

# Teacher assistants in inclusive schools

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Depending on what country you live in, the personnel hired by schools to assist classroom teachers and special educators in their efforts to educate students with disabilities are known by a variety of names such as teaching assistant, learning support assistant (LSA), teacher aide, paraprofessional, paraeducator, and special needs assistant (SNA). In this chapter we purposely use the title, *teacher assistant* rather than *teaching assistant*, because in all the cases we identified around the world these individuals *assist teachers*, though not always with *teaching*.

The purpose of this chapter is to summarize selected literature regarding the utilization of teacher assistants to support the education of students with disabilities in inclusive, general education, classes. First, we will provide a brief overview of research trends and summarize what is known about teacher assistants. Second, the chapter addresses three contemporary questions:

- What are appropriate roles for teacher assistants who support the education of students with disabilities in inclusive service delivery systems?
- What is the emerging role of the classroom teacher with students who have disabilities and

their teacher assistants?

- How does the assignment of teacher assistants affect the personal/social aspects of schooling for students with disabilities?

The chapter concludes with implications for practice and future research.

The chapter's content was drawn primarily from literature published between the mid-1990s and 2004. The majority of sources are from the United States and England, with a smaller set from Australia, Italy, and Sweden. Additionally, to provide a broader, international perspective, we have collected personal communications from colleagues around the world that offer a glimpse of teacher assistant practices in a wider set of countries (see Table 32.1).

Metaphorically, teacher assistant issues are like the tip of the iceberg, the part above the waterline that can be seen easily. Yet it is below the surface where the bulk of potential dangers lurk in the form of unresolved issues in general and special education practice and collaboration. It is these connections between teacher assistant issues and broader educational equity, appropriateness, and quality issues that we encourage you to consider as you proceed through this chapter.

**Table 32.1 International perspectives**

Country	Personal communication about teacher assistants
Canada	Education in Canada is provincially mandated; therefore the use of teacher assistants is different in each province and local school boards. A common challenge is that teachers and assistants have insufficient planning time together. This leads to the undesirable practice of assistants observing teachers' lessons and being expected to adapt and implement lessons afterwards. Effective inclusive education will necessitate that professional educators create truly differentiated plans for their mixed-ability groups. Karen Gazith, Bronfman Jewish Education Services, Montreal, Sept. 28, 2004
Finland	In 2003, 37,000 students (ages 7–15) in comprehensive schools in Finland, 6.2 per cent, received special education; two times as many as in 1995. Forty per cent of these students participated, at least partly, in regular education classes. From 1995 to 2003, the number of special teachers increased from 4,000 to 6,000. During the same time period the number of teacher assistants in special education, both in inclusive settings and special classes, increased from 2,000 to 7,000. The use of teacher assistants is a main accommodation and their use is strongly preferred, though most have no certificate. The professional nation-level association of the workers in local municipalities and the Central Union of Child Welfare have stressed that more assistants are needed and they should be used as personal helpers, not for the whole class. The teachers' professional union has been worried about the use of assistants as individual teachers. Timo Saloviita, University of Jyväskylä, December 7, 2004
Germany	Increasing numbers of paraprofessionals are working in inclusive education in Germany, most of them without any certificate. Normally, their task is to support a particular student with a disability, not the class as a whole. Some years ago the major organization of parents of persons with intellectual disabilities, the 'Lebenshilfe' ('Help for Living'), tried to find out about paraprofessional practices in the whole country. The 16 Ministries of Education in all federal states were surveyed about their regulations and practices. This turned out to be so difficult that the effort to complete the inquiry was abandoned. Ines Boban & Andreas Hinz, Martin Luther University, Halle-Wittenberg, Sept. 8, 2004
Honduras	Honduras has had a national policy of inclusion since 1992, but implementation remains slow. Teaching assistants are not used to support inclusive education in Honduras because of the poor economic situation. Suyapa Padilla, National Pedagogical University & Rich Villa, Bayridge Consortium, San Diego, CA, December 3, 2004
Hong Kong Special Administrative Region of the People's Republic of China	The Hong Kong Education and Manpower Bureau have been piloting Hong Kong inclusive education projects since 1997. While the <i>Progress Report on the Education Reform</i> (June, 2003) reports provisions to overcome the heavy burden for teachers, there is currently insufficient information to fully comprehend the extent of teacher aide deployment, the roles they assume, and their qualifications. However, a job advertisement for teacher assistants in the Hong Kong newspaper, <i>Ming Pao</i> , suggests that teacher assistants are graduates with the responsibility of teaching, conducting remedial lessons, co-curriculum duties, relief teaching, and other responsibilities required in the school. Outcomes of the employment of teacher aides have to be clarified further in terms of teacher satisfaction, actual effects on teaching quality and student success. Ming-Gon John Lian, University of Hong Kong & Kim Fong Poon-McBrayer, Hong Kong Institute of Technology, Aug. 31, 2004
Iceland	The first systematic attempt to use teaching assistants in inclusive schools in Iceland was in 1996. Teaching assistants are usually woman who have no prior training in schoolwork but are encouraged to attend special courses. Typically their role is to support pupils who need more help than the teacher can provide; they often have other duties (for example, monitor corridors, help at lunchtime, relieve teachers for short periods). Sometimes assistants are assigned to support students with the most complex challenges. Professionals often express displeasure that more skilled special education teachers are not hired for such situations. Since a teaching assistant can be hired for one-third to one-half the cost of a special education teacher, municipalities are tempted to opt for assistants, partly in response to teachers' long-standing demand for smaller student groups. This is a dilemma for schools, particularly in the advent of trade union negotiations and potential strikes by teachers. Inclusive classrooms that do not use teaching assistants may rely on team teaching (general and special education) or collaboration between teachers and developmental therapists (social pedagogues) who have 3 years of university education in working with people with disabilities, but who do not have equivalent salaries or status of teachers; they are often perceived as teaching assistants. Gretar L. Marinósson, Iceland University of Education, and Ingibjörg Haraldsdóttir, Ártúnsskóli Compulsory School, Sept. 12, 2004

Table 32.1 *continued*

Country	Personal Communication about Teacher Assistants
Ireland	The role of SNAs (Special Needs Assistants) is influenced by the English, Learning Support Assistants (LSA) model. A major difference is that the Irish SNAs are not intended to have any teaching role but, in practice, some do. According to the Department of Education and Science (2002), '... the duties of Special Needs Assistants sanctioned by this Department are of a non-teaching nature. Individual pupils with a general learning disability would typically not require the services of a Special Needs Assistant. Schools with pupils who have special care needs arising from a disability and who also require additional academic input should consider applying for additional resource teaching provision' (p. 1). Tom Daly, SOLAS Project, Boherbue Comprehensive School, Co. Cork, Sept. 14, 2004
Malta	Teaching assistants are utilized in Malta to support students with disabilities in inclusive classrooms. Though most are not trained, a part-time, two-year, diploma program at the University of Malta prepares 'facilitators' (trained assistants) to work with students with disabilities in inclusive settings. Malta does not employ 'special education teachers' as a job position, in part based on concerns that such a role would interfere with teachers' involvement. Support professionals from other fields (for example, psychologists) are available to help teachers. At times there are problems when input from support professionals is primarily shared with facilitators rather than the child's teachers. In these cases, teachers take less responsibility for the child. The roles of facilitators and other support personnel in Malta continue to evolve. Elena Tanti Burlò, University of Malta, Sept. 15, 2004
Singapore	Students with moderate disabilities may be included in the general education classrooms in Singapore. Mainstream schools have very little support for those with disabilities. Classroom teachers are solely responsible to teach these students, usually without much support. At present, the use of teacher aides is not in effect in Singapore although there has been a request to employ them by the Singapore Teachers Union. The Ministry of Education is unlikely to employ teacher aides to support students with disabilities in the mainstream setting in the near future. However, there are plans to provide specialist support in the near future as a response to the increasing demand for more support of students with disabilities. Levan Lim & Joanne Khaw, National Institute of Education, Sept. 9, 2004
South Africa	The use of assistants is primarily confined to the more affluent groups in South Africa, as it is not funded by the state. I have seen parents employ an assistant to cater to a child's physical needs in situations where the child has a severe disability. This is often seen as a way to get the school to accept the child. In my personal experience I have come across situations in mainstream schools where the teacher wanted to hand over all responsibility for teaching my child to an assistant, which we as parents did not find acceptable. I have not heard of any training specific to classroom assistants. Judy McKenzie, Educator and parent of a child with a disability, Sept. 13, 2004
Spain	Teacher assistants (known as <i>educadores</i> ) are not used in regular schools in Spain to facilitate inclusion in general education classrooms. These paraprofessionals are present only in special schools to help special education teachers meet the needs of students with severe disabilities, and/or provide personal care. In Spain, it is a collaborative team (educational psychologist, speech therapist, and special education teacher) who supports general education teachers; they have the responsibility for meeting the diverse educational needs of all students. Since 1990 (LOGSE, <i>Ley de Ordenación General del Sistema Educativo</i> ), special education is considered as a part of regular education programs. Consequently, special education services and resources have increased considerably in all regular schools (as an indicator of quality), but still are not enough to fulfill the principle of equal opportunities for all. Cristina M. Cardona, University of Alicante, May 25, 2005
Vietnam	Currently paraprofessionals are not used in Vietnam to facilitate inclusive education. They use consultants, trained general educators, special educators, related services providers, and typical peers to facilitate inclusion. In Vietnam it is primarily a collaborative team that supports the general education teacher. Human and fiscal resources are scarce in Vietnam; the average per pupil expenditure is \$25 USD per child per year. Le Van Tac, Vietnamese National Institute on Educational Science and Curriculum & Richard Villa, Bayridge Consortium, San Diego, CA, Aug. 30, 2004

## RESEARCH TRENDS

Decisions about the utilization of teacher assistants appear to be driven more by factors such as politics, local historical practices, and advocacy, than by educational research or theoretical foundations. The literature is devoid of convincing arguments that it is educationally sound to deploy the least qualified personnel to provide primary instruction to students with the most complex learning characteristics. To the contrary, it has been posited that such scenarios are illogical and reflect devaluing double standards that likely would be considered unacceptable if they were applied to students without disabilities (Giangreco, 2003). Yet the utilization of teacher assistants to provide instruction to students with disabilities not only persists, it

is increasing (Pickett & Gerlach, 2003). Stresses on the educational system such as teacher shortages, large class sizes, high special educator caseloads, and insufficient teacher preparedness for the diversity presented by students with disabilities, are among the more plausible contributors to increased reliance on teacher assistants.

Existing research offers limited guidance to policymakers and practitioners because it offers only the most basic descriptive findings (see Table 32.2), is virtually devoid of efficacy data, offers studies on disparate sub-topics without a coherent line of research, and leaves too many vital topics inadequately addressed. Some of these topics include: (a) the impact of teacher assistant supports on students' academic, functional, social outcomes; (b) effective decision-making about

**Table 32.2. What is known about teacher assistants?**

<i>Some main points in the professional literature</i>	<i>Selected sources</i>
The vast majority of teacher assistants are women who live in the communities where they work.	(Balshaw & Farrell, 2002; Pickett & Gerlach, 2003; Riggs & Mueller, 2001)
Teacher assistants' qualifications vary widely; most are not college educated and are hired with no prior training or experience in education or special education.	(Balshaw & Farrell, 2002; Riggs & Mueller, 2001)
Teacher assistants are among the lowest paid workers in schools and have limited career ladder options.	(Bernal & Aragon, 2004; Tillery et al., 2003)
The numbers of teacher assistants utilized in schools to support students with disabilities has increased substantially over the past 20 years.	(Clayton, 1993; Pickett, Likins, & Wallace, 2003)
Teacher assistants have been specifically identified as a support to assist the participation of students with disabilities in inclusive classrooms.	(Doyle, 2002; Farrell, Balshaw, & Polat, 2000; Wolery et al., 1995; Marks, Schrader, & Levine, 1999)
Teacher assistants engage in a wide range of roles (for example, clerical tasks, supervision of students, personal care and mobility support, behavior support, instruction).	(Downing, Ryndak, & Clark, 2000; Minondo, Meyer, & Xin, 2001)
There is ongoing disagreement and confusion about what constitutes appropriate roles of teaching assistants.	(Clayton, 1993; Riggs & Mueller, 2001)
There has been a shift in the roles of teacher assistants from primarily noninstructional to increasingly instructional functions.	(Clayton, 1993; Cremin, Thomas, & Vincett, 2003; Pickett & Gerlach, 2003)
Teacher assistants tend to receive inadequate orientation, training and supervision.	(French, 2001; Giangreco, Broer, & Edelman, 2002)
Teachers have mixed reactions to using teacher assistants; some recognize them as valuable contributors, while others are concerned about having another adult in the classroom.	(Clayton, 1993; Lacey, 2001; Mcvean & Hall, 1997)
Research has documented that the utilization of teacher assistants has been associated with inadvertent, detrimental effects (for example, dependence, isolation, stigma, interference with peer interactions, interference with teacher involvement).	(Giangreco, Broer, & Edelman, 2001; Giangreco et al., 1997; Hemmingsson, Borell, & Gustavsson, 2003; Skar & Tamm, 2001)

the circumstances of their use; (c) training impact on performance; and (d) alternative support strategies (for example, peer supports; improving teacher working conditions; reducing special educator caseloads).

The majority of research about teacher assistants consists of quantitative and qualitative descriptive studies (for example, Chopra & French, 2004; Wallace, Shin, Bartholomay, & Stahl, 2001), along with a few single-subject experimental designs (for example, McDonnell, Johnson, Polychronis, & Risen, 2002; Werts, Zigmond, & Leeper, 2001). A small set of evaluation studies exists on topics such as models of teacher/teacher assistant teamwork and schoolwide planning to improve supports offered by teacher assistants (Cremin, Thomas, & Vincett, 2003; Giangreco, Edelman, & Broer, 2003).

Typically, several descriptive studies focus on employment issues, roles, training, and interactions with students (Marks, Shrader, & Levine, 1999; Minondo, Meyer, & Xin, 2001; Riggs & Mueller, 2001; Tillery, Werts, Roark, & Harris, 2003). In perspective-seeking studies about teacher assistants (for example, roles, training needs), the assistants themselves are the most common respondents, outnumbering responding professionals (for example, teachers, special educators) more than two to one. Simultaneously, students with disabilities have been minimally represented as research respondents. Only three studies were identified which sought the perspectives of students with disabilities about their direct experience of receiving supports from assistants (Broer, Doyle, & Giangreco, 2005; Hemmingsson, Borell, & Gustavsson, 2003; Skar & Tamm, 2001).

To date, no large-scale, experimental studies appear in the literature exploring the efficacy of teacher assistants to support the education of students with disabilities in inclusive classrooms. However, a large-scale study of *general education teacher assistants* offered predominantly unfavorable results about their impact on achievement (Gerber, Finn, Achilles, & Boyd-Zaharias, 2001). A small set of studies with 'at risk' learners sug-

gests teacher assistants can have a positive impact on early literacy when they are explicitly trained to tutor students using professionally planned programs and receive consistent supervision (Miller, 2003; Vadasy, Sanders, & Peyton, 2002).

## CONTEMPORARY ISSUES AND COMPLEXITIES REGARDING TEACHER ASSISTANT SUPPORTS

The following sub-sections offer responses to three interrelated questions addressing contemporary issues and complexities related to teacher assistant supports.

### *Question 1: What are appropriate roles for teacher assistants who support the education of students with disabilities in inclusive service delivery systems?*

Forty years ago, long before students with a full range of disabilities were routinely included in general education classrooms, modest numbers of teacher assistants were primarily engaged in non-instructional roles (for example, bus duty, monitoring hallways, supervising cafeterias and playgrounds, taking attendance, preparing materials, 'house-keeping'). In response to the increasing numbers of teacher assistants, some teachers' unions and principals of that era 'expressed anxiety and opposition to them [teacher assistants] undertaking anything which gave the slightest hint of substitute or unqualified teaching which they feared might dilute the profession' (Clayton, 1993, p. 33). In fact a high-ranking English education official was quoted as saying it would be 'scandalous' if assistants were asked to teach (Clayton, 1993, p. 34). Others argued the roles of teacher assistants would inevitably include instruction,

if kindly women are to be recruited in large numbers and sent into schools without preparation to be used as 'an extra pair of hands', a great opportunity would have been missed ... it is unrealistic to imagine that classroom assistants could be con-

fined to classroom chores and supervisory work ... they would be teaching in the truest sense of the word whenever they demonstrated, encouraged, assisted and praised children. (Clayton, 1993, p. 34).

Over the past 30 years the steadily increasing number and range of students with disabilities being included in general education classes has coincided with a dramatic increase in the number of teacher assistants and a shift in their roles to become increasingly instructional in nature. Despite the literature's rhetoric that continually trumpets the politically correct message that teacher assistants should be properly trained and work under the guidance and supervision of qualified professionals, research suggests the contrary (Giangreco, Edelman, Broer, & Doyle, 2001). Too many teacher assistants continue to provide instruction and engage in other teacher-type roles without appropriate training, professionally prepared plans, or adequate supervision. In some cases, particularly for students with the most severe disabilities, teacher assistants function as their primary 'teachers' and are often left to fend for themselves. A common response to these dilemmas has been to focus on better training and supervision of teacher assistants; though desirable, it is naive to think that training and supervision of teacher assistants will be sufficient to ensure quality inclusive education.

Disagreement persists about what constitutes appropriate roles for teacher assistants. Should they be trained, supervised, and compensated to assume increasingly instructional roles? Or should their roles be more geared toward noninstructional tasks (for example, clerical, personal care, supervision of students in group settings such as cafeterias and playgrounds) designed to improve working conditions for teachers and special educators so these more highly trained professionals can spend more time providing instruction to students? What is the appropriate balance of their instructional and noninstructional roles and how should this balance be determined?

In part, the lack of agreement stems from differences in cultural norms, available

resources, and organized labor agreements. Regardless of these and other differences, we contend that a foundational reason for confusion about teacher assistants' roles persists because disproportionate attention continues to be focused on changes that affect teacher assistants rather than exploring potential changes in the broader system of supports. Incremental approaches to including students with disabilities in the mainstream often have led to piecemeal approaches to service delivery that lack a strong affirmative value base and clear educational logic. Attempts to clarify teacher assistant roles and improve training will remain elusive until schools are eminently clear about the expected roles of teachers and special educators in inclusive classrooms.

***Question 2: What is the emerging role of the classroom teacher with students who have disabilities and their teacher assistants?***

Arguably, classroom teachers hold the potential to be the single most influential individuals affecting the opportunities, instruction, and outcomes for students with disabilities who are placed in general education classrooms. The classroom teacher is the only professionally trained educator in the classroom throughout the entire day, the instructional leader, and the person who establishes the climate of the classroom community. When a teacher functions merely as a host it is unlikely that students with disabilities will be adequately included or instructed. Successful inclusion of students with disabilities in the general education classroom requires a teacher who is instructionally engaged with *all* students in the classroom.

Teachers who are instructionally engaged with students with disabilities express responsibility for educating all students in their class, regardless of characteristics or labels (for example, disability). These engaged teachers: (a) know the functioning levels and anticipated learning outcomes of all of their students, (b) instruct their students who have disabilities, (c) communicate directly with

them, (d) collaborate in instructional decision-making with special educators, and (e) direct the work of teacher assistants in their classroom. They maintain an instructional dialogue with their assistants and they phase out teacher assistant support to students when they are no longer needed.

Recent research suggests that the extent of instructional engagement between teachers and students with disabilities, a critical factor affecting the success of inclusive efforts, may be influenced by the way teacher assistant services are delivered (Giangreco, Broer, & Edelman, 2001). Teachers tended to be less engaged or disengaged with their students with disabilities when those students had one-to-one support from a teacher assistant. Teachers were more engaged in situations where the teacher assistant supported the entire class under the direction of the teacher.

Other aspects of service delivery affect teachers' roles as well. In some classrooms teachers and special educators co-teach, while in others the teachers are asked to function without consistent access to special educator support and sometimes under less than favorable working conditions (for example, large class size). One of the more common service delivery models establishes the special educator as the lead professional accountable for the education of students with disabilities in general education classrooms, serving as an itinerant consultant to several classroom teachers and as a manager of teacher assistants dispersed across grades or classes. Though this model acknowledges and relies on the unique knowledge and skills of special educators, its logic has been questioned because its implementation has been associated with problems such as: (a) classroom teachers functioning primarily as hosts to students with disabilities (rather than teachers), (b) extensive utilization of unqualified teacher assistants as primary instructors, (c) isolation, stigmatization, or marginalization of students with disabilities within the classroom, and (d) overextended working conditions for special educators (Giangreco, Broer, & Edelman, 2002).

The model of special educator as itinerant consultant is not inherently problematic. Rather, its current implementation in some countries disproportionately focuses on the potential contributions of special educators, often without corresponding attention to the importance, role, and engagement of the classroom teacher; such issues could reasonably be addressed to improve this option. For example, in Italy, 'The national position is that special education and general education teachers [rather than teacher assistants] should be primarily responsible for the education of students with disabilities' (Palladino, Cornoldi, Vianello, Scruggs, & Mastropieri, 1999, p. 256). The special education support person, *insegnate di sostegno*, has a small caseload of students with disabilities (not more than four), the number of students with disabilities in a classroom generally is limited to one, and class size is not intended to exceed 20. The use of teacher assistants is far less prominent in Italy and their use is typically limited to situations where students require personal care (for example, toileting, feeding) and mobility supports.

Ultimately, in order for teachers to fulfill their important roles in the education of students with disabilities their interactions must extend beyond hosting to ongoing, substantive instruction. For some teachers, being instructionally engaged with their students who have disabilities is second nature and simply what it has always meant to be a professional educator. For others, it may mean a shift in their attitudes, expectations, or supports such as: (a) a reasonable class size and configuration, (b) opportunities to collaborate with special educators, (c) time to work their assistants, and (d) access to individually determined training (for example, differentiated curriculum and instruction to meet the needs of mixed-ability groups). In all cases it will require favorable working conditions for teachers so that the duties associated with including students with a wider range of skills and needs may be approached with the enthusiasm that will invigorate the teaching experience.

**Question 3: How does the assignment of teacher assistants affect the personal/social aspects of schooling for students with disabilities?**

Social relationships are a key aspect of schooling that can be assisted or hindered by the ways in which teacher assistants are deployed. Paradoxically, though teacher assistants are invariably assigned to be of help students, their presence can have unintended detrimental effects. Excessive proximity of teacher assistants can interfere with peer interactions, stigmatize students, lead to social isolation, and in some cases provoke behavior problems (Giangreco, Broer, & Edelman, 2001; Giangreco, Edelman, Luiselli, & MacFarland, 1997; Hemmingsson et al., 2003; Skar & Tamm, 2001).

Studies exploring the perspectives of students with disabilities indicate that many students perceive their assistants in varying roles as: (a) mother/father, (b) friend, (c) primary instructor, and (d) protector from bullying (Broer, Doyle, & Giangreco, 2005; Hemmingsson et al., 2003; Skar & Tamm, 2001). Even though students may perceive any of the aforementioned roles positively or negatively, they all represent areas of concern. For example, although it is positive to make a friend, what does it say about the social relationships of students with disabilities if their primary friends are their paid, adult, service providers rather than peers? Although it is always good to protect students from bullying, what does it say about a school when the well intended assignment of a teacher assistant to undertake that role may inadvertently delay attention to addressing bullying in the school?

Heightening the awareness of school personnel to these potential problems can minimize inadvertent detrimental effects of teacher assistant support. Simultaneously, recent research has demonstrated how teacher assistants may be trained to facilitate social interactions between peers with and without disabilities (Causton-Theoharis & Malmgren, 2005). Social opportunities and experiences for students with disabilities can be enhanced

when school personnel proactively pursue strategies to minimize potentially detrimental service delivery practices while replacing them with those known to facilitate constructive interactions and build relationships.

## IMPLICATIONS FOR FUTURE RESEARCH AND PRACTICE

As stated earlier, merely doing a better job of training and supervising teacher assistants is likely to be insufficient to ensure the appropriate education of students with disabilities in inclusive classrooms. It is our contention that students with disabilities are best served when schools: (a) provide appropriate *supports* for their existing assistants (for example, respect, role clarification, orientation, training, supervision); (b) establish logical and equitable *decision-making* practices for the assignment and utilization of assistants; and (c) select individually appropriate service delivery *alternatives to teacher assistant supports* (for example, peer supports, increasing ownership and capacity of teachers, improving working conditions for teachers and special educators) (Giangreco, Halvorsen, Doyle, & Broer, 2004). Collectively, this is designed to increase student access to instruction from qualified teachers and special educators, facilitate development of peer interactions, and promote self-determination.

Before this trio of interrelated components can be effective, schools must clearly establish access to inclusive environments, appropriate curriculum, compatible instructional approaches, and desired outcomes. Only after these foundational areas are addressed will school leaders be poised to articulate their community's vision of special and general education service delivery that best suits their context. Using this conceptualization, decisions about teacher assistant service delivery becomes one of the last pieces to fit into the service delivery puzzle, rather than one of the first.

As schools pursue contextually suitable practices, future research may assist policy-makers by filling some notable data gaps.

Chief among these are the: (a) affect of teacher assistant supports on the academic/functional achievement and social relationships of students with and without disabilities; (b) interactive affects of school policies, funding provisions, and service delivery models on teacher assistant supports and student outcomes; (c) research on decision-making models designed to determine the need and appropriate utilization of teacher assistant supports, and (d) research that solicits input from consumers with disabilities and family members to increasingly promote self-determination and family-centered practices.

## CONCLUSION

Teacher assistant supports to students with disabilities in inclusive classrooms are at a crossroads. At present, there is no international consensus about the extent to which teacher assistants should be utilized, circumstances that warrant their involvement, the duties they should appropriately perform, or what constitutes adequate training and supervision. Since most countries are still quite far from equitably including students with a full range of disabilities in general education classes, the opportunity is ripe for local, national, and international dialogue on this issue. It is our hope that schools in countries that are already relying heavily on the utilization of teacher assistants to include students with disabilities will closely scrutinize their practices to ensure congruence with their inclusive aims. In countries that have not yet adopted models of support that rely heavily on teacher assistants, we caution schools to remain mindful of the inadvertent problems that have been created when inclusive education efforts have been too highly dependent on teacher assistants. We encourage schools proactively to consider alternative supports that build capacity within the native, general education system in culturally contextual ways toward the benefit of all children.

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## REFERENCES

- Balshaw, M. & Farrell, P. (2002). *Teacher assistants: Practical strategies for effective classroom support*. London: David Fulton.
- Bernal, C., & Aragon, L. (2004). Critical factors affecting the success of paraprofessionals in the first two years of career ladder projects in Colorado. *Remedial and Special Education, 25*(4), 205–213.
- Broer, S. M., Doyle, M. B., & Giangreco, M. F. (2005). Perspectives of students with intellectual disabilities about their experiences with paraprofessional supports. *Exceptional Children, 71*, 415–430.
- Causton-Theoharis, J. N., & Malmgren, K. W. (2005). Increasing interactions between students with severe disabilities and their peers via paraprofessional training. *Exceptional Children, 71*, 431–444.
- Chopra, R. V., & French, N. K. (2004). Paraeducator relationships with parents of students with significant

- disabilities. *Remedial and Special Education*, 25(4), 240–251.
- Clayton, T. (1993). From domestic helper to 'assistant teacher': The changing role of the British classroom assistant. *European Journal of Special Needs Education*, 8(1), 32–44.
- Cremin, H., Thomas, G., & Vincett, K. (2003). Learning zones: An evaluation of three models for improving learning through teacher/teaching assistant teamwork. *Support for Learning*, 18(4), 154–164.
- Department of Education and Science (2002). *Applications for full-time or part-time special needs assistant support to address the special care needs of children with disabilities*. Retrieved September 14, 2004, from [http://www.education.ie/servlet/blobervlet/spedc07\\_02.pdf](http://www.education.ie/servlet/blobervlet/spedc07_02.pdf)
- Downing, J., Ryndak, D., & Clark, D. (2000). Paraeducators in inclusive classrooms. *Remedial and Special Education*, 21, 171–181.
- Doyle, M. B. (2002). *The paraeducators guide to the inclusive classroom: Working as a team* (2nd ed.). Baltimore, MD: Paul H. Brookes.
- Farrell, P., Balshaw, M., & Polat, F. (2000). The work of learning support assistants in mainstream schools: Implications for school psychologists. *Educational and Child Psychology*, 17(2), 66–76.
- French, N. K. (2001). Supervising paraprofessionals: A survey of teacher practices. *Journal of Special Education*, 35, 41–53.
- Gerber, S. B., Finn, J. D., Achilles, C. M., & Boyd-Zaharias, J. (2001). Teacher aides and students' academic achievement. *Educational Evaluation and Policy Analysis*, 23(2), 123–143.
- Giangreco, M. F. (2003). Working with paraprofessionals. *Educational Leadership*, 61(2), 50–53.
- Giangreco, M. F., Broer, S. M., & Edelman, S. W. (2001). Teacher engagement with students with disabilities: Differences between paraprofessional service delivery models. *Journal of the Association for Persons with Severe Handicaps*, 26, 75–86.
- Giangreco, M. F., Broer, S. M., & Edelman, S. W. (2002). 'That was then, this is now!' Paraprofessional supports for students with disabilities in general education classrooms. *Exceptionality*, 10(1), 47–64.
- Giangreco, M. F., Edelman, S. W., & Broer, S. M. (2003). Schoolwide planning to improve paraeducator supports. *Exceptional Children*, 70, 63–79.
- Giangreco, M. F., Edelman, S. W., Broer, S. M., & Doyle, M. B. (2001). Paraprofessional support of students with disabilities: Literature from the past decade. *Exceptional Children*, 68, 45–63.
- Giangreco, M. F., Edelman, S., Luiselli, T. E., & MacFarland, S. Z. C. (1997). Helping or hovering? Effects of instructional assistant proximity on students with disabilities. *Exceptional Children*, 64, 7–18.
- Giangreco, M. F., Halvorsen, A., Doyle, M. B., & Broer, S. M. (2004). Alternatives to overreliance on paraprofessionals in inclusive schools. *Journal of Special Education Leadership*, 17(2), 82–90.
- Hemmingsson, H., Borell, L., & Gustavsson, A. (2003). Participation in school: School assistants creating opportunities and obstacles for pupils with disabilities. *Occupational Therapy Journal of Research*, 23(3), 88–98.
- Lacey, P. (2001). The role of learning support assistants in the inclusive learning of pupils with severe and profound learning difficulties. *Educational Review*, 53, 157–167.
- Marks, S. U., Schrader, C., & Levine, M. (1999). Paraeducator experiences in inclusive settings: Helping, hovering, or holding their own? *Exceptional Children*, 65, 315–328.
- McDonnell, J., Johnson, W., Polychronis, S., & Risen, T. (2002). Effects of embedded instruction on students with moderate disabilities enrolled in general education classes. *Education and Training in Mental Retardation and Developmental Disabilities*, 37, 363–377.
- Mcvean, M. L., & Hall, L. J. (1997). The integration assistant: Benefits, challenges and recommendations. *Australian Disability Review*, 2/97, 3–9.
- Miller, S. D. (2003). Partners-in-reading: Using classroom assistants to provide tutorial assistance to struggling first-grade readers. *Journal of Education for Students Placed at Risk*, 8, 333–349.
- Minondo, S., Meyer, L., & Xin, J. (2001). The roles and responsibilities of teaching assistants in inclusive education: What's appropriate? *Journal of the Association for Persons with Severe Handicaps*, 26, 114–119.
- Palladino, P., Cornoldi, C., Vianello, R., Scruggs, T., & Mastropieri, M. (1999). Paraprofessionals in Italy: Perspectives from an inclusive country. *Journal of the Association for Persons with Severe Handicaps*, 24(4), 253–256.
- Pickett, A. L., & Gerlach, K. (2003). *Supervising paraeducators in school settings: A team approach* (2nd ed.). Austin, TX: Pro-Ed.
- Pickett, A. L., Likins, M., & Wallace, T. (2003). *The employment and preparation of paraeducators*. New York: National Resource Center for Paraprofessionals. Retrieved September 28, 2004, from <http://www.nrcpara.org/resources/stateofheart/index.php>
- Progress Report on the Education Reform* (2003, June). Retrieved August 2, 2004, from [http://www.e-c.edu.hk/eng/reform/index\\_e.html](http://www.e-c.edu.hk/eng/reform/index_e.html)
- Riggs, C. G., & Mueller, P. H. (2001). Employment and utilization of paraeducators in inclusive settings. *Journal of Special Education*, 35, 54–62.
- Skar, L., & Tamm, M. (2001). My assistant and I: Disabled children's and adolescents' roles and relationships to their assistants. *Disability and Society*, 16, 917–931.

- Tillery, C. Y., Werts, M. G., Roark, R., & Harris, S. (2003). Perceptions of paraeducators on job retention. *Teacher Education and Special Education, 26*(2), 118–127.
- Vadasy, P. F., Sanders, E. A., & Peyton, J. A. (2002). Timing and intensity of tutoring: A closer look at the conditions for effective early literacy tutoring. *Learning Disabilities Research & Practice, 17*, 227–241.
- Wallace, T., Shin, J., Bartholomay, T., & Stahl, B. (2001). Knowledge and skills for teachers supervising the work of paraprofessionals. *Exceptional Children, 67*, 520–533.
- Werts, M. G., Zigmond, N., & Leeper, D. C. (2001). Paraprofessional proximity and academic engagement: Students with disabilities in primary aged classrooms. *Education and Training in Mental Retardation and Developmental Disabilities, 36*, 424–440.
- Wolery, M., Werts, M., Caldwell, N. K., Snyder, E., & Liskowski, L. (1995). Experienced teachers' perceptions of resources and supports for inclusion. *Education and Training in Mental Retardation and Developmental Disabilities, 30*, 15–26.