Chapter 13

Roles of Related Services Personnel in Inclusive Schools

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Related services providers such as speech-language pathologists, school psychologists, physical therapists, and occupational therapists serve vital roles in supporting the education of many students with disabilities in general education environments. Related services personnel can provide students with disabilities *access* to an appropriate education and facilitate students' pursuit of important *learning outcomes* through the application of the specific skills associated with their

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respective disciplines and the collaborative skills required to work effectively with others in the context of a family-centered approach in general education classrooms and other inclusive environments (Rainforth & York-Barr, 1997).

It is important to note here that much of the knowledge and many of the skills that related services personnel possess are not exclusive or unique to any particular discipline and may or may not be possessed by all those of a particular profession. The fact that someone has a related services title (e.g., physical therapist, speech-language pathologist) in no way guarantees that he or she has had training or experience to provide inclusive school-based services for children with a wide range of developmental disabilities. Furthermore, every discipline that serves students with disabilities overlaps with other disciplines to varying degrees, sometimes substantially so. This is one reason why it is important to consider the potentially overlapping roles that general and special educators, family members, and related services personnel share. In inclusive education models, team members must communicate with each other to identify the potential interrelationships among their disciplines and to avoid unnecessary gaps, overlaps, and contradictions among their recommendations and activities. This communication is essential to ensure that individually determined student supports are provided in ways that 1) effectively achieve specified outcomes, 2) use resources in a responsible manner, 3) are status enhancing or status neutral for the student, and 4) are "only as special as necessary" (Giangreco, 1996).

From the initial passage of the Education for All Handicapped Children Act of 1975 (PL 94-142) through the Individuals with Disabilities Education Act (IDEA) Amendments of 1997 (PL 105-17), there has been confusion about what *related services* are and how they should be provided. By federal definition, a *related service* is any "developmental, corrective, or other supportive service" that is "required to assist a child with a disability to benefit from special education" (Individuals with Disabilities Education Act [IDEA] Amendments of 1997, PL 105-17, 34 C.F.R. § 300.24). Some children with disabilities may benefit from specialized services during non–school hours that are not educationally necessary. Making the distinction between what is educationally necessary and what is medically or otherwise necessary has been and continues to be one of the most contentious issues pertaining to school-based related services. Criteria that must be met to establish educational necessity are addressed under the heading "Educational Necessity" in this chapter.

Although there are numerous examples of related services providers offering excellent support services to students with disabilities, related services have been provided since the mid-1970s in ways

that too often 1) do not match the IDEA definition of *related services*; 2) do not abide by court rulings pertaining to related services (e.g., *Board of Education of the Hendrick Hudson Central School District v. Rowley,* 1982; *Irving Independent School District v. Tatro,* 1984); 3) do not coincide with exemplary practices for educating students with disabilities (Fox & Williams, 1991; Meyer & Eichinger, 1994); and 4) do not adequately support students with disabilities in general education classes. Some of these historically common yet interfering practices are listed in Table 1 (Giangreco, Edelman, & Dennis, 1991; Giangreco, Edelman, Luiselli, & MacFarland, 1996; Giangreco, Edelman, Luiselli, & MacFarland, 1998; Giangreco, Edelman, & Nelson, 1998).

Simply stated, appropriately provided related services are too important for students, families, and school personnel to be provided in ways that interfere with the education of students with disabilities. Therefore, the remainder of this chapter is designed to encourage quality provision of educationally necessary related services. First, seven generic roles of related services providers are offered as constructive alternatives to many of the historically interfering practices discussed. These are also listed in Table 1. Next, four brief case studies pertaining to school psychology, speech-language pathology, occupational therapy, and physical therapy are presented and discussed. Each of these case studies provides 1) a description of a child, 2) examples of indi-

Table 1. Historically common practices that interfere with the provision of educationally necessary related services

1. Families and school personnel interact with related-services personnel as "experts" rather than collaborative team members.
2. Families and general educators have insufficient involvement in related-services decision making.
3. Groups of individuals serving the same student do not always function as a team.
4. Typically, no process is used to assist in making related-services decisions.
5. Autocratic decisions about support services are made by related-services providers in isolation without consideration of the interrelationships among the services provided by team members.
6. Each discipline develops separate goals based on discipline-specific assessments.
7. Related-services planning, implementation, and evaluation often are unrelated to the educational program.
8. Pull-out approaches that do not match the intended educational functions of related services are used.
9. Students are placed in special education schools or classes so they can receive related services rather than being provided services that support them in general education programs and placements that are less restrictive.
10. Group members often defer to one another rather than risk the potential conflicts associated with openly addressing support services decisions.

vidualized education program (IEP) goals or accommodations for which the team agrees the related service was necessary, 3) an example of a commonly applied support for which the team decides that the provision of the related service was not necessary, and 4) examples of how the related services personnel provided support in ways that were consistent with their generic roles as described in this chapter. The chapter ends with implications for facilitating an increasing quality of related services that are educationally necessary and effective in assisting children with disabilities.

GENERIC ROLES OF RELATED SERVICES PROVIDERS

Based on our observations, interactions, and research with related services providers, several roles that cross disciplinary boundaries have emerged. Recognition of these generic roles reinforces the need to examine critical approaches to service delivery by support service personnel. Each of these generic roles is described in the following sections.

Establish a Shared Framework

All decision making about the education of children is based on beliefs, values, and assumptions. A shared framework consists of a team's common set of beliefs, values, or assumptions about education, children, families, and professionals that they negotiate through active participation and contribution. As professionals, educators and related services personnel may have been socialized to serve and protect their own disciplines. When teams develop a shared framework, each member's existing beliefs about his or her own profession may be challenged. This can be threatening for some professionals who fear a potential loss of their traditional role and believe that their professional skills will be devalued. In reality, when professionals open themselves to new ways of thinking, acknowledge the limitations of their own knowledge, and seek out shared paths with other team members, their value in the eyes of other team members, including families, is often raised. Table 2 offers examples of beliefs, values, and assumptions that guide the authors of this chapter when educating children. Readers are invited to consider the ways they might reword these statements to reflect their teams' evolving shared frameworks. In their study of attitudes regarding education and related services provision for students with multiple disabilities, Giangreco, Edelman, MacFarland, and Luiselli (1997) suggested that teams can explore the extent of their members' agreement about important foundational beliefs by asking each team member to rate his or her beliefs or practices on a scale from 1 to 10 (e.g., 1 = Strongly dis-

Table 2. Examples of shared framework statements

Education:

- Is a reciprocal process of learning and mutual support between students and teachers (used here in the broadest sense)
- Should have an important mission (e.g., education should result in positive changes in individually determined valued life outcomes for students such as personal health, social relationships, and access to meaningful places and activities)
- Should result in outcomes that provide students with opportunities to contribute to their own support as well as contribute to a larger community of people (e.g., family, classroom, workplace, neighborhood, town, country)

Children (with and without disability labels):

- Are all entitled to the supports they need in order to receive an appropriate education (e.g., human supports, technology)
- Are all worthy of our time, energy, and resources regardless of the type or extent of their individual characteristics (e.g., disability, gender, cultural heritage, economic status)
- Should be given equal access to the same places and opportunities

Families:

- All have important knowledge, insights, and/or skills to contribute to their child's education
- Should be treated with respect and in culturally sensitive ways
- Must be included in decisions that will affect them

Professionals:

- Should be committed to lifelong learning for themselves as well as their students
- Should continually strive to interact with students, families, and each other in ways that are respectful and constructive
- Should collaboratively clarify their roles and responsibilities so that they are working in concert toward common goals

Excerpted from Giangreco, M.F. (1996). *Vermont independent services team approach: A guide to coordinating educational support services* (pp. 4–5). Baltimore: Paul H. Brookes Publishing Co.

agree; 10 = Strongly agree). This can be done anonymously so that team members feel free to be honest about their perspectives. Then the team can review the members' responses to identify their similarities and differences as well as clarify their interpretation of the rated items. In this way, team members can actively participate in developing a shared framework that evolves over time.

Establish Common Goals and Avoid the "Expert Trap"

Collaborative teamwork is a term that frequently is misused. Many groups formed to serve the educational needs of a student with disabilities have been labeled inaccurately as a team. Although such groups may demonstrate several characteristics of teamwork as described in the literature (e.g., involving people affected by team decisions, sharing resources, having regular meetings with an agenda,

rotating roles, reaching consensus) (Thousand & Villa, 1992; see also Chapter 10), they fail to engage in arguably the most defining and foundational characteristic of a team—the pursuit of shared goals. Teamwork does *not* mean agreeing to have *different* goals for each discipline that subsequently are stapled together and inaccurately labeled a "team IEP." This common and problematic practice of having separate goals stems at least in part from our professional socialization as specialists or experts. Traditionally, we think of people from specialized disciplines such as psychology or occupational therapy as specialists or experts in their field. In reality, an individual's level of skillfulness within a discipline can range from novice to expert. Furthermore, parents, teachers, and special educators often are not considered specialists or experts. Parents, however, are experts regarding their child. Similarly, general and special education teachers have skills and knowledge that differ from those of other team members.

Through teaming, people learn new skills that they need to implement specific strategies or programs and can gain access to training, technical assistance, or consultation from teammates with specialized skills. If related services personnel are viewed as experts and parents and teachers are not, an unproductive hierarchy is inadvertently established within a team, unrealistic expectations among team members are created, and genuine collaboration is disrupted. The expert trap can and must be avoided by encouraging people to value the contributions of each team member and practice principles of role release and support (Rainforth & York-Barr, 1997).

Help Parents and Teachers to Become Better Consumers

Having parents and teachers become increasingly knowledgeable consumers of support services makes sense. Parents are the only adults likely to be involved with a student throughout the student's school career. Teachers typically are the professional staff who spend the most time with a student in school. Conversely, most related services providers interact with the students whom they serve much less frequently.

A first step in becoming a better consumer is to become more knowledgeable about which support services personnel have to offer. Perhaps more important is to find out the specific skills and knowledge of the personnel who are or will be working with a student. For example, although it is important for a teacher or a parent to know that speech-language pathology is a discipline that includes a subspecialization in augmentative and alternative communication (AAC), it is more important to know whether the speech-language pathologist assigned to a student who needs such supports in fact has those skills.

If not, team members are poised to select alternatives to meet the student's needs, such as 1) having the speech-language pathologist learn new skills, 2) identifying another speech-language pathologist who has the needed skills, or 3) identifying a person from another discipline who has the needed skills (e.g., special educator, occupational therapist, assistive technology specialist). Feedback from parents of children with disabilities has indicated that related services personnel are perceived more favorably by families when they acknowledge the limitations of their own skills, express a willingness to work together to solve identified problems, and act on those concerns (Giangreco, Cloninger, Mueller, Yuan, & Ashworth, 1991). These parents also expressed appreciation when services were well coordinated.

Ensure the Educational Relevance and Necessity of Support Services

The professional literature is replete with criteria for making related services decisions for students with disabilities. Some criteria may be situationally useful (e.g., age, history) and others highly suspect (e.g., level of parental involvement, geographic location of the student, student abilities or willingness to follow instructions). Two criteria, however, appear to be essential across all situations: educational relevance and educational necessity.

Educational Relevance First, teams should always consider whether a proposed support service is educationally relevant based on the student's IEP. For example, if an occupational therapist suggests that her service is intended to assist the student in handwriting *and* handwriting is an identified component of the IEP, then relevance is established. Conversely, if handwriting is not part of the IEP, then relevance is not established. In other words, there is not a match between the content of the IEP and the proposed service. Identifying this kind of mismatch may be a sign that 1) team members have separate agendas specific to their professional disciplines, 2) related services recommendations are being made inappropriately prior to knowing the student's IEP's content, or 3) the group has not established common goals. Alternatively, it may be a sign that the content of the IEP needs to be adjusted.

Educational Necessity If a proposed support service is established to be educationally relevant, then the team must consider the second essential criterion of educational necessity. It is conceivable that a service may be educationally relevant but not educationally necessary. There are at least six basic ways to judge the educational necessity of proposed services:

1. Absence of service interferes with education

2. Consider gaps, overlaps, and contradictions
3. Check with the sender and receiver
4. Generalization across environments
5. Only as special as necessary?
6. Provided appropriately during non–school hours

First, we can ask, "Will the absence of the proposed service interfere with the student's access to or participation in his or her education program?" If the answer is yes, then the service is necessary.

Second, if the service passes the initial considerations for relevance and necessity, then the team must consider potential gaps, overlaps, and contradictions among the related services. For example, appropriate therapeutic positioning may be suggested by *both* the occupational therapist and the physical therapist. If the therapists' skills overlap in this area, the team needs to decide whether the overlap is necessary and desirable. A gap could occur if each therapist assumes that the other is handling the therapeutic positioning issue, only to find out later that neither was doing so. Contradictions also occur when support services providers make conflicting recommendations based on their disciplinary perspectives. For example, a physical therapist may recommend that a child's head be positioned at midline during instruction, whereas the vision specialist may recommend nonmidline head positioning to account for maximum use of residual vision. This example illustrates the importance of support services providers' communicating with each other on an ongoing basis, expanding their own breadth of knowledge, and working collaboratively with each other to design learning experiences that make the most sense for the student.

A third way to explore the potential necessity of support services is to check with both the sender and the receiver of the service. For example, an occupational therapist (sender) may say that she needs to serve the function of transferring specialized information and skills regarding eating and drinking to the classroom assistant (receiver) who works with the student at lunchtime. Although serving this function may meet the previous test for necessity, the team may agree that the classroom assistant is sufficiently experienced and skilled with this particular student that such support is not necessary. Alternatively, the potential receiver of a service can make it known that he or she needs a certain type of support. A newly hired classroom assistant (receiver) may have no experience in assisting a child with oral-motor difficulties to eat and therefore may require transfer of information and skills from the occupational therapist (sender). When possible and age appropriate, it is always desirable to check directly with the student (receiver)

to gain his or her perspective on the need for a proposed service. This can provide not only essential information but also experience in self-advocacy.

A fourth test for necessity is to consider whether a service provided in one context can be adequately generalized to other environments without the direct involvement of the specialist. For example, in one situation, a school psychologist assisted a student's core team members by sharing specialized information and skills pertaining to positive behavioral supports in the general education classroom. The team needs to determine whether the psychologist needs to transfer directly the same information and skills across all environments in which this support is needed (e.g., gymnasium, cafeteria, playground, library, co-curricular activities) or whether the information and skills can be transferred adequately by the core team classroom staff to other places and people, possibly with the psychologist monitoring to ensure quality and accountability.

As a fifth test of necessity, the team should consider whether the proposed services are "only as special as necessary" (Giangreco, 1996, p. 35). This consideration is intended to avoid the drawbacks inherent in providing well-intended but potentially harmful "overservice." Team members can ask whether the proposed related services can be provided appropriately in more typical ways through the use of natural supports (e.g., existing school staff, classmates) and more typical materials and activities. In part, this concept 1) has its historic roots in the special education literature (Reynolds, 1962) and 2) is supported by the U.S. Supreme Court case of *Board of Education of Hendrick Hudson Central School District v. Rowley* (1982), in which the provision of a sign language interpreter as a related service for a student with a hearing impairment was denied because the court found evidence that the student was and had been benefiting adequately from instruction without a sign language interpreter.

A sixth and final test asks the team to consider whether the proposed service can be provided appropriately during *non*–school hours. If it can be, then it need not be provided as a school-based related service. This criterion was established in the Supreme Court's ruling in *Irving Independent School District v. Tatro* (1984), a case pertaining to clean intermittent catheterization (CIC) as a related service. The court ruled that the school in that case had to provide CIC because the student needed to receive this intervention a few times during the school day; therefore, this case represented an important example of allowing a student *access* to education. If, however, a health procedure needed to be done for a student once a day and the time of day was not a critical factor (e.g., the procedure could be pro-

vided at 6:00 A.M., noon, or 6:00 P.M.), then the school would not be responsible for providing that service, because it could be delivered appropriately during non–school hours. Application of this standard, established in the *Tatro* case, should be considered carefully. The Code of Federal Regulations has established that certain supports that are related to school but occur during non–school hours indeed are appropriately provided related services. Support for students with disabilities to participate in co-curricular activities, community-based training, and parent training are examples of such supports.

Working in the Context of the General Education Program and Environment

As related services providers spend more time supporting students with disabilities in general education classes, they are faced with a markedly different context than they may have experienced when working in special education classes, schools, or clinics. Specifically, general education teachers have indicated that they most appreciate specialists who 1) function as collaborative team members rather than in isolation as experts; 2) help teachers and parents work on the child's education goals rather than impose separate therapy goals; 3) provide assistance at times and in ways that consider the operation of the classroom in order to avoid disruption; and 4) use approaches that are not overly technical or specialized, so that the student may avoid being unnecessarily stigmatized (Giangreco, Dennis, Cloninger, Edelman, & Schattman, 1993). Related services personnel are perceived to be more effective when they attend to these contextual differences that are important to teachers. (See Chapter 7 for extended discussion of the general education context.)

Engaging in a Variety of Functions

In a study by Giangreco (1990), 318 special educators, related services providers, and parents of students with severe disabilities rated a set of support services functions commonly cited in the professional literature. These respondents indicated that the four most important functions for serving students with severe disabilities were 1) developing adaptations, equipment, or both to allow for active participation or to prevent negative outcomes (e.g., regression, deformity, discomfort, pain); 2) transferring information and skills to others (e.g., related services providers, educators, parents); 3) serving as a resource, support, or both to the family; and 4) applying discipline-specific methods or techniques to promote active participation, to prevent negative outcomes, or both. These essential functions may be augmented by discretionary functions (e.g., promoting typical developmental sequences,

being a liaison between the school and medical service providers) that are individually and situationally appropriate. It is essential for team members to have a shared understanding of which functions each person serves and how they are interrelated to support the components of a student's education program. Furthermore, all individually selected functions should be pursued within the context of collaborative and ongoing assessment, planning, implementation, and evaluation.

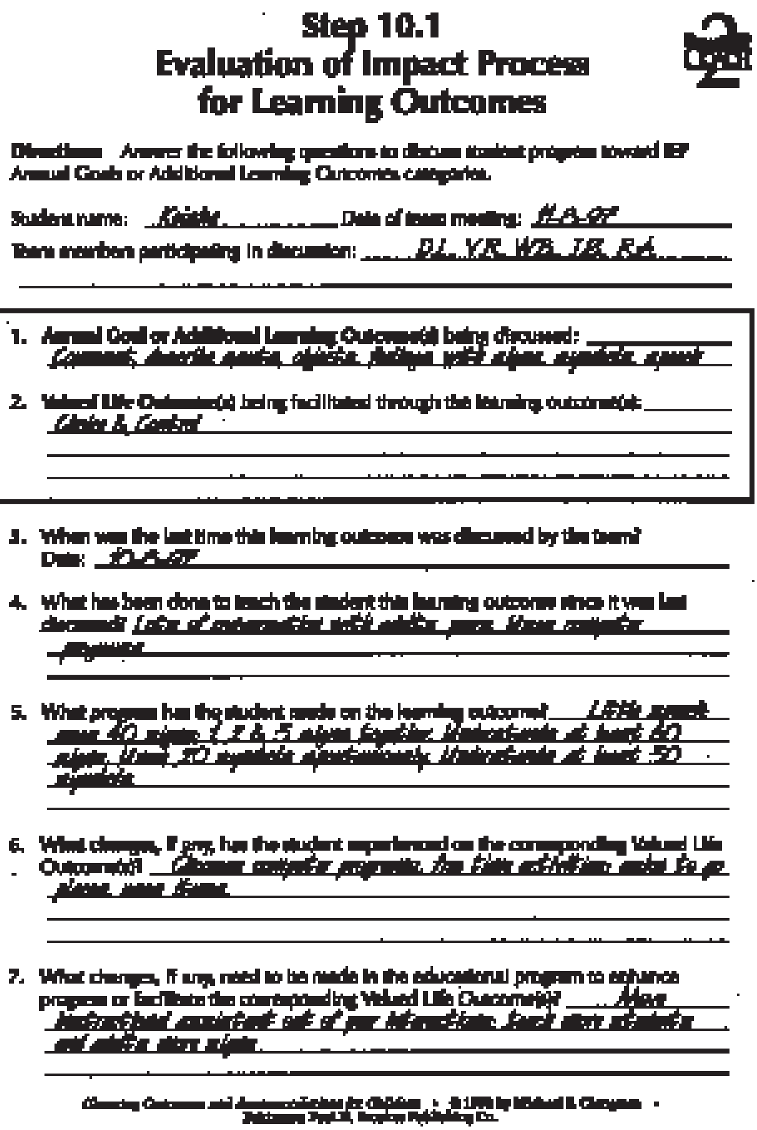
Traditionally, related services support to students often decreases with students' chronological age. We suggest that age should be considered in a different light. Specifically, as a student grows older, he or she may be presented with new environments and opportunities that call for different types of supports and potential increases in services. This can occur at times of major transitions (e.g., from preschool to school services, from middle school to high school); during participation in community-based experiences; or during transitions to adult services and employment situations (Sowers, Hall, & Rainforth, 1992). Clarifying the functions served by each team member and their interrelatedness helps to further develop the team's shared framework and allows members to purposely explore service functions for potential gaps, overlaps, and contradictions.

Evaluating the Impact of Related Services

Once the team has begun to implement a related service, the question becomes whether the provision of the support service has been effective. Outcome measures for related services for students with disabilities are not always easy to determine, because more traditional standardized assessments of skill development are often inappropriate. Thus, many teams have neglected to assess the impact of support services interventions as vital components of their service provision. Meaningful assessment of related services outcomes for students with disabilities is critical.

The first step in evaluating the impact of a support service is to recall which components of the education program the service was intended to support. Knowing this, the team can ask individually appropriate questions such as, "Has the service provided access to or allowed for participation in the educational program?" or "Has the service facilitated improvement in identified learning outcomes that would probably not occur in the absence of the service?"

A larger question the team should ask is, "Does the student experience positive changes in his or her life as a result of the service?" In other words, is the student's life better in ways that are valued by the student and his or her family, and, if so, how? Furthermore, is the student's life better because he or she received this service? Thinking about these kinds of quality-of-life issues is complex and highly indi-



Step 10.1
Evaluation of Impact Process for Learning Outcomes

Directions: Answer the following questions to discuss student progress toward IEP Annual Goals or Additional Learning Outcomes categories.

Student name: Date of team meeting:

Team members participating in discussion:

1. Annual Goal or Additional Learning Outcome(s) being discussed:
2. Valued Life Outcome(s) being facilitated through the learning outcome(s): Choice & Control
3. When was the last time this learning outcome was discussed by the team? Date:
4. What has been done to teach the student this learning outcome since it was last discussed?
5. What progress has the student made on the learning outcome?
6. What changes, if any, has the student experienced on the corresponding Valued Life Outcome(s)?
7. What changes, if any, need to be made in the educational program to enhance progress or facilitate the corresponding Valued Life Outcome(s)?

(continued)

Figure 1. Evaluation of impact process for learning outcomes, step 10.1. (From Giangreco, M.F., Cloninger, C.J., & Iverson, V.S. [1998]. *Choosing outcomes and accommodations for children: A guide to educational planning for students with disabilities* [2nd ed., p. 262]. Baltimore: Paul H. Brookes Publishing Co.; reprinted by permission.)

vidualized (Dennis, Williams, Giangreco, & Cloninger, 1993). However, parents of children with disabilities have identified several high-priority valued life outcomes: 1) being safe and healthy, 2) having networks of

Figure 1. *(continued)*

Step 10.1
Evaluation of Impact Process for Learning Outcomes

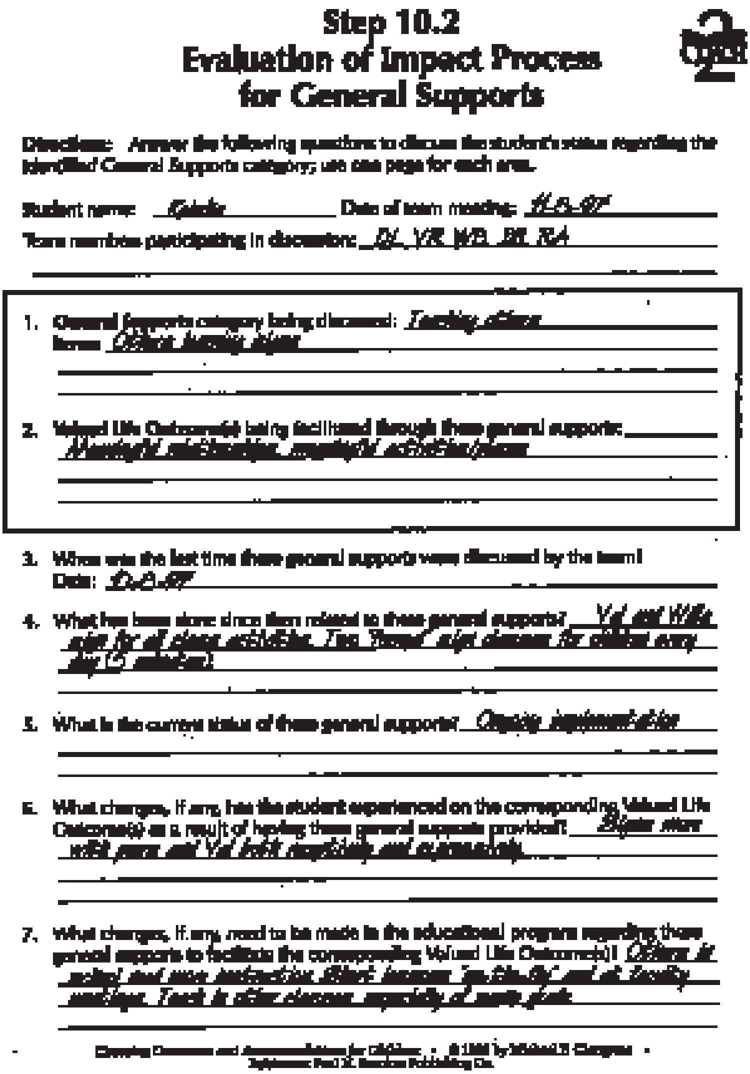
Directions: Answer the following questions to discuss student progress toward IEP Annual Goals or Additional Learning Outcomes categories.

Student name: *[illegible]* Date of team meeting: *[illegible]*

Team members participating in discussion: *D.L., V.R., W.B., J.B., R.A. (?)*

1. Annual Goal or Additional Learning Outcome(s) being discussed: *Shares with others (?)*
2. Valued Life Outcome(s) being facilitated through the learning outcome(s): *Meaningful relationships (?)*; *Meaningful activities in various places (?)*
3. When was the last time this learning outcome was discussed by the team? Date: *[illegible]*
4. What has been done to teach the student this learning outcome since it was last discussed? *Modeling by adults and peers, using "give and get" (?)*
5. What progress has the student made on the learning outcome? *[illegible]*
6. What changes, if any, has the student experienced on the corresponding Valued Life Outcome(s)? *[illegible]*
7. What changes, if any, need to be made in the educational program to enhance progress or facilitate the corresponding Valued Life Outcome(s)? *[illegible]*

personally meaningful relationships, 3) having choice and control that matches one's age and cultural context, 4) having a variety of interesting places to go and meaningful activities to do, 5) having a home to live in, now and in the future, 6) engaging in personal growth and lifelong learning, and 7) contributing to one's community (Giangreco, Cloninger, et al., 1991; Giangreco, Cloninger, & Iverson, 1998). A simple



Step 10.2
Evaluation of Impact Process for General Supports

Directions: Answer the following questions to discuss the student's status regarding the identified General Supports category; use one page for each area.

Student name: [illegible] Date of team meeting: [illegible]

Team members participating in discussion: [illegible]

1. General supports category being discussed: [illegible]
   Items: [illegible]
2. Valued Life Outcome(s) being facilitated through these general supports: [illegible]
3. When was the last time these general supports were discussed by the team?
   Date: [illegible]
4. What has been done since then related to these general supports? [illegible]
5. What is the current status of these general supports? [illegible]
6. What changes, if any, has the student experienced on the corresponding Valued Life Outcome(s) as a result of having these general supports provided? [illegible]
7. What changes, if any, need to be made in the educational program regarding these general supports to facilitate the corresponding Valued Life Outcome(s)? [illegible]

(continued)

Figure 2. Evaluation of impact process for learning outcomes, step 10.2. (From Giangreco, M.F., Cloninger, C.J., & Iverson, V.S. [1998]. *Choosing outcomes and accommodations for children: A guide to educational planning for students with disabilities* [2nd ed., p. 270]. Baltimore: Paul H. Brookes Publishing Co.; reprinted by permission.)

evaluation process has been developed as part of COACH (*Choosing Outcomes and Accommodations for Children: A Guide to Educational Planning for Students with Disabilities, Second Edition*; Giangreco et al., 1998) to address students' learning outcomes (see Figure 1) and gener-

Figure 2. *(continued)*

Step 10.2
Evaluation of Impact Process for General Supports

Directions: Answer the following questions to discuss the student's status regarding the identified General Supports category; use one page for each area.

Student name: [illegible] Date of team meeting: [illegible]

Team members participating in discussion: [illegible]

1. General Supports category being discussed: [illegible]
   Items: [illegible]

2. Valued Life Outcome(s) being facilitated through these general supports: [illegible]

3. When was the last time these general supports were discussed by the team?
   Date: [illegible]

4. What has been done since then related to these general supports? [illegible]

5. What is the current status of these general supports? [illegible]

6. What changes, if any, has the student experienced on the corresponding Valued Life Outcome(s) as a result of having these general supports provided? [illegible]

7. What changes, if any, need to be made in the educational program regarding these general supports to facilitate the corresponding Valued Life Outcome(s)? [illegible]

al supports provided to students (see Figure 2). These approaches focus on their impact on students but can be a helpful adjunct to evaluate the impact of the service provision.

CASE STUDIES

In this section, the generic principles of providing the educationally relevant and necessary related services discussed thus far in the chapter are illustrated through four related services (i.e., school psychology, speech-language pathology, occupational therapy, physical therapy). Each case example describes a student with disabilities and explains how a related service was needed or not needed for the student to receive an appropriate education.

School Psychology

Historically, the practice of school psychology as a related service has been severely limited by the way in which the psychologist's role has been defined. An overwhelming amount of most school psychologists' time is spent in assessment activities related to the determination of special education eligibility of a student (Levinson, 1990). This leaves little time for the psychologist to offer other types of services that fall within the purview of school psychology. Although assessment and evaluation remain important aspects of the school psychologist's role, in inclusive schools, the emphasis shifts to the program development, monitoring, and support necessary for the success of the student.

Elliot

Elliot was diagnosed as having attention-deficit/hyperactivity disorder (ADHD), combined type, and was making the transition from his local elementary school to middle school. The psychologist, having worked with Elliot during his elementary school years, was invited to a transition meeting at the middle school in the spring of Elliot's last year in elementary school, Grade 6. Others in attendance included Elliot's mother; the sixth-grade teacher; his special education support teacher; the school nurse; three middle school teachers who would have Elliot as a student in the coming year; the middle school special educator; and, of course, Elliot.

In years past, the middle school staff might have looked to the school psychologist for "expert" opinions on Elliot's disability, questions about his behavior, and suggestions regarding how he should be taught. This day, the meeting took a different course as Elliot's current classroom teacher and special educator outlined Elliot's learning strengths as well as areas that challenged him. His mother shared her feelings regarding Elliot's prior school experiences and described some of the challenges that she faced in the home. Most important, Elliot described learning situations and activities that he enjoyed and

those that were difficult for him. This fact-finding was used as part of a broad set of information to help the team identify learning priorities for Elliot that could be translated into his annual IEP goals. The team also clarified expectations for his participation within the general education curriculum and general support needs.

Once these foundational decisions were made, the team asked the question, "What kind of supports will Elliot need to be successful at the middle school and to pursue his IEP?" It was at this point that the many and varied skills of the school psychologist were considered in concert with those of other disciplines to address Elliot's educational needs. The team decided that Elliot and the school psychologist together would provide staff with general information regarding ADHD.

Elliot's mother informed the team that she and Elliot's physician decided to try medication to see whether it would help counter the effects of ADHD. The team agreed that the school psychologist would develop a behavioral data collection system for use by Elliot's teachers and parents. These data would allow the physician to make informed decisions regarding dosage adjustments for optimal effect. In addition, the psychologist would interview Elliot at regular intervals in order to obtain Elliot's insights into his own academic and social functioning.

Elliot's mother and his sixth-grade teacher both raised concerns regarding his peer relationships. His mother believed that he had trouble making friends, and his teacher had observed that his relationships with his classmates were characterized by frequent conflicts. The team agreed that the school psychologist and the middle school teachers would work together to develop a schoolwide process for resolving conflicts (Johnson & Johnson, 1991). This process would be team-taught to all students by teachers and the school psychologist. They also would instruct Elliot and his classmates in these and other social skills in the contexts in which they would need to be demonstrated, such as the classroom, the lunchroom, the schoolyard, the hallways, and the school bus (Goldstein, 1988; Goldstein & McGinnis, 1997). Aware of community resources, the school psychologist recommended that Elliot participate in a week-long outdoor adventure learning program jointly offered during the summer vacation months by a community recreation program and a local social services agency. This summer program would be attended by many of Elliot's future middle school classmates from neighboring communities. This experience was aimed at enhancing important social skills such as teamwork, communication, problem solving, and

trust building. The psychologist would facilitate interagency support for Elliot through a referral to the sponsoring agencies.

Elliot's scenario highlights how a psychologist's time, skills, and efforts can be focused to provide critical support to a student with a special educational need. As Levinson, Fetchkan, and Hohenshil (1988) pointed out, school psychologists can experience greater job satisfaction when they are able to expand their work efforts beyond traditional role boundaries.

Speech-Language Pathology

The case of Stephen illustrates a collaborative team's implementation of a speech-language intervention.

Stephen

Stephen was a 14-year-old high school freshman who had a fluency disorder that was complicated by a written language challenge. As a young child, Stephen had been a late talker and first received speech-language intervention in preschool. He responded well to intervention, and, by the end of kindergarten, he no longer required direct services from a speech-language pathologist. At the beginning of second grade, Stephen was referred again to the speech-language pathologist, this time for a fluency problem (stuttering). He continued to experience fluency problems throughout grade school. During sixth grade, it was also noted that Stephen had difficulty with formulating ideas to develop written narratives. He required support to brainstorm potential topics, outline key ideas, sequence his ideas, and monitor his written language structure. The speech-language pathologist provided both direct and in-classroom intervention to facilitate Stephen's fluent speech and his written language.

As Stephen's team met to discuss his goals for the upcoming year, they considered the educational relevance and necessity of direct speech-language intervention. His IEP included two major priorities: 1) to increase successful participation in class discussions by creating a "fluency-friendly environment" and 2) to expand his written language skills in a variety of genres (e.g., narrative, descriptive, expository, persuasive).

Up to this point in Stephen's school career, his team members had clearly identified the relevance of related services support. However, high school presented some new challenges in terms of Stephen's schedule, his adjustment to multiple teachers and academ-

ic subjects, and his increased responsibility for independent writing assignments. Furthermore, Stephen expressed interest in being a self-advocate to support his own needs. Teachers who knew of Stephen's fluency disorder shared their concerns regarding strategies that should be used to support him. They also worried about the level of support he might require for completing his written language assignments across subject areas.

An action plan was developed with input from Stephen, his parents, a speech-language pathologist, a classroom teacher whom Stephen identified as particularly helpful during his eighth-grade experience, and the guidance counselor of his high school. Based on team discussions, it became apparent that the role of the speech-language pathologist should shift from a direct services provider to a consultant who would support Steven's general education teachers. The following steps were agreed on to begin to create a fluency-friendly environment:

1. Stephen, the speech-language pathologist, and the guidance counselor would plan a meeting with all of Stephen's Grade 9 teachers. Stephen decided that he would demonstrate his stuttering behavior at that meeting because his stuttering was not always obvious to the naive listener.
2. In collaboration with the speech-language pathologist, Stephen would work with his teachers to help them understand which level of support would help to ensure his comfort in participating in class discussions. Stephen might ask for teachers to adapt the strategies they used to call on him. Supports might also include Stephen's cueing the teachers when he was ready to give a book report or scheduling a time before class to prepare or to practice oral presentations with the teacher.
3. As Stephen begins to develop a relationship with a particular teacher, that teacher and the guidance counselor (rather than the speech-language pathologist, who is in the building for only 2 days per week) would become mentors in the academic environment with whom Stephen can check in on a regular as-needed basis. Stephen could also use these individuals to practice his slow speech or to warm up before giving an oral presentation in class.
4. Stephen and the speech-language pathologist would continue to communicate with the guidance counselor to ensure that both Stephen's teachers and Stephen were comfortable with the intervention plan for managing his fluency challenges.

5. Stephen determined that it would be helpful to talk about his stuttering, particularly with his science and history classmates because these classes required a significant amount of discussion and lab work with a partner.

As a support for Stephen's written language impairments, the freshman English teacher offers writing practice opportunities to all interested students twice a week after school. Peers also were identified who could help any students requiring assistance with editing and reflection on the content of their written language. Stephen indicated that he would feel comfortable with access to these resources to support his written language problems.

It was clear to the team that Stephen needed and wanted to generalize his skills and strategies in this high school environment. The speech-language pathologist trusted that Stephen's primary goals would be supported by his general education environment with the addition of teachers and peers he identified as confidants. The speech-language pathologist would remain a support person for brainstorming new ideas on a quarterly basis.

Occupational Therapy

Pediatric occupational therapists are trained to promote the development of motor, play, social, adaptive, and perceptual abilities of children who experience a wide range of developmental challenges. As a related services provider in special education programs, an occupational therapist can support a child's ability to function as independently as possible and to benefit from his or her education program. The following case study illustrates this type of support.

Lazaro

Lazaro, a lively 3-year-old boy, had been determined eligible for special education because of delays in development associated with his diagnosis of Down syndrome. Using a family-centered education-planning process, the IEP team, which included Lazaro's parents, the preschool general education teacher, and the early childhood special educator, began the process of IEP development. The occupational therapist was asked to provide information about Lazaro's present level of functioning to help the team make decisions. Unlike past practice, the assessment information was not used to determine separate goals for occupational therapy but rather to help determine which services might be needed and how services would fit together to support Lazaro's development.

The information provided by the occupational therapist was based on multiple sources, including formal and informal assessments, observations, interviews, and record reviews. She noted that Lazaro had strengths in social skills and motor imitation, a persistent approach to activities, and an interest in other children and play materials. Generalized low muscle tone had an impact on his development of balance and equilibrium in standing and walking, postural stability in sitting, grasp strength, dexterity, and oral-motor control. Lazaro could walk but did not run. He had difficulty with going down steps. He had the ability to grasp and release self-care items, toys, and writing materials but lacked dexterity and strength to pull on clothing or use fasteners in dressing. He made marks with a crayon but did not hold a crayon in his fingers or imitate lines or shapes. He also had difficulty with matching shapes, assembling simple puzzles, and organizing the front and back of his clothing.

Lazaro's parents were worried that Lazaro often choked on pieces of solid food. He had difficulty with biting through some foods, chewing adequately, and drinking without spilling. He occasionally drooled. He was communicative, using facial expressions and hand gestures as well as vocalizations. Lazaro used a number of single words, but these words were not easily intelligible by those who were not familiar with his communication style.

Using information from the occupational therapist and others, the team identified six educational priorities that would be translated into IEP goals for Lazaro: 1) sustaining social interactions with peers; 2) making requests (e.g., for food, toys, activities, people); 3) safe eating and drinking; 4) independent dressing skills; 5) functional use of objects (e.g., toys, crayons, other classroom materials); and 6) increased balance in walking and descending stairs. The team also agreed that Lazaro would benefit from exposure to all aspects of a typical preschool curriculum, with the understanding that initially partial participation in some activities might be expected. Next the team determined needed general supports and accommodations, which included teaching others, including staff and classmates, about textures and foods that were safe for Lazaro to eat at snacktime and exercising precautions to prevent Lazaro from choking. The team agreed that the least restrictive place for Lazaro to pursue his education program was in a typical preschool environment because that environment provided him the opportunity to access materials, activities, and models he needed to address his priority learning outcomes and to benefit from exposure to a range of typical preschool activities.

Determining which, if any, support services Lazaro needed to benefit from his education program was a team decision. To make informed decisions, each team member reviewed information gathered during assessments conducted by the IEP team. The occupational therapist focused her attention on the information from parents, teachers, and other specialists, including the physical therapist and speech-language pathologist, related to the family-selected educational priorities and preschool curriculum. Although the occupational therapist had skills related to much of Lazaro's education program, the team decided that occupational therapy involvement was needed to address only some of Lazaro's educational needs because other team members could provide needed supports more appropriately in a way that was only as special as necessary. For those priorities with which the occupational therapist was to be involved, she would continue to collaborate with other team members to identify long- and short-term IEP objectives and strategies to support and assess the objectives. In Lazaro's case, the following decisions were made:

1. The occupational therapist did not need to be involved in the listed IEP priority of sustaining social interactions with peers. The team agreed that the preschool teacher and the parents, working together, could address this goal adequately by creating social experiences and providing Lazaro with instruction and support.
2. The team agreed that the occupational therapist did not need to be involved in the listed IEP priority of making requests, because her proposed input substantially overlapped that of both the speech-language pathologist and the special educator. Recognizing the potential future need for occupational therapy involvement related to communication, the team agreed that their decision should be revisited in 2 months.
3. Team members agreed that the occupational therapist did need to address the safe eating and drinking IEP priority. Although there were identified overlaps in this area with the speech-language pathologist, the team decided that the overlaps were necessary. The occupational therapist would serve Lazaro indirectly through the speech-language pathologist and teacher. The occupational therapist would play a major role in suggesting increasingly challenging food textures, types, and sizes for home and school snacks. She also would select or construct adaptive eating materials such as an adapted cup with a straw. In addition, the occupational therapist would serve as a liaison among the family, medical service providers, and the education team.

4. The team agreed that the occupational therapist needed to support dressing skills by sharing knowledge and resources with other team members. She would consult with the teachers and the parents regarding accommodations and strategies for putting on and taking off clothing. The teachers were to take responsibility for practicing dressing at appropriate times throughout the school day. The occupational therapist also was to assist the family in selecting shoes, boots, and clothing fasteners that were most appropriate for Lazaro. The team discussed the probability that, once the parents learned the principles behind the selection of appropriate clothing, this aspect of occupational therapy involvement could be reduced or eliminated.
5. The team agreed that the occupational therapist did not need to be involved in the listed IEP priority of imitating skills of daily life by using objects for intended purposes, because the teacher was skilled in this area and it was an integral part of her typical program. The occupational therapist would remain available on a consulting basis for times when the team members required her specialized knowledge and skills.
6. The team agreed that the physical therapist could provide consultation to the teacher and physical education program at the preschool, suggest activities and games for the group, and monitor Lazaro's progress and needs in order to address the listed IEP priority of increased balance in walking and on stairs. Occupational therapy involvement in this priority was not needed.

Physical Therapy

The following case study illustrates an education team's incorporation of physical therapy intervention for Tina.

Tina

Tina loves school! She has many friends, two of whom are in her third-grade general education class. Tina has some unique needs in school because she has cerebral palsy (severe spastic quadriplegia). Her needs for physical assistance and therapeutic movement and positioning are everpresent, given her tightly flexed arm postures and strong patterns of extension in her trunk, neck, and hips. She wears a wrist splint on one hand and molded ankle–foot orthoses (i.e., braces) on her feet. Her wheelchair has a custom seat design that promotes a stable, upright posture. Tina does not use speech but has learned to use a chin switch mounted upon her wheelchair to oper-

ate a variety of toys, musical devices, and a simple scanning device. This year Tina's team included her classroom teacher, classroom instruction assistant, speech-language pathologist, occupational therapist, physical therapist, and mother.

Using COACH (Giangreco et al., 1998), a family-friendly process, Tina's mother selected a set of five discipline-free priorities to be restated as annual goals on her IEP. Tina's priorities were 1) making choices; 2) engaging in individual leisure activities; 3) completing tasks independently; 4) identifying objects, pictures, and symbols; and 5) initiating and sustaining social interactions. Several additional learning outcomes, beyond the IEP priorities, were identified together by the team based on Tina's individual needs and on the general education curriculum for her school. Some of these additional learning outcomes included responding to yes-or-no questions, expressing "more," learning to complete a classroom assignment, using the computer, and achieving selected language and math outcomes using a multilevel curriculum approach.

General supports also were identified by the team. The team recognized that the success of Tina's school experience would depend in part on providing her with necessary supports as well as on providing supports to those who worked with her. In addition, there were a number of tasks that needed to be done for Tina by others, with regard to which skill acquisition by Tina was not expected. For example, feeding, dressing, and personal hygiene were tasks that the team had decided would be done for Tina. There was no expectation that she would learn the physical aspects of these skills, although she was encouraged to learn about related communication and social skills (e.g., making choices, expressing "more," expressing refusal, cooperation) that built on her strengths. In addition, Tina needed to be moved from place to place in her wheelchair and in and out of her chair using specialized positioning and movement techniques and equipment that kept her positioned comfortably. Staff needed to use good body mechanics to avoid injury (e.g., lower-back strain). Physical environments throughout the building and on school grounds needed to be assessed to determine the need for accessibility adaptations. Equipment management was also needed for seating, computer access adaptations, switches, the scanning device, and a prone stander that allowed Tina to be upright during activities when other students were standing. Classmates and school staff needed to be taught about Tina's communication and interaction strategies and her movement and safety needs, including the equipment she used. Finally, instruction accommodations had to be made each week for language arts; math; and specials such as music, art, and library time.

Table 3. Tina's physical therapy service plan

Identified outcome or support	Specific need	Function to be served	Collaborate with...
Specialized positioning and movement techniques	• Recommended positions to match classroom activities and Tina's needs	Developing adaptations	Classroom teacher
	• Select and assist in procurement of positioning equipment	Developing adaptations	Classroom teacher and administrator
	• Teach staff safe and effective movement and positioning assistance techniques	Teaching others	Team
	• Teach staff safe body mechanics for transferring and lifting Tina	Teaching others	Team
	• Ongoing evaluation and monitoring of use of techniques taught	Teaching others	Team
	• Documentation on videotape and in notebook of photographs for descriptions and examples of appropriate use of techniques	Teaching others	Team
Accessible activities and environments	• Evaluate the need for increased accessibility in physical education, art room, and for field trips, and plan accordingly	Teaching others, making adaptations Adaptations	Physical education and art teachers, classroom teacher
Manage equipment	• Monitor fit and condition of wheelchair, prone stander, and adapted seat		
	• Document person to call for repairs of equipment	Adaptations	
Instructional accommodation	• Develop instructional accommodations for physical education class		Physical education teacher
Develop emergency evacuation procedures	• Determine appropriate evacuation route and procedures from various positions and locations around school	Adaptations	Classroom teacher, building principal

Tina's team considered the needs for service support using a collaborative process intended to ensure that services would be both educationally relevant and educationally necessary. For the physical therapist, this meant participating with the team to determine support needs. They determined that the physical therapy service plan would include 5 hours per month of indirect physical therapy support with a potential for decreasing to 2 hours per month once certain supports were in place. Table 3 outlines the resulting physical therapy service plan for Tina.

There were no IEP goals or additional learning outcomes for which the team determined the need for physical therapy support. Initially, both physical therapy and occupational therapy support were considered potentially necessary for Tina to learn a classroom job (e.g., making deliveries, caring for classroom plants and animals). Both types of therapists had experience and skills 1) collaborating with teachers on selecting an appropriate job, 2) analyzing motor performance on selected tasks, and 3) determining adaptations. In Tina's case, the team decided that the overlap between these two services was not a desirable overlap and that the occupational therapist, who had a background in working in supported employment, would be responsible for that area of support. Tina's plan illustrates a situation in which the therapeutic involvement of a related service exclusively related to *general supports* rather than to any direct learning outcomes.

IMPLICATIONS FOR PRACTICE

This chapter describes the generic roles that related services providers can play to support the education of children with disabilities and provides several applications of those roles in inclusive preschool through high school education environments. The chapter also offers criteria for teams to use in making decisions about related services provision. These criteria, framed as questions, include the following:

1. Are proposed related services educationally relevant?
2. Are proposed related services educationally necessary?
3. Are proposed related services only as special as necessary?

Given this backdrop, we see several implications for practicing related services providers. First, related services providers are encouraged to reexamine their models of service provision so that they can increase their constructive involvement on teams, decrease the fragmentation and isolation often associated with itinerancy, and ask how

their services will improve a student's learning and success in his or her education environment. Second, to be better prepared as collaborative decision makers, service providers need to participate in cross-disciplinary training. Through this exchange of discipline-specific information, they will be better prepared to plan, implement, and evaluate a student's education program in a nonduplicative and coordinated fashion. Third, providers must trust that their collaborators can adequately take on a role they traditionally have viewed as their own. This trust can be built through initial and ongoing communication among team members that is reciprocal in nature. Cross-disciplinary and discipline-specific training can further build team capacity and trust. Fourth, related services providers must strive for accountability in the efforts of those individuals delivering cross-disciplinary activities that are agreed on by the team. Finally, team members should create a process for evaluating what they are doing and demonstrating the relationship of what is being done with regard to the valued life outcomes identified for and by the students being served.

The phrase *valued life outcomes* refers to what has commonly been called *quality of life* in the literature. By pursuing quality of life as an outcome of education, we hope that the lives of *all* our students are better as a result of having attended our schools and receiving the support services that are provided. This is no less true of and no less important for students with disabilities. Noted educator Burton Blatt emphasized the temporal, relative, and individual nature and importance of quality of life for people with disabilities when he so eloquently stated,

> There will be necessarily empty places, as it is equally certain that there will be times when there seems to be too much. . . . The brimming cup has little to do with the size of the cup or the temporary nature of its contents. . . . It is all in the mind and, for sure in the soul. (1987, p. 358)

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