RASE Feature Article

Common Professional Practices That Interfere with the Integrated Delivery of Related Services

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This study provides descriptive data regarding the prevalence of seven professional practices believed to interfere with the integrated delivery of related services for students with handicapping conditions in public schools. Based on questionnaire responses from 585 educators, parents, and related service personnel (e.g., speech/language pathologists, occupational therapists, physical therapists) from across the United States, these data highlight foundational issues that have an impact on the integrated delivery of related services that are necessary for some students to benefit from special education. Professional practices are presented that are believed to facilitate the integrated delivery of related services, as well as those believed to interfere with it. Results of the study document the prevalence of the interfering practices as reported by study participants, and also the extent to which parents and general education teachers report a lack of critical information about the provision of related services. Implications are discussed that pertain to personnel preparation, supervision of staff, advocacy, and collaborative teamwork.

RELATED SERVICES SUCH as speech/language pathology, occupational therapy, physical therapy, and psychological services represent crucial support mechanisms that allow students with handicapping conditions access to an appropriate education. Although related services are a frequent component of students' IEPs, they remain one of the least studied and most heavily litigated aspects of P.L. 94-142 (Lehr & Haubrich, 1986; Lehr & Noonan, 1989; Osborne, 1984; Vitello, 1986). The existing literature regarding related services primarily consists of opinion-based papers and a small number of data-based studies (Giangreco, 1989). Despite the dearth of research, many authors share similar interpretations of the related service section of P.L. 94-142 (Education for All Handicapped Children Act of 1975; 34 C.F.R. §§300.13-300.14). Three main areas of agreement exist in the literature. Ensuring the *educational relevance and necessity* of related services so that students can benefit from special education services is one major area of agreement (American Occupational Therapy Association, 1989; American Physical Therapy Association, 1990; Lehr & Haubrich, 1986; Martin, 1988; Osborne, 1984; Sears, 1981). Additionally, the teamwork practices of developing a *unified set of student goals* and making *consensus decisions* are consistently supported in the literature (Campbell, 1987; Giangreco, 1990; Hutchinson, 1978; Hylton, Reed, Hall & Cicirello, 1987; Pfeiffer, 1982; Rainforth & York, 1987).

Educational Relevance and Necessity

Ensuring the educational relevance and necessity of related services is an explicit requirement of P.L. 94-142. Related services, by definition, are those "required to assist a handicapped child to benefit from special education. . ." (34 C.F.R. 300.13-300.14). Schools are not required to provide services considered to be nonessen-

tial (*Board of Education of the Hendrick Hudson Central School District v. Rowley,* 1982; Osborne, 1984) or those that "may appropriately be administered to a handicapped child other than during the school day. . ." (*Irving Independent School District v. Tatro,* 1984, p. 10).

Litigation has clarified, in part, that some related services are provided to permit students *access to education.* Some of these litigated services include (a) clean intermittent catheterization (*Irving Independent School District v. Tatro,* 1984; *Tokarcik v. Forest Hills School District,* 1981), (b) tracheostomy management (*Hymes v. Harnett County Board of Education,* 1981; *Department of Education, State of Hawaii v. Katherine D.,* 1983), (c) environmental modifications (*Espino v. Besteiro,* 1981), and (d) transportation (*Hurry v. Jones,* 1983). As explained in the Supreme Court decision in *Irving Independent School District v. Tatro* (1984), "A service that enables a handicapped child to remain at school during the day is an important means of providing the child with the meaningful access to education that Congress envisioned" (p. 7).

The educational relevance and necessity of related services may extend beyond access issues when they directly pertain to student learning outcomes (e.g., IEP goals and objectives). A small number of single-subject studies demonstrate the utilization of related services in instructional programming that results in the attainment of student goals and objectives (Campbell, McInerney, & Cooper, 1984; Giangreco, 1986b; McEwen & Karlan, 1989; Strawbridge, Drnach, Sisson, & Van Hasselt, 1987). These studies are consistent with opinion-based articles that view related service provision as a support to students' individualized learning (American Occupational Therapy Association, 1989; American Physical Therapy Association, 1990; Campbell, 1987; Dunn, 1991a; Giangreco, 1986a; Giangreco & Eichinger, 1990; Hylton et al., 1987; Martin, 1988; Rainforth & York, 1987; Sears, 1981; Sternat, Messina, Nietupski, Lyon, & Brown, 1977).

Shared Goals and Consensus Decision Making

Collaboration and teamwork are themes that dominate the special education literature of the late 1970s and the 1980s. The descriptive studies and conceptual works of that period continue to contribute to our understanding of professional teamwork practices today (Albano, 1983; Bray, Coleman, & Gotts, 1981; Fenton, Yoshida, Maxwell, & Kaufman, 1979; Hutchinson, 1978; Lowe & Herranen, 1982; McCormick & Goldman, 1979; Orelove & Sobsey, 1987; Sternat et al., 1977). It is not evident, however, that current practice in the field *fully* reflects those ideas as presented in the literature. All team members continue to be challenged to find effective ways of synthesizing their diverse backgrounds to meet students' educational needs (Hylton et al., 1987).

The literature suggests that the pursuit of shared goals and consensus decision making are two essential elements of effective teamwork (Johnson & Johnson, 1987; Johnson, Johnson, & Holubec, 1986). Others (Campbell, 1987; Giangreco, 1990; Hutchinson, 1978; Orelove & Sobsey, 1987; Rainforth & York, in press; York, Rainforth, & Giangreco, 1990) have applied these elements of teamwork to the development of students' individualized educational programs. Educational teams emphasize shared goals and consensus decision making to avoid the parochial practices of retaining separate goals and decision authority by each discipline. Therefore, an overarching objective of effective teams is to converge the skills and competencies of all team members to assist the student in gaining access to educational opportunities and pursuing identified learning outcomes. Effective teams formulate consensus service delivery decisions by analyzing the potential interdependencies among functions served by team members in reference to student educational needs. The term *interdependence* is used to emphasize that the service delivery decisions made by any team member should be influenced and informed by the recommendations of other team members.

Integrated Delivery of Related Services

Based on litigative interpretations of federal regulations, as well as the logic and data presented in the literature, a definition of *integrated delivery of related services* is proposed that extends beyond the minimum requirements of P.L. 94-142 and strives for congruence with the field's most promising practices (Campbell, 1987; Giangreco, York, & Rainforth, 1989; Meyer, Eichinger, & Park-Lee, 1987; Williams & Fox, 1990). In this context, integrated delivery of related services must (a) be educationally relevant and necessary for a student either to gain access to educational opportunities or to pursue identified learning outcomes; (b) avoid undesirable gaps, overlaps, or contradictions in services; (c) employ consensus decision making based on shared student goals; (d) determine the extent to which professionals representing various disciplines should release their traditional role to others; (e) determine the extent to which the input and methods of team members are synthesized to address student educational goals and/or instructional management needs; (f) provide for physical care needs in the same locations as they would be provided to students without disabilities (e.g., health procedures such as suctioning and administration of medication in the health office; bowel/bladder management in a bathroom); (g) pursue student learning outcomes in the least restrictive environments that are accessed by people without disabilities (e.g., eat lunch in the cafeteria at the same time as classmates); (h) seek to employ effective intervention methods that are the most normalized, minimally intrusive, and the least stigmatizing; and (i) formatively and summatively evaluate related services'

impact on students' access to education, pursuit of identified learning outcomes, and quality of life, based on each of the aforementioned features of integrated service delivery.

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Table 1 presents a series of professional practices regarding goal selection, service delivery decision making, and sequencing of related service activities that are believed to facilitate the integrated delivery of related services. The authors' observations of related service and educational practices in the field led to the identification of seven corresponding practices that logically interfere with the provision of integrated delivery of educationally related services. Four of the seven practices interfere with establishing educational relevance and necessity of related services, two interfere with pursuing a shared set of goals, and one runs counter to the practice of consensus decision making.

The purpose of this study was to provide current, descriptive information regarding the prevalence of the seven related service practices believed to interfere with the provision of integrated delivery of educationally related services in public schools, as reported by educators, administrators, parents, and related service providers. Confirming or refuting the existence of these seven behaviors is an important first step in collecting useful baseline data for further advancement of the design and implementation of effective service delivery options for students with special educational needs.

Method

Study Respondents

Study respondents ($n = 585$) from 17 states included parents of students with disabilities, special education

Table 1. Professional Practices That Facilitate or Interfere with the Integrated Delivery of Related Services

Facilitating practices	Interfering practices
When evaluations are conducted by related service staff, summary reports include descriptive student information based on discipline-specific assessments and observations of students in educationally relevant activities and environments. Summary reports include only the specialists' description and analysis of the student's strengths and weaknesses as they pertain to educational access and/or pursuit of learning outcomes.	When evaluations are conducted by related service staff, summary reports include goals that represent priorities from their disciplines (e.g., OT, PT, SLP) based on the results of the evaluation.
	When evaluations are conducted by related service providers, summary reports include recommendations for service delivery (e.g., number of sessions per week or month, direct or consultative service) based on the clinical judgment of the professional.
The team writes a *single set of discipline-free goals* that reflect family-referenced educational priorities that are shared by all team members.	Goals written in summary reports are transferred to the IEP so that there is a section within the IEP that reflects priorities of each discipline (e.g., PT, OT, SLP sections).
Related service delivery recommendations are made by *consensus*, with team members accounting for potentially undesirable gaps, overlaps, and contradictions in service recommendations among their disciplines.	Service delivery recommendations (e.g., number of sessions and types of service delivery) are made by the person representing the discipline (e.g., PTs make PT decisions; OTs make OT decisions), and these professionals then inform the other group members of their decisions.
The team makes related service delivery decisions *after* they have reached consensus regarding student learning outcomes (e.g., IEP goals) and instructional management needs.	Service delivery recommendations (e.g., number of sessions and types of service delivery) are made *prior* to classroom placement decisions.
	Service delivery recommendations (e.g., number of sessions and types of service delivery) are made *prior* to the time IEP goals are determined.
An educational placement decision is made based on the student's learning needs. The team then considers student placement information to assist in determining the extent of related services needed to support the student's access to educational opportunities and identified learning outcomes.	The need for services like occupational, physical, or speech/language therapy determines (at least in part) where students will be placed (e.g., special school or class, regular class).

Note. OT = occupational therapist; PT = physical therapist; SLP = speech/language pathologist.

teachers, general education teachers who serve students receiving special education services, school administrators, and a variety of related service personnel (i.e., speech/language pathologists [SLP], occupational therapists [OT], physical therapists [PT], school psychologists, vision specialists, hearing specialists, social workers/counselors, and school nurses; see Table 2).

State education agencies or federally funded research and demonstration projects known to the authors were contacted in the spring of 1989 to identify potential data collection sites. The investigators inquired about the number and types of people who were expected to participate in inservice training institutes addressing issues relative to the education of students with disabilities during the summer of 1989. Ten sites were selected where the scheduled inservice training was likely to include people representing a wide range of groups (e.g., parents, general education teachers, special education teachers, administrators, related service personnel) in a mixed forum and from several geographic regions of the country. Study respondents included those people who voluntarily attended the inservice training sessions at identified sites.

Seventy-two percent ($n = 423$) of the respondents reported that they work primarily with students whose level of disability is considered mild to moderate. The remaining 28% ($n = 162$) reported working primarily with students whose level of disability is considered severe to profound. The majority of respondents were involved with students identified as having mental retardation, learning disabilities, emotional disturbance, or orthopedic handicaps. Nearly half worked with youngsters with vision or hearing impairments.

The students with whom the respondents worked received services in a variety of settings (i.e., special education classes, general education classes, resource rooms, special education schools) and represented all age groups, preschool through high school. When asked to list the most common related services provided to the students with whom they worked, over 96% of the respondents listed speech/language pathology among the top three, followed by occupational therapy (62.9%) and physical therapy (57.7%).

Design and Data Collection

During the summer of 1989, a 15-item questionnaire was distributed to 605 people at the 10 data collection sites. A contact person at each site was oriented to questionnaire administration over the phone by one of the authors. Contact persons also were provided with written directions for administration of the questionnaire and were supplied with a sufficient number of questionnaires for all of the participants expected at their site.

Instructions for distribution by contact persons to respondents included directions to (a) remain neutral regarding questionnaire content, (b) stress that the responses should reflect "what actually happens in their settings, not whether they agree or disagree," and (c) welcome narrative comments that would clarify responses. Respondents were allowed approximately 15 minutes to complete the questionnaire prior to the specific inservice training in which they were involved. Questionnaires were collected immediately upon completion by the contact person and mailed to the authors.

"All team members continue to be challenged to find effective ways of synthesizing their diverse backgrounds to meet students' educational needs (Hylton et al., 1987). The literature suggests that the pursuit of shared goals and consensus decision making are two essential elements of effective teamwork . . ."

Instrumentation

The questionnaire was developed based on a review of literature regarding delivery of related services and observations of related service practices in schools by the authors. It was pilot-tested with a sample of parents and professionals in Vermont. The finalized questionnaire included sections for demographic information, open narrative comments, and respondents' reactions to seven statements regarding related service practices in schools. Those statements (included in Tables 3 and 4) were accompanied by a 10-point Likert-style scale for which 1 was anchored with the phrase "Never Happens" and 10 was anchored with the phrase "Always Happens." Respondents were also given the option to circle "Don't Know" if they did not have the information necessary to respond to the statement.

Data Analysis

T tests and one-way analyses of variance (SAS, 1985) were conducted on each of the seven variables (i.e., responses to the statements in Tables 3 and 4) to identify potential differences based on demographic characteristics of groups with a minimum n of 30. After adjusting for experiment-wise error rate (Glasnapp & Poggio, 1985, p. 477; Howell, 1987, p. 339), it was determined that no significant differences among groups existed based on (a) relationship to students (e.g., parents, teachers, OT, PT), (b) students' level of disability (i.e., mild/moderate, severe/profound), (c) settings (e.g., general class, special class), (d) students' age levels (e.g., elementary, secondary), or (e) geographic region (i.e., East = NY, PA, NJ, MD; New England = VT, NH; South = LA, TX, VA; Midwest = SD, IA, KS, MI; West = CA, OR, WA, WY). Therefore, the descriptive data (means and standard deviations) included in Table 3 are presented in an aggregate fashion.

Table 2. Descriptive Information About Respondents

	n	%
Group Represented	216	36.9
Special education teachers	125	21.4
General education teachers	54	9.2
Speech/language pathologists	46	7.9
Parents whose children have disabilities	43	7.4
Occupational therapists	37	6.3
Physical therapists	34	5.8
School administrators	12	2.1
School psychologists	6	1.1
Social workers/counselors	5	0.9
School nurses	4	0.7
Vision specialists	3	0.5
Hearing specialists	585	100.0
Total Number of Respondents		
State of Residence	175	29.9
Vermont	82	14.0
South Dakota	58	9.9
Louisiana	55	9.4
New York	38	6.5
California	38	6.5
Kansas	37	6.3
New Hampshire	32	5.5
Oregon	23	3.9
New Jersey	16	2.7
Iowa	11	1.9
Pennsylvania	8	1.4
Virginia	5	0.9
Michigan	4	0.7
Texas	1	0.2
Maryland	1	0.2
Washington	1	0.2
Wyoming		
Respondents Who Work/Live with Students of Differing Levels	423	72.3
Mild to moderate level of disability (primary involvement)	162	27.7
Severe to profound level of disability (primary involvement)		
Respondents Who Work/Live with Students of Differing Classifications	439	75.0
Mentally retarded (any level)	427	73.0
Learning disabled	420	71.8
Behavior disordered/emotionally disturbed	307	52.5
Orthopedically handicapped	280	47.9
Hearing impaired	274	46.8
Visually impaired	217	37.1
Autistic	421	72.0
Respondents who work/live with students from three or more classifications		
Respondents Who Serve Students in Differing Settings	243	41.5
Special education class in a general school	241	41.2
General education classes	156	26.7
Resource room in a general school	121	20.7
Special education school (handicapped only)		
Respondents Who Serve Students of Differing Age Levels	422	72.1
Elementary	239	40.9
Middle school/junior high	208	35.6
Preschool	167	28.5
High school		
Most Commonly Reported Related Services Provided to Students (Based on respondents listing three most common related services in their settings)		
Speech/language pathology	542	92.6
Occupational therapy	368	62.9
Physical therapy	338	57.7
Psychology	109	18.5
Nursing (school health services)	96	16.5
Social work	28	4.8
Vision support (including orientation and mobility)	3	0.6

Results

The data collection design allowed for a 100% response rate because the questionnaires were collected immediately upon completion. Of the 605 questionnaires distributed and returned, 96.7% ($n = 585$) were deemed eligible for data analysis. Twenty questionnaires were excluded from data analysis because they were incomplete, filled out incorrectly, or filled out by persons who were not necessarily expected to have had knowledge of related service delivery practices (e.g., paraprofessionals).

Respondents' mean scores for all listed statements were distributed across the higher end (above 5.5) of the Likert-style scale. As depicted in Table 3, respondents indicated that it is a relatively common practice in their experience for related service staff to determine student goals and priorities from their disciplinary perspective. Respondents also indicated that it was common practice to include service delivery recommendations (e.g., number of sessions, direct or consultative service) in related service evaluation reports and for each discipline to retain decision authority for those recommendations. Respondents reported that such service delivery decisions were frequently made prior to the determination of students' IEP goals and/or educational placement. Respondents reported the transfer of discipline-referenced goals from their evaluation reports to the IEP. The IEP included a section for each discipline that reflected the priorities of the discipline. Finally, respondents indicated that to a lesser, but still substantial, extent the need for related services was a contributing factor in determining student placement. This last finding is consistent with recent research conducted in Connecticut with physical therapists (Roberts, 1990).

Although the purpose of the study was to have people report what actually happens in their schools, as opposed to whether they believed the practices were desirable, some respondents commented that the listed practices *were* undesirable, in their opinion. Of the 40 written comments offered by respondents, several explained their rating of the occurrence of the listed practices low on the Likert scale as an indication that they used group or team decision-making practices. It is unknown whether those who rated the occurrence of the practices at the higher end of the scale (5.5 or above) perceived them to be desirable or undesirable practices.

A review of the narrative comments, and visual inspection of the raw data included in Table 3, prompted analysis of the rating "Don't Know" by respondents from various groups (e.g., special education teachers, general education teachers, parents). As depicted in Table 4, parents and general education teachers who serve students receiving special education services were more likely than other groups (i.e., special education teachers, occupational therapists, physical therapists, speech/language pathologists, administrators) to respond "Don't Know." While other groups' "Don't Know" responses to each variable ranged from 0% to 13.5% (i.e., special education 0% to 8.8%; OT 0% to 5%; PT 3% to 13.5%; SLP 0% to 2%; administrators 0% to 6%), "Don't Know" responses for parents ranged from 10.9% to 21.7%. "Don't Know" responses of general education teachers ranged from 18.4% to 37.6%. The lack of knowledge regarding related service issues by general education teachers who serve students receiv-

Table 3. Responses of Study Respondents to Questionnaire Items

Questionnaire Statements[a]	*n*	*M*	*SD*
When evaluations are conducted by related service staff, summary reports include goals that represent priorities from their discipline (e.g., OT, PT, SLP), based on the results of the evaluation.	537	8.17	1.76
When evaluations are conducted by related service providers, summary reports include recommendations for service delivery (e.g., number of sessions per week or month, direct or consultative service), based on the clinical judgment of the professional.	548	8.01	2.04
Goals written in summary reports are transferred to the IEP so that there is a section in the IEP that reflects priorities of each discipline (e.g., PT, OT, SLP sections).	533	8.28	1.82
Service delivery recommendations (e.g., number of sessions and types of service delivery) are made by the person representing the discipline (e.g., PTs make PT decisions; OTs make OT decisions), and these professionals then inform the other group members of their decisions.	535	7.84	2.09
Service delivery recommendations (e.g., number of sessions and types of service delivery) are made *prior* to classroom placement decisions.	511	6.59	2.52
Service delivery recommendations (e.g., number of sessions and types of service delivery) are made *prior* to the time IEP goals are determined.	508	6.70	2.53
The need for services like occupational, physical, or speech/language therapy determines (at least in part) where students will be placed (e.g., special school or class, general class).	510	5.72	2.54

Note. OT = occupational therapist; PT = physical therapist; SLP = speech/language pathologist.
[a]Mean and standard deviation scores were based on a 1 to 10 scale in which 1 was anchored with "Never Happens" and 10 was anchored with "Always Happens." Differing *n* values exist because respondents were given the option of answering "Don't Know."

Table 4. "Don't Know" Responses by Parents and General Education Teachers

Questionnaire Statements[a]	Parents %	General Educators %
When evaluations are conducted by related service staff, summary reports include goals that represent priorities from their discipline (e.g., OT, PT, SLP), based on the results of the evaluation.	21.7	21.6
When evaluations are conducted by related service providers, summary reports include recommendations for service delivery (e.g., number of sessions per week or month, direct or consultative service), based on the clinical judgment of the professional.	10.9	18.4
Goals written in summary reports are transferred to the IEP so that there is a section within the IEP that reflects priorities of each discipline (e.g., PT, OT, SLP sections).	13.0	27.2
Service delivery recommendations (e.g., number of sessions and types of service delivery) are made by the person representing the discipline (e.g., PTs make PT decisions; OTs make OT decisions), and these professionals then inform the other group members of their decisions.	13.0	25.6
Service delivery recommendations (e.g., number of sessions and types of service delivery) are made *prior* to classroom placement decisions.	21.7	30.4
Service delivery recommendations (e.g., number of sessions and types of service delivery) are made *prior* to the time IEP goals are determined.	19.6	37.6
The need for services like occupational, physical, or speech/language therapy determines (at least in part) where students will be placed (e.g., special school or class, general class).	19.6	29.6

Note. OT = occupational therapist; PT = physical therapist; SLP = speech/language pathologist.
[a]The percentage of respondents who answered "Don't Know" from other groups with *n* of at least 30 (i.e., Special Education Teachers, OT, PT, SLP, Administrators) all averaged well under 10%.

ing special education services was explained, in part, by one teacher, who wrote, "Although some of the children attending my class were provided services, I personally was never consulted or informed of progress." Another mentioned, "By the time we work with students, their IEP is already done, we rarely see it."

Discussion

The results of this study highlight the perceived national prevalence of seven related service practices that are believed to interfere with the integrated delivery of related services in schools. Results of the study must be interpreted cautiously, due to nonrandom participant selection, potentially idiosyncratic interpretations of questionnaire content, and unknown reliability between respondent reporting and actual behavior. As depicted in Table 2, readers are reminded that special education teachers and general education teachers from across the country are represented more heavily than any other groups, as are respondents from Vermont.

If the identified practices do, in fact, interfere with the integrated provision of related services in schools, their prevalence and pervasiveness are cause for concern by those who seek to extend the quality and appropriateness of services beyond the minimum requirements of P.L. 94-142. If these data accurately represent national practice, they suggest that a high proportion of professionals may be operating in an independent, discipline-referenced fashion whereby crucial decisions are made in relative isolation, without access to foundational or contextual information (e.g., student goals, placement characteristics, input from colleagues). Logic suggests that such practices may tend to reduce the possibility that services will be educationally relevant or necessary. In addition, such practices are incompatible with emerging educational trends and the emphasis on integrated delivery of related services (Campbell, 1987; Dunn, 1988, 1991a, 1991b; Giangreco, 1990; Giangreco et al., 1989; Hylton et al, 1987; Rainforth & York, in press; Williams & Fox, 1990).

It is distressing that parents and general education teachers who work with students with disabilities report being at least two to three times more likely than other respondents to lack enough information about related service practices in their schools to be able to respond to basic questions like those posed in this study. Their lack of information provides a rationale for exploring whether related services have adequately included or supported families and general education teachers. Because the integrated delivery of related services is intended to promote the inclusion of students in integrated environments, it is important that related service providers collaborate with parents and general education teachers, and support them in providing academically and socially meaningful experiences for students.

The results of this study focus attention on common professional practices that are of questionable value. An awareness of their prevalence may stimulate thoughtful analyses of service delivery practices and provide an impetus for identification of more collaborative alternatives

that will facilitate desirable student outcomes. The descriptive information generated through this study could be used in a variety of ways to advance the integrated delivery of related services. The information can be used in cross-disciplinary pre-service and inservice staff development to raise awareness regarding common practices that either interfere with or facilitate current exemplary practices in the field. Existing service delivery and supervision models could be modified, and/or new practices could be developed that would be consistent with interdependent, cross-disciplinary approaches to ensuring educational relevance and necessity. Parents and advocates could use the information from a consumer standpoint to ensure that the field's most promising practices are applied to their children. Lastly, given that educators and related service personnel have a history of striving to improve their own practice, individual student-planning teams could use these data to self-evaluate and set group goals to improve their collaborative teamwork skills.

Issues regarding the integrated delivery of related services will undoubtedly continue to be raised with increasing frequency as the numbers of students with unique service needs and increasing levels of disability are included in general schools and classes. Given the minimal attention related services have received in the research literature, continued study is warranted to evaluate the efficacy of services and determine their impact on students, families, and staff.

Replication or other forms of research that might account for the limitations of this investigation should be pursued, to verify or refute the findings presented in this study. Quantitative alterations to the present investigation, such as randomized subject selection and more equivalent numbers of people from geographic locations and various disciplines, would allow greater generalizability of findings. Qualitative methods, such as in-depth interviews or observations of teams, may shed light on how and why professionals engage in various behaviors that they believe facilitate or interfere with the integrated delivery of related services. More importantly, future study should attempt to determine whether the logic supporting the interfering nature of the identified practices can be verified. Accounts describing and analyzing the nature of the interference can lead toward potential solutions that hopefully will result in meaningful outcomes for students, families, and professionals.

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