, special educators, and administrators are taken into account. By broadening the scope of possible solutions to improve educational opportunities for students with and without disabilities, strengthening paraeducator supports is not viewed as the *only* option, but rather one among an array of options and combinations.

During the 1999-2000 school year, Giangreco, Broer, and Edelman (2002) conducted a pilot study to field-test a 10-step, schoolwide planning process to improve paraeducator supports. This process was designed to assist school-based teams assess their own status on 28 indicators of paraeducator support, identify their priorities pertaining to those supports, develop corresponding plans of action, implement their plan, and evaluate its impact. Although the results of that pilot study provided positive feedback from participants about the process and resulted in constructive actions in the schools, the scope of the study, which was conducted in four schools within the same reasonably well resourced suburban school system, presented significant limitations to commenting on its generalized utility.

The current study aimed to address the limitations of the pilot study by field-testing a slightly updated version of the same process in a larger set of more diverse schools. Additionally,

the current study extended the pilot by including data about the impact of schoolwide paraeducator planning and implementation efforts on school personnel and students. These two major extensions of the pilot study are important because they explore the utility of the planning process in more diverse settings and begin to make the somewhat elusive link between school planning efforts and student outcomes.

The current study posed a series of six evaluative questions.

1. How did the schools rate themselves on 28 indicators of paraeducator support?
2. What were the schools' self-identified paraeducator priorities?
3. What actions did the schools take to address their paraeducator priorities?
4. How did team members rate the paraeducator planning process on whether it did what it purported to do (e.g., help schools select appropriate priorities, develop plans to address identified priorities) and on consumer-oriented variables (e.g., importance, ease)?
5. What were participants' perspectives on the strengths, weaknesses, and suggestions for improving the paraeducator planning process?
6. What impact did the paraeducator planning process have on personnel and students?

This study fills a gap in the literature by presenting follow-up data on a practical tool that educational teams can easily access online and use to improve paraeducator supports. Currently, no comparable processes or data are described in the professional literature.

## METHOD

### *RECRUITMENT OF FIELD-TEST SITES*

Participating schools were recruited using an e-mail letter and one-page application sent to approximately 400 special education professionals nationally who were affiliated with college or university special education training programs, OSEP-funded projects, parent/advocacy organizations, or public schools. The same information was also posted on the project's Web site. Schools were offered \$1,000 mini-grants in exchange for field-testing a schoolwide planning process, devel-

oped by the authors, for improving paraeducator supports and supplying various data. To be eligible for participation, schools provided demographic information about their school and documented (a) administrative support for the project, (b) inclusion of students with disabilities in general education classrooms, (c) employment of paraeducators to provide educational supports, and (d) a voluntary commitment to participation. Each application included a statement of assurance, signed by school leaders (e.g., principals, superintendent, school board chairs), indicating that the school met the participation criteria.

Originally this project was slated to have 40 field-test sites. Over a period of 2 years, 52 schools submitted applications for mini-grants. Based on available grant funding, the goal of the

FIGURE 1

*Steps of A Guide to Schoolwide Planning for Paraeducator Supports*

1. Inform your local school board of your intention to establish a team, or use an existing team, to address paraeducator issues.
2. Ensure that the team includes the appropriate members of the school and local community.
3. Have the team assess their own status and fact-find in relation to six paraeducator topics:
  - (a) Acknowledging Paraeducators
  - (b) Orienting and Training Paraeducators
  - (c) Hiring and Assigning Paraeducators
  - (d) Paraeducator Interactions With Students and Staff
  - (e) Roles and Responsibilities of Paraeducators
  - (f) Supervision and Evaluation of Paraeducator Services
4. Prioritize and select topics and specific issues that reflect areas of need within the school that the team will work on first.
5. Update your local school board of the team's ranked priorities.
6. Design a plan to address the team's ranked priorities.
7. Identify local, regional, and statewide resources to assist in achieving team's plans.
8. Implement the team's plans.
9. Evaluate the plan's impact and plan next steps.
10. Report impact and needs to your local school community.

vidual team members completed questionnaires about the paraeducator planning process where they were asked to respond to seven evaluative statements using a Likert-style scale where 1 was anchored with the phrase "strongly disagree" and 4 was anchored with the phrase "strongly agree." The questionnaire statements sought to identify the participants' perspectives on (a) whether the paraeducator planning process did what it purported to do (e.g., helped select appropriate priorities, helped develop a plan) and (b) a small set of consumer-oriented variables (e.g., importance, ease of use). The questionnaire also included three questions that called for brief written responses about the strengths and weaknesses of the planning process and suggestions for improvement.

Third, after completion of Step 10, the teams submitted a written report of impact designed to assist in making links between actions taken by the school as a result of their paraeducator planning and outcomes for school personnel and students. (This was an added set of data that was not collected in the pilot study.) Each team was asked to submit a brief report by responding to the following question, "*In what ways are students with disabilities better off because of the paraeducator supports you have implemented through your paraeducator action-planning?*" This question

is in alignment with contemporary evaluation practices that focus on *social betterment* (Henry, 2000) as a primary goal of evaluation. Rather than the research team presuming what the outcomes for school personnel and students *should be*, this approach opened the door for school teams to reflect on their work and describe what they deemed as important outcomes that had occurred for personnel and students in their schools. It encouraged teams to consider how the lives of school personnel and students were better as a result of their actions. In an effort to minimize respondent burden and increase the utility of the report for local use, teams were given written instructions to be as explicit as possible yet to approach the task flexibly. Schools that developed products (e.g., job descriptions, orientation manuals, supervision forms) submitted those as evidence of their work.

#### DATA ANALYSIS

Quantitative data from teams and individual team members were analyzed using a mainframe version of the SAS System (SAS Institute, 1999-2000) to calculate descriptive statistics. Chi-square analyses were also conducted to determine if individual team members' questionnaire responses varied based on his or her role within the



Row	% (n) Doing Well
1	4.35 (2)
2	6.52 (3)
3	2.17 (1)
4	6.67 (3)
5	4.35 (2)
6	6.52 (3)
7	17.39 (8)
8	4.35 (2)
9	0.00 (0)
10	6.67 (3)
11	13.04 (6)
12	8.89 (4)
13	17.78 (8)
14	15.22 (7)
15	8.70 (4)
16	8.89 (4)
17	17.39 (8)
18	23.91 (11)
19	6.52 (3)
20	26.09 (12)
21	0.00 (0)
22	13.04 (6)
23	15.56 (7)
24	23.91 (11)
25	34.78 (16)
26	15.56 (7)
27	4.35 (2)
28	32.61 (15)

ages were (a) paraeducators carry out a variety of supports, (b) demonstrate constructive interpersonal skills, (c) paraeducators provide important services, (d) professional staff have ultimate re

**TABLE 2**  
*Participants' Perspectives*

Theme	Number of Schools	Number of Participants	Number of Comments
Time	17	16	16
Structure	17	16	16
Language	17	16	16
Complexity	17	16	16
Redundancy	17	16	16
Utilization	17	16	16
Challenges	17	16	16
Suggestions	17	16	16

ple, but effective”; “flexible structure”). Team members who identified weaknesses were concerned about the amount of time it took to complete additional paperwork. Others commented on the structural and language concerns (e.g., “cumbersome,” “complexity,” “redundancy”). Several individuals noted challenges to utilization that reflected system issues rather than problems with the tool per se (e.g., time to meet, scheduling conflicts, relationship problems among adults). Primary suggestions for improvement included (a) exploring ways to streamline the process and generate less paperwork, (b) simplifying wording, (c) avoiding redundancy, (d) adding examples, and (e) exploring ways to adapt the planning process from a schoolwide to districtwide approach.

*IMPACT REPORTING*

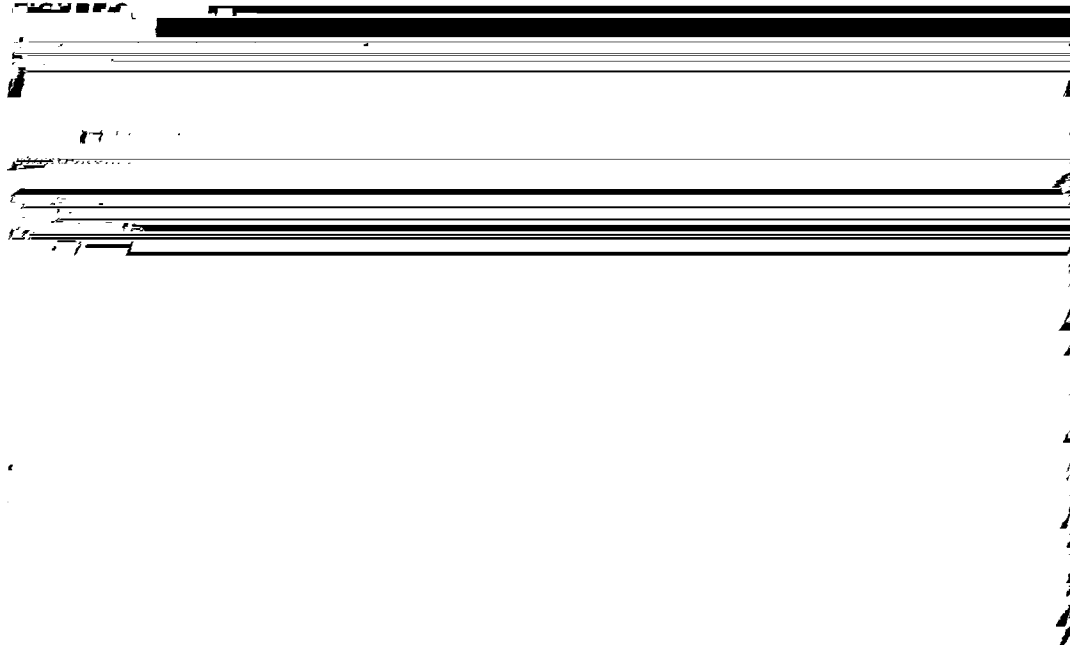
Of the 46 teams, 40 submitted impact reports. The six other schools completed the process and data collection through Step 7, but did not implement their action plans prior to the end of the data collection period for various reasons (e.g., death of a principal, school closed due to air quality problems, project was inherited, schools were too busy). Among the 40 submitted reports, seven schools described what they were doing but did not comment on impact because they had not implemented their plans for a sufficient amount

of time. Therefore, the following findings are based on the reports of the remaining 33 schools. Seventeen planned and implemented over a 2-year period, 16 over a 1-year period.

Eleven categories of impact were reported by the schools (see Table 3); a further categorization highlighted two types. The first type included seven categories related to *impact on adults* (e.g., paraeducators, teachers, special educators, parents). The second type included the remaining four categories, each of which reflected *direct impact on student outcomes*

*Impact on Adults.* The most commonly reported impact on adults was that paraeducators knew their jobs better as a result of the paraeducator planning and subsequent actions taken by schools. As a paraeducator who was involved in accessing Web-based training materials wrote, “I feel that the material covered has helped me understand a broader view of my position as a paraeducator which will improve the quality of services to students.” A paraeducator who participated in face-to-face training commented, “I am more aware of how to assist with teacher-planned instruction. I feel more capable, informed and confident as a paraeducator.” As a result of a newly developed orientation manual and procedures, a teacher at a different school stated, “The paraprofessional now has a better understanding of the entire process and can deal with the student in a





more appropriate manner (So can I!).”

The next most commonly reported outcome was *improved morale among paraeducators*. This was characterized by a paraeducator who indicated that as result of the paraeducator planning in her school, “I feel that I am a valued contributing member of the educational teams I work with.” Paraeducators feeling more valued was reported to be on the rise in several of the schools before any of the action plans were ever instituted. The use of the paraeducator planning process itself reportedly provided a strong message of support and value to many paraeducators that served to raise their morale. As was stated in one of the reports:

Many paraeducators have expressed their appreciation that the school is looking at their needs in a new way and that several paraeducators have been directly involved in the process. Paraeducators were also very happy that their issues have been brought to the school board with the planning team’s presentation. This increased visibility of paraeducators and their needs has had an impact on raising morale.

Additionally, it was reported that paraeducators felt valued as a result of the actions taken by the schools based on their paraeducator planning. As stated in another report:

When we designed the paraeducator job description and the evaluation, I don’t think the team realized the impact it would have on the paraeducators. Our mini-grant work has provided appreciation and recognition for their hard work to our school and community.

Concurrently, nonparaeducator members of the educational community reported an *increase in awareness of the value of paraeducators*. “Teachers learned how valuable paraeducators could be by understanding their role.” For some teachers this represented a shift in their perspectives. One such educator wrote:

I found that during my first 2 years of teaching I was having frequent conflicts with paraeducators. In part this was due to role confusion and seemingly incompatible belief systems about how to work with persons with disabilities. By participating in the action-planning process with paraeducators that I respected, I came to better understand the issues that are important to them.

This increased awareness led to reports of more effective utilization of paraeducator supports. “All adults in the building, especially general educators, are utilizing instructional assistants more efficiently and effectively. General educators appear to be more aware of the variety of ways

they can utilize instructional assistants within the classroom.”

Teams reported that as a result of their paraeducator planning, paraeducators knew the students better. Reports indicated that this outcome was frequently associated with the indicator to establish “times and mechanisms to work with teachers” (Table 1, Action rank #3) and was put into action through steps such as conducting shared student record reviews with the paraeducators and teaching faculty prior to the beginning of the school year, and establishing regular meeting times to discuss students’ characteristics, needs, and educational goals. In some instances this was reflected in access to information as basic and vital as knowledge of the student’s IEP goals and objectives. As one paraeducator explained, “Last year I did not have access to IEPs. This year I am clearer on who the student is and what his goals are.” At other times knowing students better allowed problems to be avoided. A paraeducator described how “advanced knowledge of a student’s need to be aware of upcoming changes has made transitions easier for the student.”

Six schools identified *retaining paraeducator staff* as an outcome attributable to their paraeducator planning efforts. These teams reported that their efforts to demonstrate respect, clarify the roles, provide training, and improve supervision led to higher job satisfaction and lower turnover in paraeducator staff. A school report stated, “We also learned that paraeducators have remained at our school due to the increase in being valued for their contributions.” During self-assessment (Step 3, Figure 1), one of the six schools also noted a

problematic pattern of absenteeism among its paraeducators. Their impact report stated, “Absenteeism is down among paraeducators...part of that is greater commitment to kids and more job satisfaction.”

Five of the schools reported *improved delivery of instruction* by various school faculty as a result of their paraeducator planning and implementation. The three most common results

tations and more quality support throughout the entire day.” As another report summarized, “Para-professionals are now able to understand and support individual goals for students, recognizing that individuals may need to work on different levels or even different tasks than their peers, within the same classroom setting.”

The process of supporting paraeducators also had a positive impact on instruction delivered by some of the general and special education teachers. One special educator described how her work developing training materials for an instructional skills unit for paraeducators prompted her to reflect on her own teaching. She described coming to the conclusion that her instruction was “really boring” and decided to do something about it.

I’ve found ways to make the instruction more interesting and stimulating and the students are working hard to achieve their goals. In fact, the students have almost tripled their work output, and I am being challenged to keep up with them.

A different middle school reported, “General education instructors became more willing to change assignments and eager to share modifications with any student in need. We made great strides this year in all teachers talking about ‘our kids’ and meaning everyone!”

Four schools reported that their paraeducator planning had a positive impact on *home-school collaboration*. The reports included comments indicating “increased parental satisfaction with paraeducator performance” and development of “stronger communication links with families.” For example, a report from a school where they developed an extensive Web site stated, “Having information on the Web has also been an effective way to communicate to parents the goals and activities of classrooms. By providing parents with information about what our staff is doing up front, there have been fewer misunderstandings.”

*Direct Impact on Students.* Eight schools reported *improvement in student achievement* and “positive impact on student learning” as outcomes of their paraeducator planning and implementation. They qualified reported achievement gains by indicating that their paraeducator planning and implementation efforts were “one component that facilitated these successes” and should not be

viewed as the sole contributor to reported student achievement. Reports by teachers and paraeducators indicated that students with disabilities “made progress on their IEP goals and also made progress in the general education curriculum.” For example, one school reported, “It was a success for all involved to see students’ reading scores go up several levels. Similar gains were noted in other areas such as math, handwriting, and in student self-management of schedules.”

Schools reported a variety of examples of individual student achievement. For example, it was reported that one student

progressed from failing grades in all core classes and no completed daily assignments to Cs and Bs in all classes. Daily assignments were shortened, and organizational prompts and paraeducator support allowed this student to find success without having to be pulled out of the general education classes. The time that allowed special education staff to meet with general education staff helped the paraeducator feel more comfortable and informed about the direction of instruction and thus, better able to encourage the student. The collaborative efforts of all helped students increase grades and successful completion of class activities.

Functional life skills were also identified as examples of achievement. “One student was toilet trained during the school year. Time to collaborate helped this occur as the parent, general educator, paraeducator, and special educator worked out the details of the schedule and toilet training.” In another situation a classroom teacher wrote, “The student in my classroom has become more independent. His paraprofessional and I have tried stepping back more and we have seen an improvement in his independence.”

Seven schools reported *more student inclusion* as a result of their paraeducator support efforts. This was reflected in “increased participation in general education activities” for students with disabilities. Sometimes this meant qualitative improvements in practices occurring in general education classes where students already had access. One school reported this scenario:

Having the [classroom] teacher talk directly to the student has given this individual student a sense of importance in the regular education classroom. The teacher showing value to the stu-

dent not only boosts the student's self-confidence but also demonstrates to the regular education students that his/her presence is valued. When observing this firsthand, I've noticed that increased learning is taking place, along with a willingness to participate more positively.

In other cases it meant access itself. For example, "One student with an emotional disturbance label began the year spending most of his day in the special education classroom. At the end of the year he was spending the majority of his day in the general education classroom." In the most extreme example, a student with severe behavioral challenges was being tutored at home "to ensure safety of other children" and residential placement was being considered. The team realized the crucial importance of matching this student's characteristics and needs with those of support personnel. As a team, they generated a list of the qualifications they sought in a paraeducator to be part of this team. The special educator wrote, "Even though it sounds very routine, this situation really brought to mind the importance of training, hiring, and the roles and responsibilities of paraeducators." Not only was the residential placement averted, but

The child began a modified program in our school. By the end of February vacation he was a full-time student in our school. The paraeducator had become a helper, not a hoverer, within the classroom setting as the child spread his wings and flew!

Across the examples, gains in inclusive opportunities were "attributed to the extra collaborative time given to paraeducators and teachers to meet and to discuss activities and assignments and how the student might be involved."

Six schools reported improvements in *student behavior* or *school safety* as a result of their actions to support the work of paraeducators. Reports listed improved "hallway behavior" by students, "fewer disciplinary slips being turned into administrators," and a "playground that has become a more orderly and safe environment for students" as examples of how paraeducator efforts had contributed to positive student outcomes. Another report stated:

Student behavior improved as a result of professional development materials given to the paraeducators. Several paraeducators attributed this to

having a better understanding of the behavior the students were displaying and better ideas for how to respond. Several respondents attributed this to time spent collaborating with teachers resulting in more consistency and follow through with behavioral expectations. It was reported that both teachers and paraeducators were providing more positive behavior supports for students.

As summarized in one report, "We have observed less anger and improved social skills on the part of students. This overall positive approach has impacted the classroom environment in a way that has affected all students."

Two schools noted *increased peer interactions* as a result of their paraeducator planning (e.g., "We also have noticed more interaction between the student [with a disability] and his peers."). One of the special educators reported:

Students with disabilities were immediately included more with their peers, such as sitting with their peers rather than being isolated. Aides stepped back when appropriate so the children were treated more like everyone else in the group. I saw these immediate changes in K-2, especially with the three autistic children and their aides that I work with. It has been a positive experience! Without this training, none of us would have been comfortable making these changes.

In another situation in two different classes where each included a student with Down syndrome, the report stated:

As the year went on more interaction between the individual students [with disabilities] and peers was occurring. Students [without disabilities] were initiating interactions with the students [with disabilities] as peer tutors, friends, and as partners. The students [with disabilities] here consiand setheiede

that was observed in both of these settings. Collaboration time and the provision of materials to paraeducators working in these settings about Down syndrome, inclusion, communication, and facilitating interactions with peers all impacted these changes and outcomes.

*Ripple Effect.* In virtually all of the schools reporting impact, there was an overarching theme suggesting a ripple effect that started with the initiation of paraeducator planning process and culminated in positive outcomes for students. This ripple effect generally was characterized by four stages. First, each school's team utilized the schoolwide paraeducator planning process to self-assess their paraeducator supports, select priorities, and develop action plans. As one report stated, "The opportunity to participate in the *Schoolwide Planning for Paraeducator Supports* project was a springboard to the development of a long-term staff development plan for our paraprofessional staff."

Second, this led to schools taking a variety of individually determined actions (e.g., orientation, training, meeting times, job descriptions, supervision models, appreciation luncheons). Third, these actions had a positive impact on the adults who were responsible for educating students with and without disabilities. Paraeducators reported feeling more valued and gaining knowledge and skills about their jobs, students, and instruction. The actions also increased the value of paraeducators in the eyes of other school personnel and parents. The combined effects included higher morale, retention of paraeducator staff, more collaboration among school personnel and families, and more effective educational planning and implementation (e.g., "the students' skills were improving because teachers and parents were discussing individual student progress in a collaborative team meeting and working together to help students.")

Fourth, the aforementioned adult outcomes subsequently contributed to student outcomes such as increased inclusion in general education settings, student achievement (e.g., IEP goals, general education curriculum), student behavior and safety, and peer interactions. For example, a school report described a ripple effect in terms of how training efforts and the availability of a special educator to provide ongoing support to

paraeducators influenced students. "As a result [of our actions], paraeducators feel more valued because they receive immediate feedback and direction...[that] has assisted in increasing student belonging...[and] student achievement." Another school offered this example of the ripple effect, "providing supports for teaching assistants in the areas of education and collaboration seems to improve self-confidence, which in turn seems to improve the working environment and the support of students." One report writer summed up her school's experience this way, "Overall, the entire paraeducator grant team felt that the procedures put in place helped students more effectively participate in the general education classroom."

*Providing supports for teaching assistants in the areas of education and collaboration seems to improve self-confidence, which in turn seems to improve the working environment and the support of students.*

## DISCUSSION

The combination of team and individual data presented in this study documents that schools with a wide range of demographic characteristics successfully utilized the schoolwide paraeducator planning process to self-assess their status on indicators of paraeducator support, identify priorities, and take corresponding actions. The vast majority of individual team members who participated in the process reported that the process did what it purported to do and found it helpful, logical, and easy to use. Impact reports offered authentic, field-based, feedback indicating that actions taken as a result the paraeducator planning process had a positive impact on adults in the schools and that this led to a ripple effect resulting in positive student outcomes (e.g., achievement, inclusion, behavior, peer interactions).

It is notable that even these self-selected schools chose to initiate actions primarily on what might be termed "first-generation" issues, referring to those considered to be the most basic (e.g., job descriptions, training, orientation). Al-

though each of these schools obviously included many individuals who were keenly aware of these first-generation issues long before their participation in this field-testing, it took the introduction of this structured opportunity, establishment of a team, and a systematic planning process before these first-generation issues were acted upon.

A closer examination of the quantitative team data suggests that although there is a strong relationship between needs, priorities, and actions taken, exceptions to the trend likely depend on factors such as perceived ease or difficulty of implementation, time, immediacy of the need, and perceived locus of control. For example, ensuring that paraeducators are informed about students' educational needs (e.g., IEP goals) is a relatively easy, concrete task and is an immediate need. Not surprisingly, it rose from a lower priority to a higher ranking action. Conversely, improvements in compensation to paraeducators was identified as high need and priority, yet dropped in the action-rankings, presumably because it was a much more complex task, would take longer to affect, and many teams may perceive it as beyond their control.

Sometimes indicators that were low in the action-rankings, regardless of their need or priority status, might be considered "second-generation" issues. This refers to those issues a school might attend to once the more immediate, first-generation, issues have been addressed. For example, when schools are dealing with the most basic issues of hiring and retaining, orienting, and training paraeducators, they may be less likely to take actions such as training teachers and special educators in the supervision of paraeducators, developing criteria to determine if paraeducator support is needed, or evaluating the impact of paraeducator services. The range of first- and second-generation indicators included in this tool and the inherent individualization the process encourages in the interpretation of the indicators and steps allows schools at virtually any stage of development to use the tool to effect improvements.

The selection of first-generation actions by the schools likely had a significant influence on the reported impact and outcomes. The fact that 79% ( $n = 26$ ) of schools reporting adult impact noted, *paraeducators knew their job better*, corre-

sponds closely with the common actions undertaken by schools (e.g., entry-level training, development of orientation manuals and procedures, development of job descriptions) that would logically lead to paraeducators having a better understanding of their jobs. Therefore, the frequency of various categories of impact on adults and students is likely to shift based on the actions taken.

Although frequency counts and qualitative findings were offered to characterize the types and categories of impact that resulted from the use of the schoolwide paraeducator planning process, the magnitude of the impact or the level of contribution of the various actions had on schools, personnel, families, or students was difficult to assess. Nevertheless the schools' reports provided a general impression that their involvement using the paraeducator planning process was worthwhile. The types and categories of impact on adults and students provided specific examples that schools considering its use in the future can anticipate.

*Future development should further explore options for streamlining the process and adjusting it in ways consistent with consumer feedback so that more schools are encouraged to initiate schoolwide paraeducator planning efforts.*

Future development should further explore options for streamlining the process and adjusting it in ways consistent with consumer feedback so that more schools are encouraged to initiate schoolwide paraeducator planning efforts. Additionally, teams might consider expanding the team to include a "critical friend." This would be a knowledgeable individual (e.g., special educator from a neighboring school, local consultant, university faculty member) who would be available to participate as a planning team member to provide perspectives "outside the system."

Future research should continue to pursue links between planning and implementation ef-

forts geared toward adults who work with students with disabilities and their impact on students. When so much research and so many other federally-funded training, outreach, and model demonstration initiatives are geared toward affecting adults who interact with students with disabilities, finding credible ways to link efforts with student outcomes is essential.

#### IMPLICATIONS FOR PRACTICE

This study highlights the availability of a field-tested process schools can utilize to improve paraeducator supports and subsequently contribute to improving student outcomes. Presumably, the same basic process could foster collaboration if applied to other issues. Field-testing suggests broad applicability in large and small schools in urban, suburban, and rural settings, and in schools with diverse student populations. Additionally, findings describing the impact on adults logically build capacity in schools by improving staffing continuity through retention of paraeducators over time, maximizing the impact of expended training resources, and fostering ongoing collaboration among paraeducators and other team members.

*A Guide to Schoolwide Planning for Paraeducator Supports* is online, free, and available to any school interested in downloading it. The tool's at-

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Support for the preparation of this article was provided by the United States Department of Education, Office of Special Education Programs, under the funding category, Model Demonstration Projects for Children and Youth with Disabilities, CFDA 84.324M (H324M980229), awarded to the Center on Disability and Community Inclusion at the University of Vermont. The contents of this paper reflect the ideas and positions of the authors and do not necessarily reflect the ideas or positions of the U.S. Department of Education; therefore, no official endorsement should be inferred.

Manuscript received September 2002; accepted January 2003.

Pyramid Educational Consultants, Inc.,  
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