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# *Attitudes About Educational and Related Service Provision for Students with Deaf-Blindness and Multiple Disabilities*

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**ABSTRACT:** *Over the past two decades, exemplary practices regarding support services have been shifting away from specialist-reliant models and toward approaches that rely more on natural supports. This study explored attitudes regarding educational and related service-provision practices from the perspective of professionals and parents (n = 119) who were educational team members for students with deaf-blindness and multiple disabilities in general education settings. The findings highlight sample respondents' agreements and disagreements with exemplary practices, as well as differences across subgroups and within teams. Analyses suggest some internal inconsistencies regarding important service provision practices, as well as continuing gaps between attitudes and proposed exemplary practices.*

**I**ncreasingly, students who are deaf-blind or have other severe or multiple disabilities are being educated in general education classes (Cloninger & Giangreco, 1995; Haring & Romer, 1995). Not surprisingly, the transition to the general education classroom raises a variety of service provision issues. In part, this is true because their sensory impairments often exist concurrently with challenging cognitive, physical,

health, and behavioral characteristics. Many students with multiple disabilities receive services (e.g., speech/language pathology, physical therapy, orientation and mobility) corresponding to each type of disability. The more disabilities, the more specialists. This approach is based on the assumption that specialists have unique training, knowledge, and skills in educating students with multiple disabilities and conversely, that others

(e.g., parents, teachers, generic special educators) generally do not. Throughout this study, this assumption will be referred to as the *Specialist-Reliant* approach. Reliance on specialists to assist in educating students with multiple disabilities is considered highly desirable by some parents, advocates, and professionals.

Not everyone favors the specialist-reliant approach or the reasoning on which extensive provision of services is based. For example, even though a person may be a competent physical therapist, he or she does not necessarily have specialized training, knowledge, or skills specifically in educating students with deaf-blindness or multiple disabilities. The same reasoning may apply for the other specialists. Even if expertise were available, extensive use of specialists in ways that were traditionally employed when students with disabilities were educated in separate special education classes and schools may not work well in general education classrooms because of significant contextual differences (Giangreco, Dennis, Cloninger, Edelman, & Schattman, 1993). Schools and districts will likely have trouble finding enough teachers and specialists who are specifically trained to work with every student identified as deaf-blind. This likelihood stems from the combined impact of the low incidence of this population, their sparse geographic dispersment, limited availability of trained personnel, and budgetary constraints facing many school districts. Proponents of segregated services have often argued that these are primary reasons for the existence of center-based programs where students with multiple disabilities are congregated. Their argument is, in part, rooted in their acceptance of the specialist-reliant approach as a preferred service provision option.

In a recent study, general education teachers who had a child with multiple disabilities in their classroom described the following difficulties with the specialist-reliant approach: (a) Specialists had separate goals and a different agenda from that of the classroom teacher, (b) specialists disrupted the class schedule and routines, and (c) specialists used approaches perceived as overly technical and stigmatizing to students (Giangreco et al., 1993).

In a study of parents who had children with deaf-blindness and multiple disabilities (Gian-

greco, Cloninger, Mueller, Yuan, & Ashworth, 1991), parents raised the following concerns: (a) feeling overwhelmed and frustrated when dealing with numerous professionals, (b) finding deficiencies in communication and coordination among professionals, (c) feeling excluded by professionals from the educational planning team, and (d) experiencing fragmentation of services. Some of these same parents said they appreciated it when professionals admitted when they did not know an answer and expressed a willingness to work with the family to solve problems.

There are at least two other approaches to instituting support services in ways that allow students with multiple disabilities opportunities to access typical home, school, and community environments: *Natural Supports* and *Only as Special as Necessary*. The natural-supports approach emphasizes the importance of providing supports in the environments the person would access if he or she did not have a disability (e.g., home, neighborhood, local school, regular classroom, job sites) and relying on people who would be in the environment even if the person did not have a disability (e.g., family members, community members, classmates, co-workers, general education teachers) (Nisbet, 1992). Whereas specialists may have expertise within their discipline, it is the people who spend the most time with the student on an ongoing basis who have the most experience-based "expertise" about the person (Kunc, 1992). The natural-supports approach recognizes the importance of self-advocacy by people with disabilities in shaping their own lives.

Natural-support proponents have argued that the escalating level of increasingly specialized services provided to people with disabilities is a negative trend that has the following effects:

- Unnecessarily isolates people with disabilities.
- Creates unnecessary and unnatural dependencies.
- Interferes with the development of natural relationships and supports.
- Disrupts participation in school activities.
- Causes inequities in the distribution of scarce resources.
- May not be economically viable.
- May be more an indication of perpetuating and expanding the professional disciplines

than serving people with disabilities (Bradley & Knoll, 1995; Leake, James, & Stodden, 1995).

Consistent with the pursuit of more naturally existing supports, some parents said that they viewed themselves as the coordinator of services because they knew their child best and had both the historical perspective and vested interest in their child's future (Giangreco et al., 1991). Critics of the natural-supports approach have expressed concerns that some important aspects of education may be lost without the presence of specialization and that natural-support rhetoric may be espoused by those who control financial resources as a politically correct veil to rationalize potentially harmful service and budget cuts.

Another alternative view of service provision, the only-as-special-as-necessary approach, seeks to provide a bridge between natural supports and input provided by specialists. This approach acknowledges the importance of learning from each other, whether our area of "expertise" is a professional discipline or experience with the person receiving support. The tenets of this approach are summarized in a support-service, decision-making process, the Vermont Interdependent Services Team Approach (VISTA) (Giangreco, 1996). VISTA provides a forum for specialized information and skills of team members to be considered. VISTA encourages natural supports whenever possible by offering various safeguards to closely scrutinize the potential overuse of specialized services. Safeguards include the following:

- Including the family (e.g., parents, student) on the team.
- Referencing support service decisions to priority learning outcomes selected by the family.
- Encouraging an underlying value orientation to provide services that are only as special as necessary.
- Providing a decision-making forum that stresses selection of support services only if they are both educationally relevant and necessary.
- Requiring consensus decision making.
- Encouraging the use of natural supports, environments, and strategies.

Current exemplary practices regarding educational placement and support services for students with severe or multiple disabilities reflect the underlying values and principles of the natural-supports and only-as-special-as-necessary approaches (Fox & Williams, 1991; Meyer & Eichinger, 1994). Yet the continued use and support for the specialist-reliant approach highlights the gap between proposed exemplary practices and existing attitudes and practices.

This study gauges the nature and size of the gap between exemplary and existing attitudes of parents and professionals who work with students who have multiple disabilities in general education settings. The data describe their responses as a group and between groups, based on their relationship to the student (e.g., parents, related service providers, special educators, general educators). Having a sample composed of functioning teams provided an opportunity to compare responses within teams. Also, responses provided insights into service-provision issues and practices, highlighted valuable similarities and differences, and offered implications for future directions for service provision in general education settings.

## METHOD

### *Research Sites*

During the 1994-95 school year, we collected data from personnel affiliated with 13 public school sites in four states (Connecticut, Massachusetts, Utah, and Vermont) where students with disabilities were educated in general education classrooms as part of a federally funded research project. Completion of the questionnaire referred to in this study was one aspect of baseline data collected from participants prior to involvement in other research activities.

The nine female and four male students with deaf-blindness at the 13 sites ranged in age from 4 through 20 years. Approximately 70% ( $n = 9$ ) of the children were Caucasian; 30% ( $n = 4$ ) were from other racial/cultural groups (Hispanic/Latino = 3; Native American-Navajo = 1).

Participating schools were self-identified as urban, suburban, rural, and remote, with individ-

ual school populations ranging from 233 to 810 students and school district student populations ranging from 522 to 14,739. The four sites where minority students who were deaf-blind were educated had minority populations ranging from 20% to 80%; the other nine sites had minority populations ranging from less than 1% to 5%. Students who were deaf-blind in these sites were educated across a variety of general education grade levels including preschool (with students without disabilities), Kindergarten, and Grades 1, 2, 3, 5, and 11 (which was primarily education within integrated community and vocational settings).

In addition to concurrent hearing and vision impairments, all students were reported to have cognitive delays. They also had additional disabilities, most frequently, orthopedic impairments ( $n = 12$ , 92%), health impairments ( $n = 9$ , 69%), and behavioral impairments ( $n = 4$ , 31%). Each student's education was supported by 5 to 13 people. The average team size of 10 typically included the child's parent(s), special educator(s), related service providers, paraprofessionals, general class teacher(s), and school administrators. Speech/language pathology was the most commonly received related service; all 13 students received this service. Other services provided included physical therapy ( $n = 9$ ), occupational therapy ( $n = 8$ ), vision support services ( $n = 7$ ), hearing support services ( $n = 5$ ), deaf-blind support services ( $n = 5$ ), nursing services ( $n = 2$ ), orientation and mobility services ( $n = 1$ ), employment specialist services ( $n = 1$ ), and family support services ( $n = 1$ ).

### *Study Participants*

A total of 119 adults involved in the students' education participated in this study, including 108 (91%) females and 11 males (9%). Approximately 93% ( $n = 111$ ) of the respondents were Caucasian. The remaining (7%) were either Hispanic/Latino ( $n = 6$ ) or Native American ( $n = 2$ ), including four parents and four school staff. Fifty-three of the respondents were related service providers, including 13 speech/language pathologists, 11 physical therapists, 7 occupational therapists, 6 nurses, 5 teachers of the blind and visually impaired, 4 teachers of the deaf and hearing impaired, 3 deaf-blind specialists, 1 orientation and

mobility specialist, 1 employment specialist, 1 psychologist, and 1 social worker. The remaining respondents included 18 special educators, 16 parents (12 mothers, 4 fathers), 14 paraprofessionals, 11 general education teachers, and 8 school administrators.

Approximately 80% of the respondents ( $n = 96$ ) had completed at least a bachelor's degree. Nearly 18% ( $n = 21$ ) had completed high school or some college or technical schooling, whereas less than 2% ( $n = 2$ ) did not complete high school. The questionnaire and introductory letter were provided in Spanish for one parent and on computer disk for transcription to Braille for a respondent who was blind.

Participants reported having an average of 2.63 ( $SD = 2.56$ ) years of experience with 1 of the 13 students with deaf-blindness; an average of 11.39 ( $SD = 7.79$ ) years of experience working with students with disabilities in general; and an average of 6.69 ( $SD = 6.74$ ) years of experience working with students with disabilities in general education classrooms. Approximately 40% ( $n = 47$ ) of the respondents reported receiving some training on related service provision issues in pre-service or inservice education programs, whereas the remaining 60% ( $n = 72$ ) reported receiving no such training.

### *Design and Data Collection*

During the fall and winter of the 1994-95 school year, we distributed a 20-item questionnaire to 120 study participants at the 13 sites. A contact person at each site (e.g., special educator) distributed survey packets to each member of the student's team. Survey packets included (a) an introductory letter; (b) a demographic information form; (c) a 20-item questionnaire pertaining to attitudes about educational and related services; and (d) a self-addressed, postage-paid envelope. After collecting the questionnaire data, we observed each of the students' classes from three to six times during the 1994-1995 school year (observations were conducted by at least one of the authors).

### *Instrumentation*

To construct the questionnaire statements used to ascertain the attitudes of study participants, we used provisions of the Individuals with Disabili-

ties Education Act (IDEA, 1990) and three data-based sources. We used portions of two validated listings of exemplary educational practices pertaining to educational and related services for students with disabilities as content sources: *Best Practices for All Students in Their Local School* (Fox & Williams, 1991) and *Program Quality Indicators* (PQI) (Meyer & Eichinger, 1994). The third source was national survey data from 585 respondents about professional practices pertaining to the provision of related services (Giangreco, Edelman, & Dennis, 1991).

The questionnaire included the verbatim IDEA definition of "related services," followed by 20 statements about educational and related service provision, each followed by a Likert-style scale, where 1 was anchored with the phrase "strongly disagree" and 10 with the phrase "strongly agree." Respondents were asked to circle numbers on the 1 to 10 scale that most closely reflected their opinion, or they could circle "don't know." Ten of the 20 statements were worded so that an agreement response (a score in the upper half of the scale) would be consistent with current exemplary practices. Conversely, the remaining 10 statements were worded so that a disagreement response (a score in the lower half of the scale) would be consistent with current exemplary practices. These two formats of statements were randomly interspersed in the questionnaire. The questionnaire ended with a "Comments" section where respondents were invited to provide written information to clarify their responses. We pilot-tested an initial version of the questionnaire with a convenient sample of 37 inservice professionals and parents who had a child with a disability. We used their feedback, and that of project staff, to edit the questionnaire for final use.

#### *Data Analysis*

We analyzed questionnaire content data using the *SAS System* (SAS Institute, Inc., 1989). Means and standard deviations were calculated for each of the 20 statements about educational and related service provision. One-way analyses of variance (ANOVAs) were conducted to determine whether there were significant differences in responses among subgroups of respondents based on their geographic location (i.e., state), and relationship to the student (i.e., related services staff,

special educators, general education teachers, parents, paraprofessionals, and administrators). Post hoc analyses were conducted using the Scheffe test of multiple comparisons. Although, in the strictest sense, ANOVA is designed to be used with ratio-scaled data, its application to ordinal Likert-style data is a common practice in educational research, particularly when using conservative significance standards, as in this study. Written "Comments" were analyzed using categorical coding (Bogdan & Biklen, 1992).

## **RESULTS**

We obtained completed questionnaires from 119 of the 120 individuals to whom they were distributed (99%). The varying size of  $n$  corresponding to the 20 questionnaire statements reflects respondents' option to select "don't know." Parents, school administrators, and general education teachers were the most likely to circle the "don't know" response, using it 13%, 11%, and 10% of the time, respectively. As one general education teacher wrote, "I found the questionnaire difficult to fill out because I don't have enough knowledge about related services." "Don't know" responses were used in 9% of the responses by paraprofessionals, 7% by related service providers, and 3% by special educators. Approximately 28% ( $n = 33$ ) of the respondents wrote comments at the end of the questionnaire.

#### *Agreement and Disagreement Responses Consistent with Exemplary Practices*

Respondents indicated varying levels of agreement with exemplary practices. These responses are presented in descending order in Table 1, based on strength of agreement. Numbers in the first column of Tables 1-4 refer to the order of presentation on the questionnaire. Following each statement a plus sign (+) denotes statements consistent with exemplary practices; a minus sign (-) denotes statements inconsistent with exemplary practices. Respondents indicated their strongest agreement (mean scores between 8.1 and 9.04) with practices that addressed issues such as (a) individualization of related service determination; (b) collaboration to consider the interrelationships among service provider recommendations;

(c) the role of related services to support student access and participation in the educational program; (d) the need to provide related services in the least restrictive locations and least intrusive ways; (e) the appropriateness of students with deaf-blindness and multiple disabilities pursuing individualized educational programs within general education classes, even when some of their learning outcomes may be different from those of their classmates; and (f) the importance of having a single set of goals that reflect the student's needs from a family-centered perspective.

Comments written by respondents about questionnaire items with the highest mean scores tended to be congruent with those items. For example, several comments supported the notion of individualized service determination, the highest ranked agreement statement ( $M = 9.04$ ,  $SD = 1.57$ ). "Related services and settings for these students should be decided on an individual basis" (speech/language pathologist). "Individual situations require individual decisions" (special educator). An orientation and mobility specialist verified her support for collaboration to consider the interrelationships among service provider recommendations, the second highest ranked agreement statement ( $M = 8.91$ ,  $SD = 1.62$ ) by writing:

The team needs to regularly communicate with each other to fully provide an interrelated and consistent program for the student. Services provided in isolation, without communication between team members, only fosters further isolation.

A mother expressed her support for providing related services in the least restrictive locations by writing, "I feel as many related services that can be performed in a classroom should be." A special educator expressed support for the importance of having a single set of goals that reflect the student's needs, yet tempered her comment by mentioning the struggle between desirable and actual practice: "Though I believe in principle in setting goals collaboratively, rather than having each specialist write up objectives for his/her own field, considerations of time/efficiency sometimes cause us to resort to the latter approach."

Respondents indicated slightly lower levels of agreement (mean scores between 6.19 and

7.86) with practices that addressed issues such as (a) the appropriateness of educating students with deaf-blindness and other severe disabilities in general education classes, (b) the ability to provide necessary educational supports within general education classrooms, and (c) the appropriateness of determining educationally related services only after educational goals and placement have been established (see Table 1).

Respondents also indicated support for current exemplary practices by *disagreeing* with statements that suggested that (a) related services should be provided primarily in separate settings such as "therapy rooms," (b) students with deaf-blindness and other severe or multiple disabilities require special education classes or special schools to be appropriately educated, (c) indirect/consult provision of related services is the most appropriate way of providing related service supports for students with deaf-blindness and other severe or multiple disabilities, and (d) the role of related services in schools is to remediate deficits (see Table 2).

Respondents' written comments about items with lower agreement means reflected more widely differing perspectives. Although the overall mean regarding the appropriateness of educating students with deaf-blindness and other severe disabilities in general education classes was in the agreement range, comments reflected both agreement and disagreement perspectives. Some respondents expressed support for general education placement with comments like "I feel that students with deaf/blindness should be in general classrooms" (paraprofessional). Others used qualifiers, writing that students should be included, "if such services are not overly disrupting and distracting" (mother), "as long as the disabled student's developmental needs are met" (school nurse), or "when there is adequate *professional* support" (speech/language pathologist). Others wrote comments inconsistent with exemplary practices by inferring that disability characteristics of the student, rather than the use of environmental modifications to accommodate students' educational needs, should be key factors in determining access to general education settings. This was reflected in a comment by a paraprofessional who wrote, "It is also necessary that all persons concerned realize the limitations of the

**TABLE 1***Statements Where Participants' "Agreement" Responses Were Consistent with Exemplary Practices*

<i>Survey Statement</i>	n	M	SD
14. Use of direct/individual and indirect/consult provision of related services should be individually determined for each student (+).	113	9.04	1.57
9. Related service providers can only make appropriate related service decisions by working together with other team members to consider the interrelationships among their respective recommendations (+).	117	8.91	1.62
12. The role of related services in schools is to support a student's access to education and participation in his or her identified educational program (+).	116	8.81	1.51
18. Related services should be provided in the least restrictive locations and the least intrusive ways (most socially appropriate to the setting) (+).	115	8.71	1.74
3. Students with deaf-blindness and other severe or multiple disabilities can pursue individualized educational programs within general education classes, even when some of their learning outcomes may be different than those of their classmates (+).	117	8.19	2.08
8. There should be a single set of goals that reflect the student's educational needs from a family-centered perspective (+).	116	8.10	2.36
1. Students with deaf-blindness and other severe or multiple disabilities should be educated in general education classrooms with students who do not have disabilities (+).	118	7.86	2.25
2. Supports necessary to educate students with deaf-blindness and other severe or multiple disabilities can be provided in general education classes (+).	115	7.71	2.34
10. Student's educationally related services can only be determined after his or her educational goals and placement have been determined (+).	109	6.19	2.89

*Note:* Numbered statements were presented in a survey of parents, educators, and special service providers. Mean responses and standard deviations are shown for a Likert-like scale where 1 = strongly disagree and 10 = strongly agree. There were no differences among groups for these statements. Plus and minus signs indicate positive and negative statements in relation to exemplary practice as reflected in the provision of the Individuals with Disabilities Education Act (IDEA) and other validated sources.

**TABLE 2***Statements Where Participants' "Disagreement" Responses Were Consistent with Exemplary Practices*

<i>Survey Statement</i>	n	M	SD
17. Related services should be provided primarily in separate settings, such as a therapy room (-).	114	3.62	2.53
4. Students with deaf-blindness and other severe or multiple disabilities require special education classes or special education schools to be appropriately educated (-).	117	4.08	2.73
19. Indirect, consult provision of related services is the most appropriate way of providing related services supports for students with deaf-blindness and other severe or multiple disabilities (-).	100	4.81	2.48
6. The role of related services in schools is to remediate student deficits (-).	100	5.40	2.96

*Note:* Numbered statements were presented in a survey of parents, educators, and special service providers. Mean responses and standard deviations are shown for a Likert-like scale where 1 = strongly disagree and 10 = strongly agree. There were no differences among groups for these statements. Plus and minus signs indicate positive and negative statements in relation to exemplary practice as reflected in the provision of the Individuals with Disabilities Education Act (IDEA) and other validated sources.

student and do not insist on full inclusion." Also, a physical therapist wrote, "Students with severe or multiple *physical* disabilities can succeed in general education classes if their cognitive abilities allow this." Such comments perpetuate the restrictive notion that students with disabilities need to earn their way into integrated settings by being less disabled or by presenting characteristics that do not challenge the status quo in the general education classroom.

Two separate ANOVAs, based on (a) geographic location and (b) relationship to the student, showed no significant differences on any of the 13 questionnaire statements where participant responses (both agreements and disagreements) were consistent with current exemplary practices. Review of Tables 1 and 2 revealed that lower level agreement means had a wider range of scores. In fact, on 12 of 13 items, scores across the sample ranged from 1 to 10; the other item's range was nearly as wide, 3 to 10. Intrateam analysis of the score ranges depicts wide differences among team members who worked with the same student. Intrateam score ranges of more than 5 were identi-

fied in 12 to 18 of the questionnaire statements for each team. This intrateam disparity was highlighted in respondents' written comments, as noted previously. One occupational therapist wrote:

Many teams do not share a common philosophy about the inclusion of students in general education environments. . . . I struggle at times with finding a comfortable balance and yet remain true to my own values and beliefs!

#### *Agreement and Disagreement Responses Inconsistent with Exemplary Practices*

Tables 3 and 4 list questionnaire statements and mean scores where responses were inconsistent with exemplary practices. For example, respondents' disagreement with the questionnaire statement, "Related services should be provided only if they are necessary for the student to provide access to, or participation in, the educational program," appears to be in direct conflict with IDEA stipulations that related services be educationally relevant and necessary. Access and participation

**TABLE 3***Statements Where Participants' "Disagreement" Responses Were Inconsistent with Exemplary Practices*

<i>Survey Statement</i>	<i>n</i>	<i>M</i>	<i>SD</i>
20. Related services should be provided only if they are necessary for the student to provide access to, or participation in, the educational program (+).	107	5.43	3.14

*Note:* Numbered statements were presented in a survey of parents, educators, and special service providers. Mean responses and standard deviations are shown for a Likert-like scale where 1 = strongly disagree and 10 = strongly agree. There were no differences among groups for these statements. Plus and minus signs indicate positive and negative statements in relation to exemplary practice as reflected in the provision of the Individuals with Disabilities Education Act (IDEA) and other validated sources.

components have been further elaborated on in the *Code of Federal Regulations* (1994) and Supreme Court rulings (*Board of Education of the Hendrick Hudson Central School District v. Rowley*, 1982; *Irving Independent School District v. Tatro*, 1984). This incongruence with exemplary practice was internally consistent with respondents' agreement with the statements "Students with deaf-blindness and other severe or multiple disabilities should be provided with as much related service support as possible" and "Related services should be provided if they *can help* the student, even if they are not 'required to assist a child with disabilities to benefit from special education' as stipulated in P.L. 101-476 (IDEA)." All three responses, though incongruent with the IDEA definition of related services, Supreme Court rulings, and exemplary practices, highlight a "more-is-better" approach which, although guided by benevolent intentions, presents conceptual, ethical, and practical shortcomings (Giangreco, 1996).

Other questionnaire items where agreement responses were inconsistent with exemplary practices dealt with (a) related service providers' retaining authority for service recommendations for their own discipline, (b) direct service being the most appropriate way to provide related services, (c) related service providers' retaining responsibility to generate their own goals, and (d) determining related service needs prior to knowing educational goals and placement.

Some of these responses were internally inconsistent with other questionnaire responses. For example, in Table 1 (Statements 8 and 9), respondents indicated agreement with having a single set of goals that reflect the student's educational

needs from a family-centered perspective and the need to make related service decisions together as a team. Yet in Table 4 (Statements 7 and 13) respondents favored, although to a lesser extent, having related service providers generate their own goals for each of their respective disciplines and retain authority for making related service recommendations. These issues represent areas of confusion, ambivalence, and philosophical difference. On all seven of these items, scores across the sample ranged from 1 to 10, indicating extensive intrateam differences.

A one-way ANOVA based on geographic location showed no significant differences on any of the seven questionnaire statements where participant responses (both agreements and disagreements) were inconsistent with current exemplary practices. A one-way ANOVA, based on relationship to the student, did show significant differences on three statements where participants' agreement responses were inconsistent with current exemplary practices (see Table 5). Post hoc analysis showed that parents differed from related service providers in response to the item suggesting that students with deaf-blindness and other severe or multiple disabilities should be provided with "as much related service as possible." The responses of all groups were in the agreement range; and parents, paraprofessionals, teachers, and administrators had means at or above 9, with scores tightly clustered near the mean as reflected in standard deviations below 1.00. Although special educators also had a high mean agreement score ( $M = 9.17$ ), they had a higher standard deviation ( $SD = 1.62$ ), indicating a wider spread of scores. Most significant in this post hoc analysis is not

**TABLE 4***Statements Where Participants' "Agreement" Responses Were Inconsistent with Exemplary Practices*

<i>Survey Statement</i>	n	M	SD
* 5. Students with deaf-blindness and other severe or multiple disabilities should be provided with as much related service support as possible (-).	117	8.32	2.59
15. Related services should be provided if they <i>can help</i> the student, even if they are not "required to assist a child with disabilities to benefit from special education" as stipulated in P.L. 101-476 (IDEA) (-).	98	7.99	2.21
13. Related service providers should make related service recommendations for their own discipline and share results and decisions with the rest of the team (-).	111	7.17	2.85
* 16. Direct individual provision of related services is the most appropriate way of providing related service support for students with deaf-blindness and other severe or multiple disabilities (-).	102	5.99	2.82
* 7. Related service providers should be responsible for the generation of annual goals and objectives representing the perspectives of their discipline so that there is a set of goals for each discipline on the team (-).	115	5.67	3.37
11. Students' related service needs can be appropriately determined prior to knowing educational goals and placement by using assessment approaches from the respective disciplines (-).	102	5.58	2.74

*Note:* Numbered statements were presented in a survey of parents, educators, and special service providers. Mean responses and standard deviations are shown for a Likert-like scale where 1 = strongly disagree and 10 = strongly agree. Plus and minus signs indicate positive and negative statements in relation to exemplary practice as reflected in the provision of the Individuals with Disabilities Education Act (IDEA) and other validated sources.

\* Indicates that differences existed between certain groups (see Table 5).

only the lower mean score ( $M = 7.00$ ) for related service providers, but the markedly higher standard deviation ( $SD = 3.30$ ). A closer examination of the distribution of related service providers' scores depicts one group of scores clustered near the top of the scale and another group clustered near the bottom of the scale.

Parents and related service providers also differed on the statement, "Related service providers should be responsible for the generation of annual goals and objectives representing the

perspectives of their disciplines so that there is a set of goals for each discipline on the team" (see Table 5, Statement 7). Post hoc analysis showed generally lower mean scores across all groups and higher standard deviations. Parents tended to agree with this statement, whereas related service providers tended to disagree.

Last, differences were noted again between parents and related service providers, as well as parents and special educators, regarding the statement, "Direct individual provision of related ser-

**TABLE 5***Post Hoc Analysis Showing Significant Differences on Three Statements*

<i>Group</i>	<i>n</i>	<i>M</i>	<i>SD</i>
<b>Statement 5:</b> Students with deaf-blindness and other severe or multiple disabilities should be provided with as much related service support as possible. Alpha = 0.05; Confidence = 0.95; <i>DF</i> = 111; <i>MSE</i> = 5.59; Critical value of <i>F</i> = 2.30; <i>F</i> = 5.69; <i>p</i> < 0.0001.			
Parents	15	9.53	0.74 <sup>a</sup>
Paraprofessionals	14	9.50	0.94 <sup>a</sup>
Teachers	11	9.36	0.92 <sup>ab</sup>
Special educators	18	9.17	1.62 <sup>ab</sup>
Administrators	8	9.00	0.76 <sup>ab</sup>
Related services	51	7.00	3.30 <sup>b</sup>
<b>Statement 7:</b> Related service providers should be responsible for the generation of annual goals and objectives representing the perspectives of their discipline so that there is a set of goals for each discipline on the team. Alpha = 0.05; Confidence = 0.95; <i>DF</i> = 109; <i>MSE</i> = 9.67; Critical value of <i>F</i> = 2.30; <i>F</i> = 4.90; <i>p</i> < 0.0004.			
Parents	15	8.27	2.12 <sup>a</sup>
Paraprofessionals	14	7.36	3.18 <sup>ab</sup>
Teachers	11	6.45	2.84 <sup>ab</sup>
Administrators	7	6.29	2.87 <sup>ab</sup>
Special educators	18	4.89	3.20 <sup>ab</sup>
Related services	50	4.44	3.37 <sup>b</sup>
<b>Statement 16:</b> Direct individual provision of related services is the most appropriate way of providing related service support for students with deaf-blindness and other severe or multiple disabilities. Alpha = 0.05; Confidence = 0.95; <i>DF</i> = 96; <i>MSE</i> = 6.40; Critical value of <i>F</i> = 2.31; <i>F</i> = 5.90; <i>p</i> < 0.0001.			
Parents	12	8.42	1.88 <sup>a</sup>
Teachers	9	8.11	1.76 <sup>ab</sup>
Paraprofessionals	9	7.33	2.50 <sup>ab</sup>
Administrators	7	6.29	2.29 <sup>ab</sup>
Related services	49	5.10	2.95 <sup>b</sup>
Special educators	16	4.81	1.87 <sup>b</sup>

*Note:* Superscript letters <sup>a,b</sup> positioned to the right of the standard deviation column indicate if groups are significantly different. Groups that share a common superscript letter are not significantly different. Conversely, if two or more groups do not share a superscript letter, it indicates that a significant difference exists.

vices is the most appropriate way of providing related service support for students with deaf-blindness and other severe or multiple disabilities" (see Table 5, Statement 16); parents generally agreed with this statement, whereas related service providers and special educators tended to disagree.

## DISCUSSION

Results of this study depict varying levels of agreement and disagreement across the data set, between certain groups (e.g., parents and related service providers), and within teams. Though these findings can shed light on many issues, we must consider the limitations of this research. Responses to questionnaire content are always subject to idiosyncratic interpretation by participants. Also, respondents' levels of agreement with statements may or may not reflect their actual behavior. In addition, the perspectives of various related service providers comprise nearly 45% ( $n = 53$ ) of the sample.

The overall sample responses to 13 of the 20 questionnaire statements were consistent with current exemplary practices. Agreement about this subset of service provision practices offers a substantial foundation on which educators, parents, and service providers can hold further discussions and refine their ideas about service provision.

The overall sample responses to 7 of the 20 questionnaire statements were inconsistent with current exemplary practices. These data, in combination with the presence of an average of four related service providers per team plus special educators and paraprofessionals, highlight attitudes and practices suggesting that the specialist-reliant approach is still firmly entrenched in the sampled teams. These data are of concern to anyone who accepts the tenets of natural supports or is concerned about the potential overuse of specialized support services. Responses inconsistent with exemplary practices reflect a "more is better" perspective to service provision, described as benevolent in intention, but based on a flawed logic that equates quantity with value (Giangreco, 1996). Consistent with previous research (Giangreco, 1990; Giangreco, Edelman, & Dennis,

1991), "more is better" thinking often exists concurrently with professional behaviors inconsistent with exemplary practices. These behaviors include (a) specialists' retaining exclusive authority over decision making, (b) providing only direct/individual services, (c) having specialists generate separate goals for each of their disciplines, and (d) having specialists determine service needs prior to knowing educational goals and placement.

Results of post hoc analyses suggest that although parents and general education teachers have continued to express opinions similar to those studied in the early 1990s (Giangreco, 1990, Giangreco, Edelman, & Dennis, 1991), many of the related service providers in the current study expressed opinions that differed from those of the early 1990s by expressing opinions more consistent with exemplary practices. The fact that related service providers had the lowest mean score and the widest standard deviation for Statement 5, Table 5 ("Students should receive as much related service as possible"), is hopeful news: information about current exemplary practices is likely reaching related service providers. On the downside, the full sample data, post hoc analyses, and "don't know" responses all suggest that the logic and values underlying current exemplary practices have not reached families, general educators, and many personnel in all the groups (e.g., special educators, related service providers, administrators) whose attitudes still closely reflect the specialist-reliant approach. Apparently, we need to better explain and demonstrate exemplary practices, especially for parents, general educators, and administrators. As the specialist-reliant approach comes under increased scrutiny from professionals, parents, and self-advocates because of its drawbacks, we need to fill the void its absence will create with constructive alternatives. We need to use varying forms of the natural-supports and only-as-special-as-necessary approaches in schools in ways that allow for necessary individualization of students' educational programs. In this way, we can ensure that students, regardless of disability labels, will receive the educational supports they need in ways that allow them to learn most effectively in typical settings as full members of their communities.

### IMPLICATIONS FOR PRACTICE

The intrateam findings have great potential impact on students, families, and professionals. This study showed extensive intrateam differences on virtually every variable, even where there was a high level of agreement across the data set. It is not surprising that groups are having difficulty functioning as teams when members hold different views about basic issues regarding authority for decision making, professional boundaries, parental control, sequence of events, service locations and strategies, frequency of service, and educational placement. To function effectively as a team, members need to develop a shared framework, including a set of core beliefs, values, and assumptions about education, children, families, and professionals to guide their practice.

The questionnaire statements could be used in practice by having team members respond to the 20 statements without noting which are considered exemplary, so as to not bias their responses. Once each member has responded to the statements, the team could discuss their collective agreements and disagreements and level of congruence with exemplary practice. Identifying intrateam similarities and differences is a crucial initial step in understanding each member's status in regard to exemplary practices and understanding each other as the team works toward a shared framework. It could be enlightening to discuss items that appear to be internally inconsistent. This method would overcome the inherent limitation of idiosyncratic interpretation and meaning of questionnaire content because members would have opportunities to explain their responses. The same strategies could be employed at broader organizational levels, such as departments, grade levels, whole schools, or across districts. This process provides a framework to guide group discussion and ongoing learning opportunities.

Changing attitudes is a challenging task, in part because the change agents have often been those outside the circle of people affected by the change. Rating agreement levels regarding exemplary practice statements within one's own group provide an opportunity to explore possibilities and clarify meaning among those who will be directly affected by the outcomes. Discussions of this sort are not meant to result in autocratic deci-

sions or the potential polarization resulting from majority-rule voting. Rather, these discussions should provide a path through the maze of possibilities toward an evolving consensus.

Finally, the authors underscore that the outcomes of this research do not minimize the importance of specialized services for some children with disabilities in inclusive settings. Rather, these results suggest that the use and implementation of specialized services needs to be scrutinized on an ongoing basis to determine their necessity in individual educational programs.

### REFERENCES

- Board of Education of the Hendrick Hudson Central School District v. Rowley, 102 S.Ct. 3034 (1982).
- Bogdan, R., & Biklen, S. (1992). *Qualitative research for education: An introduction to theory and methods* (2nd ed.). Boston: Allyn & Bacon.
- Bradley, V., & Knoll, J. (1995). Shifting paradigms in services to people with disabilities. In O. Karan and S. Greenspan (Eds.), *Community rehabilitation for people with disabilities* (pp. 5-19). Newton, MA: Butterworth-Heinemann.
- Cloninger, C. J., & Giangreco, M. F. (1995). Including students with deaf-blindness in general education classes. *Journal of Visual Impairment and Blindness*, 89(3), 262-266.
- Code of Federal Regulations. (1994). *Education*, 34, 300-399. Washington, DC: Office of Special Education and Rehabilitative Services, U.S. Department of Education.
- Fox, T., & Williams, W. (1991). *Implementing best practices for all students in their local school*. Burlington: University of Vermont, University Affiliated Program of Vermont. (ERIC Document Reproduction Service No. ED 361 977)
- Giangreco, M. F. (1990). Making related service decisions for students with severe disabilities: Roles, criteria, and authority. *Journal of the Association for Persons with Severe Handicaps*, 15(1), 17-25.
- Giangreco, M. F. (1996). *Vermont Interdependent Services Team Approach (VISTA): A guide to coordinating educational support services*. Baltimore: Paul H. Brookes.
- Giangreco, M. F., Cloninger, C., Mueller, P., Yuan, S., & Ashworth, S. (1991). Perspectives of parents whose children have dual sensory impairments. *Journal of the Association for Persons with Severe Handicaps*, 16, 14-24.
- Giangreco, M. F., Dennis, R., Cloninger, C., Edelman,

S., & Schattman, R. (1993). "I've counted Jon": Transformational experiences of teachers educating students with disabilities. *Exceptional Children*, 59, 359-372.

Giangreco, M. F., Edelman, S., & Dennis, R. (1991). Common professional practices that interfere with the integrated delivery of related services. *Remedial and Special Education*, 15(5), 288-296.

Haring, N., & Romer, L. (1995). *Welcoming students who are deaf-blind into typical classrooms: Facilitating school participation, learning, and friendships*. Baltimore: Paul H. Brookes.

Individuals with Disabilities Education Act. (1990) U.S. Congress, Public Law 101-476, Education of the Handicapped Act Amendments of 1990.

Irving Independent School District v. Tatro, 104 S.Ct. 3371 (1984).

Kunc, N. (1992). The need to belong: Rediscovering Maslow's hierarchy of needs. In R. Villa, J. Thousand, W. Stainback, & S. Stainback (Eds.), *Restructuring for caring and effective education: An administrative guide to creating heterogeneous schools* (pp. 25-39). Baltimore: Paul H. Brookes.

Leake, D., James, R., & Stodden, R. (1995). Shifting paradigms to natural supports: A practical response to a crisis in disabilities services. In O. Karan & S. Greenspan (Eds.), *Community rehabilitation for people with disabilities* (pp. 20-37). Newton, MA: Butterworth-Heinemann.

Meyer, L., & Eichinger, J. (1994). *Program quality indicators (PQI): A checklist of most promising practices in educational programs for students with disabilities* (3rd ed.). Syracuse, NY: Syracuse University, School of Education.

Nisbet, J. (1992). *Natural supports at home, school, and in the community for people with severe disabilities*. Baltimore: Paul H. Brookes.

SAS Institute, Inc. (1989). *SAS System, Version 6.09*. Cary, NC: Author.

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