

CHAPTER 14

IMPLICATIONS FOR EDUCATION

OVERVIEW

The definition and classification system introduced in this *Manual* can be of value to educators and applied to students with *intellectual disability* (ID) during their years in school. In this chapter, we discuss (a) the educational characteristics and needs of students with ID and the professionals who teach and support them, (b) historical and current models of special education, (c) definitions and classification systems in education, (d) the AAIDD multidimensional model and supports paradigm as applied to education, and (e) innovative best practices in education.

We begin by describing three people with ID (Nina, Sam, and John) who vary widely in their ages, abilities, and environmental contexts. We will link the concepts addressed in this chapter to these people.

Nina was diagnosed before birth with Down syndrome through an amniocentesis. Before she was born, her parents had met with the early intervention staff and discussed educational services that might be available to their daughter. These services started when Nina was 2 weeks old and an Individualized Family Services Plan was written to guide intervention. Nina is now 3 years old and attends a community preschool program that serves children with disabilities alongside typically developing peers. Nina's special education teacher and her related services support staff (occupational therapist [OT] and speech and language pathologist [SLP]) come to the preschool on a scheduled basis, provide their services that are integrated into the school routine, and meet regularly with the classroom teacher and other team members to plan Nina's educational program and to monitor her progress. Nina's parents and special education teacher have visited the kindergarten class she will attend in 2 years to build successful transition goals into her Individual Education Program (IEP).

Sam is a 10-year-old boy who was born with cerebral palsy and visual limitations; during his preschool years, he was diagnosed with significant developmental delays. Sam received special education services starting at age 2, along with OT and physical therapy (PT) and speech and language services. At age 3, he was placed in an early childhood special education classroom where he received educational and related services but also began exhibiting problem behavior (spitting and refusal to participate). In elementary school he was initially placed in a self-contained classroom for children with multiple disabilities. However, by second grade, when his school district began implementing inclusive practices, Sam received most of the special education and related services supports (OT, PT, SLP) in the context

of the second grade scheduled activities and was pulled out for some intensive instruction in the resource room several times weekly. Sam's team worked closely with his parents to plan and oversee his IEP and related progress, and to address his problem behaviors. They involved a Positive Behavior Support (PBS) specialist on the team and designed a support plan that was based on the functions that his problem behavior served. The plan called for teaching him more efficient ways to communicate and improving the classroom conditions that often triggered his problem behavior. Based on his triannual assessment at age 8, Sam's diagnosis was changed from developmental delay to ID; his placement continued to be with his peers in third grade, and his IEP services were delivered to him in that setting. Sam is now in fifth grade, and his team is studying the middle school program in the school district, where inclusive practices were recently initiated with children served under the learning disability category. The teachers in that setting have expressed hesitancy to include someone with ID and other physical disabilities; they are concerned specifically about his means of communicating and responding in class.

John is a young man who lives in a housing project with his mother and grandmother in a large city in northern United States. He was labeled with ID in elementary school after repeatedly failing several grades and most academic subjects. John's speech was not always readily understood by his teachers or peers; however, he received no speech services. At age 9 in fourth grade, he was given special education services on a pull-out basis; by sixth grade, he was placed in a self-contained, cross-categorical special education class. In his first year of high school, John tried out for the football team but was not accepted because of his difficulty attending practice regularly and understanding the rules and the plays. He continued to have difficulty reading and performing in his ninth-grade special education classes. By 10th grade, he started skipping school; he had several contacts with the law, first being caught shoplifting cigarettes for others and later being stopped as a passenger in a stolen car. He quit school midyear in 11th grade. John has never been employed, although he successfully completed two job sampling assignments in 11th grade as part of his transition plan. One summer he worked mowing lawns for several neighbors, but this stopped when he stole tools from the garage of one neighbor. At age 21, he still lives with his mother and grandmother, is unemployed, and spends most of his time with others who have dropped out of school.

CHARACTERISTICS AND NEEDS OF STUDENTS WITH INTELLECTUAL DISABILITY

Although not yet universally implemented, the right to education has become an internationally acknowledged standard for practice for children with ID. For example, participants representing 92 governments at the 1994 United Nations Educational, Scientific, and Cultural Organization (UNESCO) World Conference on Special Needs Education at Salamanca, Spain, passed the *Salamanca Statement and Framework for Action on Special Needs Education* espousing the beliefs that "every child has a fundamental right to education, and must be given the opportunity to achieve and maintain an acceptable level of learning" (UNESCO, 1994, p. viii). The Salamanca Statement

(1994) provides a succinct summary of the ideal to which most countries strive with regard to the education of children with special educational needs, including students with ID.

Who Are Students With Intellectual Disability?

Although criteria for eligibility for special needs education services vary from country to country, there are some factors that span across countries and that assist in designing educational supports for this group of students. First, the majority of students receiving special educational services are students with ID who have higher IQ scores—John clearly falls in this group. Second, the support needs of students with ID range widely as a function not only of the intensity of support needs for any given student but also of the student's age. For example, the support profiles of Nina and Sam are both directed toward their upcoming transitions but otherwise have no similarity. Such potentially diverse needs have led to the recognition that special educational services for students with ID must be individualized, taking into account unique student educational characteristics and providing individualized supports to enable students to achieve those needs.

Who Are Professionals in Education?

There is a wide array of professionals who are involved in the education of students with ID, including special and general educators; related service personnel, such as SLPs, OTs, and PTs; experts in behavioral guidance, counselors, vocational specialists, and transition coordinators; and school psychologists and social workers.

Nina and Sam have relied on the services of OTs, PTs, and SLPs in addition to special educators, but John's services were limited to special education, even though he needed speech services as well.

Among these professionals, school psychologists or educational diagnosticians are most likely to use the information presented in this *Manual*, because they are responsible for helping to determine eligibility for special educational services.

Because of school eligibility practices and based on an assessment, Sam's diagnosis was changed when he reached third grade from developmental delay to ID.

Teachers, particularly, but other instructional support personnel as well, are likely to have access to and use information from a diagnostic procedure to plan and implement educational programs. The special educational enterprise is by necessity collaborative in nature if all aspects of a student's educational needs are to be addressed in an educational program. As such, teamwork between school and community professionals and with family members is highly valued. We will return to this issue later in discussing how the supports model can be used in designing educational services for students with ID.

HISTORICAL AND CURRENT MODELS OF SPECIAL EDUCATION

Like many service systems supporting people with ID, special educational services have transformed, or are still transforming, from congregated, segregated services and settings to inclusive educational settings. The earliest attempts at education for people with ID involved efforts to educate youth with ID who lived in institutional settings. Early 19th century efforts in France and across Europe by pioneers such as Itard and Seguin were emulated by progressive reformers in the Americas, Australia, and elsewhere; however, by the late 19th century, the original educative purpose of these institutions was being obviated by the forces of increasing institutional populations and changing populations of people entering institutions. Many felt that the lofty promise of education, the “noble experiment” to eliminate ID, failed when educational methods did not cure mental retardation and when those reintegrated into society still had significant disability and needed support (Trent, 1994). Was it realistic to integrate people with ID into society? Negative myths developed about these individuals as being a danger to the community, and attention turned toward controlling their reproduction. Social pressures pertaining to eugenics and social hygiene led to forced sterilization programs that began in 1880, and these programs continued for much of the 20th century (De Kraai, 2002).

When, in the early decades of the 20th century, the demands for universal access to education opened school doors for more and more children, a nascent movement to provide educational access for students with disabilities emerged, but by and large it did not result in substantial gains with regard to access to education until the post-World War II era. Students with ID, particularly those with more severe impairments, were often the last to gain such access, but by the end of that century, as illustrated by the Salamanca Statement in 1994, there was an international expectation pertaining to the rights of children with disability, including those with ID, to education.

Over the past several decades, however, another almost universal consensus has emerged worldwide pertaining to the education of students with ID; that is, the expectation that every child has a fundamental right to education and that efforts should be made to educate them in inclusive classrooms with their nondisabled peers. The Salamanca Statement calls upon all governments and the international community to (a) adopt as a matter of law or policy the principle of inclusive education, enrolling all children in regular schools, unless there are compelling reasons for doing otherwise and (b) endorse the approach of inclusive schooling and to support the development of special needs education as an integral part of all education programs. In summary, there is an emerging consensus that children and youth with ID be included in general education settings so that they have access to the same educational opportunities available to the majority of children.

USES OF DEFINITIONS AND CLASSIFICATION SYSTEMS IN EDUCATION

For educators and other professionals involved in the education of students with ID, this 11th edition of AAIDD's *Diagnosis, Classification, and Systems of Supports Manual*

recommends diagnostic processes that will be familiar to practitioners. The *Manual* also challenges professionals to think differently about ID itself and to apply a multidimensional model and supports paradigm that will fundamentally alter the educational process. In the field of education, the primary application of the definition of ID is in the diagnostic process that is used to help determine eligibility for special education or related services. Diagnostic responsibilities typically reside with school psychologists or educational diagnosticians, who are trained to administer standardized tests and to make diagnoses based on test findings and other factors. These professionals will want to become familiar with information provided in part II of this *Manual* ("Diagnosis and Classification of Intellectual Disability") and are referred to chapters 4–8 for more information on the diagnostic process.

The application of classification systems to the education of students with ID has a more complex and, in most cases, problematic history. As is emphasized in chapter 12 ("Support Needs of Persons With ID Who Have Higher IQ Scores"), students with ID vary with regard to the severity of their impairment, and the educational support needs of students across this range of abilities and limitations likewise varies. Since the earliest attempts to educate students with ID, schools have classified students based upon level or impairment. Classification systems used in more recent times have almost all been linked to IQ ranges and identified by labels pertaining to each IQ range. Students with relatively higher IQ scores, typically between two and three standard deviations below the mean, were classified as *educable* or with *mild mental retardation*; students whose scores fell between three and four standard deviations below the mean were referred to as *trainable* or as having *moderate mental retardation*; those with IQ scores between four and five standard deviations below the mean were classified as having "severe mental retardation" and students with IQ scores lower than that were classified as having "profound mental retardation."

As a result of years of such classification systems, students were frequently grouped according to their level of mental retardation and provided special education services in homogeneous groups, typically in separate classrooms and frequently in special schools. The problems associated with homogeneous grouping by IQ level are myriad and beyond the scope of this chapter or *Manual*. The primary problems, however, have included the routinization of curricular content by level of impairment (and the consequent lack of individualization resulting from such routinization), social isolation and exclusion (and the consequent lack of appropriate role models), low expectations for performance and capacity, and the promulgation of problem behaviors associated with factors inherent to segregated settings. Finally, according to recent federal data, only 2% of students served in the United States under the categorical area of mental retardation are "declassified" from special education; once students in this category start receiving special education services, they almost always continue to need them (Snell et al., 2009).

The 1992 AAMR *Manual* proposed a classification system based not upon IQ ranges, but on the intensity of supports a person needs to function successfully in his or her environment (intermittent, limited, extensive, pervasive [ILEP]). In the 2002 AAMR *Manual*, the AAMR Terminology and Classification Committee retained a "strong

commitment to a supports-based classification system” as embodied in a system based on support levels (Luckasson et al., 2002, p. 101), but also acknowledged the variance in classification systems and needs across the life span and disciplines. The present *Manual* continues to recognize that multidimensional classification systems may be necessary in the provision of supports (e.g., to determine funding levels for adult developmental disabilities services), but the use of such systems must result in more benefit than harm to the person with ID. In the cost/benefit analysis of the application of classification systems to education to date, there is evidence that the harm, in the form of social isolation, exclusion, and low expectations, may indeed outweigh the benefits for students with ID.

Classification systems based upon level of disability become less important and, perhaps, irrelevant in school systems that include students with ID alongside their peers without disabilities and that provide needed support to all students in the classroom. It is important, then, that all educators and educational practitioners consider the ways in which the AAIDD multidimensional model, as described in chapter 2, and the supports paradigm, as described in chapter 9, impact educational decision making and practice. This change toward inclusive education has gradually evolved over the past 30 years.

John’s history of special education apart from his peers is quite different from others with ID who are younger. Sam was educated separately until second grade and then included with supports, while Nina was included with peers with no disability at the preschool level.

As we have noted, there is a worldwide acknowledgement that students with ID should be included in schools and classes with their same-aged peers who do not have the disability (Emerson et al., 2007). However, as Emerson et al. noted, “Questions about educational services in the poorest nations tend not to be about appropriateness or quality but rather about availability” (p. 602).

BEST PRACTICES IN THE EDUCATION OF STUDENTS WITH INTELLECTUAL DISABILITY

Three educational practices substantiate the impact of the AAIDD multidimensional model of ID, which includes an emphasis on individualized supports (see Figure 2.1). These three are applications of *Universal Design for Learning* (UDL), the use of educational and assistive technology, and the application of positive behavior supports. These are briefly described here by way of illustrating how the educational process may differ as a function of the new ways of thinking about ID discussed in this *Manual*.

Universal Design for Learning

One of the primary strategies to ensure that students with ID can be engaged with the general education curriculum involves the implementation of principles of UDL as the design of instructional materials delivering content information to students. Historically, content information, particularly in core academic areas, has been presented through

print-based formats (textbooks, worksheets) and lectures. Students who cannot read well or who have difficulty with memory or attention, including students with ID, do not have access to the content presented exclusively through these mediums and thus will not have the opportunity to learn that content. Applying principles of UDL to curriculum development can address this barrier by providing multiple means for presenting information and for students to respond to that information. Orkwis and McLane (1998) defined UDL as “the design of instructional materials and activities that allows learning goals to be achievable by individuals with wide differences in their abilities to see, hear, speak, move, read, write, understand English, attend, organize, engage, and remember” (p. 9).

The UDL contributes to progress in the general education curriculum by ensuring that all students can access academic content information and can provide evidence of their learning through more than one means. It promotes flexibility in representing content (how instructional materials present the content), in presenting content (how educators and materials deliver content), and in demonstrating content mastery (how students provide evidence of their learning).

Flexibility in the presentation and representation of content information can be achieved by providing information in a variety of formats, including text, graphics or pictures, digital and other media formats (audio or video, movies), or performance formats (plays, skits). The development of curricular materials in digital (electronic text) formats allows for the use of computers to provide multiple output formats. For example, using specially designed media players, electronic text can be converted to multiple output formats, including electronic Braille, digital talking book format, and sign-language avatars, as well as allowing for output in multiple languages and enabling the user to modify features of the presentation, including font size and color and background color. Similarly, there are multiple ways students can provide evidence of their learning, including written reports, exams, portfolios, drawings, performances, oral reports, videotaped reports, and other alternative means.

There are also pedagogical or instructional modifications that can provide greater access to content information. For example, the use of graphic or advance organizers has been shown to improve the comprehension of students with disabilities. Both graphic and advance organizers are, in essence, flexible ways of presenting content information to students.

The sixth-grade science teacher found that when he labeled all the areas of the science lab with picture and word directions to facilitate Sam's understanding, the rest of the class understood the procedures better too.

The use of UDL to drive curriculum design is a perfect example of the impact of multidimensional models of disability, such as that presented in this *Manual*, to education. These modifications alter the context, in this case the actual curricular materials, to enable learners with a wide array of abilities and experiences to have access to content information. The UDL improves the “fit” between the student with ID and the curriculum through which content information is presented.

Instructional and Assistive Technology

The focus on providing supports to promote a better fit between a student's capacities and the educational context also places greater emphasis on the use of instructional and assistive technologies. *Instructional technology* involves educational materials that are intended to teach ideas and concepts (e.g., a software program that provides drill and practice in arithmetic operations), whereas *assistive technologies* are tools that help students compensate for their disability; that is, technologies increase, maintain, or improve the functional capabilities (Edyburn, 2000). Sometimes a technology can serve both an instructive and assistive purpose. For example, a student who uses the Writing with Symbols software to write an essay may use it as an assistive technology because they could not write the essay without it, but it also serves as an instructional technology because, by using it, the students learns to write.

Traditionally, the role of technology in special education has been rather narrowly prescribed as of benefit only to students with more severe impairments who need some assistive technology device, such as an augmentative communication device, to accommodate for that student's speech and language deficits. This was consistent with an understanding of ID that focused on fixing the person. Within the AAIDD multidimensional model and supports systems, however, the role of all types of technology, whether they have been developed specifically for a disability population or for the general population, becomes critical to addressing not only the student's capacities but also the educational context. Computer-assisted instruction (CAI), for example, involves the use of computer-based technologies to perform a variety of instructional roles, from initial delivery of content information to drill and practice activities. Research supports the efficacy of CAI with students with and without disabilities, including students with ID (Wehmeyer, Smith, Palmer, Davies, & Stock, 2004). Generic technologies can promote peer interactions by providing a topic of conversation between the student with ID and a peer. Devices like iPods and BlackBerry wireless handheld devices are socially desirable and can facilitate social interactions as well as provide needed supports, such as picture prompts to complete a sequence of job tasks.

Nina learned to use a visual scene display in preschool to augment her speech; the device was programmed with routine scenes scanned from her day (arrival, centers, circle, recess, snack, bathroom) and spoken messages could be activated by pressing parts of each scene, such as "Let's play housekeeping!" (Fossett & Mirenda, 2007)

Positive Behavior Supports

An ongoing concern for many teachers working with students with ID is managing their classroom to create a nondisruptive learning environment for all students and to deal with challenging behavior problems exhibited by a few students. The field of positive behavior supports reflects another area of intervention and treatment that has advanced from emphasizing the person with a disability as the problem to be fixed to recognizing

that treatment and intervention must focus on the social and environmental context and the fit between that context and the individual's limitations. Applying positive behavior supports requires a focus on two primary modes of intervention: altering the environment before a problem behavior occurs and teaching appropriate behaviors as a strategy for eliminating the need for problem behaviors to be exhibited (Carr et al., 1999). Positive behavior supports interventions and support plans are based on a functional behavioral assessment and are directed toward changing the environment in several ways: (a) to prevent the problem behavior by improving antecedent conditions that predict its occurrence, (b) to teach specific skills to replace problem behavior and to expand the individual's general access to reinforcement, and (c) to change the ways others respond to the individual so desired behavior is reinforced and problem behavior is not.

In second grade when Sam's school implemented inclusive practices with all students, his team worked closely to plan his needed supports. His family was both excited and fearful about the change. Following the five steps for planning supports in Figure 14.1, they started by (a) identifying what they wanted for Sam and what they thought Sam wanted in his life, (b) assessing the kinds of supports Sam would require to accomplish these goals, (c) developing an action plan to gather and deliver the supports, (d) initiating and monitoring the plan, and (e) evaluating personal outcomes. At the time, Sam had no friends; engaged in a lot of problem behavior that seemed to get him attention, albeit negative; had difficulty communicating his wants and feelings; and did not have many academic or other skills or interests beyond his puppy, his family, and watching TV. The team had little trouble identifying goals, but the challenge was to select the goals that could yield the most immediate benefits in Sam's life. Now, 3 years later, this plan has been revised every year and serves to direct his IEP goals, objectives, and support services.

Significantly for educators, the use of positive behavior supports has focused attention on addressing problem behaviors in school settings and in addressing school violence (Horner, Albin, Sprague, & Todd, 2006; A. Turnbull, Brown, & Turnbull, 2006) by providing interventions at an individual, classroom, or whole-school level. Schoolwide positive behavior supports has been demonstrated to reduce office referrals in schools, create classroom environments more conducive to learning, and assist students with chronic behavior problems to improve their behavior. These supports involve the application of behaviorally based approaches to enhance the capacity of schools, families, and communities to design effective environments that improve the fit or link between the students and the environments in which teaching and learning occurs. Attention is focused on creating and sustaining school environments that improve lifestyle results (personal, health, social, family, work, and recreation) for all children and youth by making problem behavior less effective, efficient, and relevant, and desired behavior more functional.

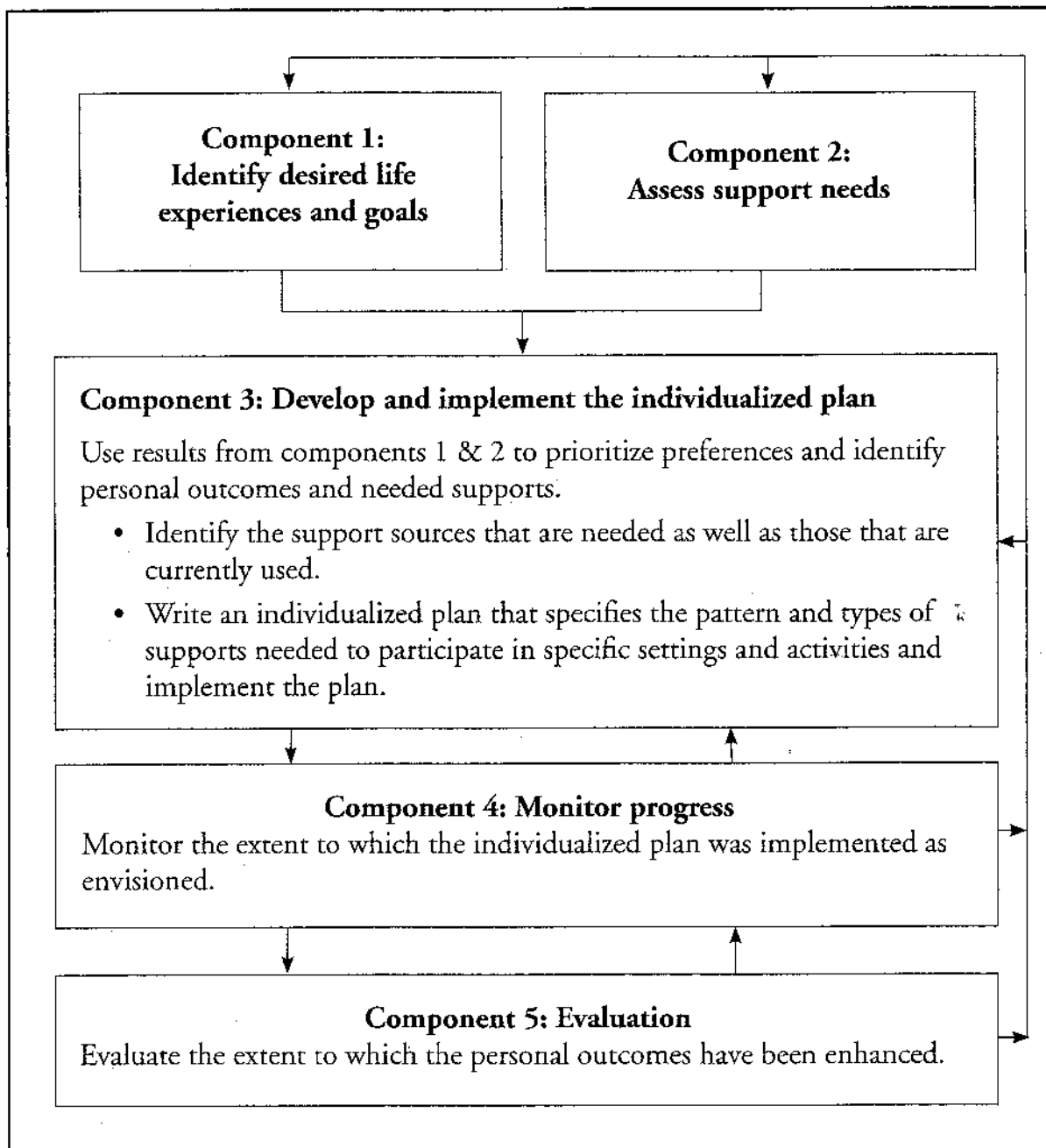


Figure 14.1. Process for assessing, planning, monitoring, and evaluating individualized supports in special education.

SUPPORTS AND THE EDUCATIONAL CONTEXT

Enhancement of Human Functioning

Supports are resources and strategies that aim to enhance individual functioning through the promotion of that person's development, education, interests, and personal well-being. Human functioning is enhanced when the person-environment mismatch is reduced

and personal outcomes are improved. Figure 14.1 illustrates the process of individually determining and designing supports with the active involvement of key stakeholders in the process. This approach contrasts with traditional educational service delivery models designed in a top-down manner and delivered in the form of programs, which are often driven as much by the needs of the educational system as by the student's own needs.

John's educational program followed this path. All students in his special education classroom during middle school received the same special education reading program, and none were taught science or received community-based instruction to learn functional skills and apply academics.

Supports added to a student's school day can take many forms but must be designed to alter the elements of the curriculum, classroom, lesson, or activity to enable that person to be educated with his or her peers without disability. Many supports will be faded once the student participates in an activity with success and shows mastery of new competencies. Supports should always be as unintrusive as possible. Overly intrusive supports can be difficult to eliminate or reduce because they tend to call unnecessary attention to the student and, therefore, run the risk of attaching stigma to a student's participation.

John did not like going to the special education classroom in high school. It was located near the cafeteria everyone used; other students called it the "retard room."

Sometimes the involvement of peers can help professionals design less intrusive classroom adaptations and accommodations (Janney & Snell, 2004).

When Nina was in a preschool with peers who did not have disabilities, she required the extensive supports of an OT, PT, and SLP in addition to a special educator to meaningfully participate. Now, as she approaches the transition out of preschool, Nina has learned many of the motor skills and communication skills needed to be an active member of a kindergarten class. Therefore, her support needs have changed and the supports provided to her in the kindergarten class will be different than what was provided when she attended preschool.

Because a supports model requires active and ongoing evaluation of the ecological aspects of the disability, teams who design supports focus heavily on changing aspects of the environment or social context and providing students with skills or strategies to overcome barriers in those environments. Within schools, this contextual focus involves modifications to the classroom, the curriculum, and instructional and social activities.

Addressing Heterogeneity Through Individualized Supports

Educators who seek the best practices for instructing students with ID must keep in mind the extensive heterogeneity of these students. There are many children who, like John, are not identified until after they have been in school for several years and academic achievement problems become a critical concern. These children's outward physical appearance are often no different than typically developing children. There are other children with

ID whose physical appearance is clearly different than others their age due to a recognizable syndrome or multiple disabilities, such as Nina's Down syndrome. Such children are usually identified when they are infants or toddlers. For these children, intervention efforts begin early in life and focus on developing basic skills associated with communication and self-care. Adding to the diversity of learners is a range of factors that has a tremendous impact on learning and school success, such as the presence of concomitant disabilities or medical conditions, a child's motivation to learn, the extent of family involvement and support, and the quality of the instruction. Because students with ID are such a diverse population, there is a wide array of educational "best practices" that may be appropriate in certain circumstances, depending on a student's abilities, needs, and age. As illustrated in Figure 14.1, educational teams, including family members, must align individualized instructional goals, teaching methods, and educational supports based on the desired life goals and experiences and the assessed learning needs and priorities of each student.

The diversity within the population of students with ID has prompted some to suggest that children with relatively higher IQ scores should be considered under a different disability category than individuals with relatively lower IQ scores (MacMillan, Siperstein, & Gresham, 1996). The variety of teacher certification structures used by different states in the United States reflects the uncertainty of educational systems on how to best prepare educators to meet the needs of this diverse population of students. Thirteen states have separate certifications for teachers working with children with "mild/moderate levels" and "severe/profound levels" of ID, six states have just one certificate associated with all levels of ID, and the remaining states include certification for teaching students with ID within a multicategorical special education certificate (Education Commission of the States, 2004).

Although children with ID are diverse in many ways, they also have many commonalities in their learning characteristics and educational needs. For example, whether they have relative high or relatively low IQ scores, children with ID, as compared to their typically developing peers, experience difficulty in the areas of cognitive skills (e.g., short term memory, attending to important stimuli, general knowledge, abstract thinking, rate of learning, generalization of learning), academic achievement (e.g., making adequate progress in all content areas, mastering academic skills), social competence (e.g., social interactions, naïveté/gullibility), and communication (e.g., language development, listening and speaking vocabularies; Taylor, Richards, & Brady, 2005). Therefore, all children with ID need access to educators who understand their learning challenges and are familiar with the extensive professional literature on effective instruction. Each child should have an individualized educational program (IEP) developed by a team of educators who work in collaboration with family members to decide (a) *what* it is that a child needs to learn, (b) *how* (i.e., methods/approaches) to best teach the child, and (c) *where* to teach the child.

Deciding What to Teach

Deciding what to teach a child is contingent on deciding what the child needs to learn. However, even the most thoughtful process requires that educational team members weigh potential benefits that may result from efforts to develop academic competencies against the potential benefits that may accrue from teaching “functional skills” (sometimes referred to as *life skills*). Functional skills include areas such as work habits and behaviors needed to keep a job, social interaction skills needed to participate with others in community settings, and home living skills needed to maintain oneself safely in a community house or apartment. Functional skills are typically not part of the general education curriculum. The choice between teaching functional skills and academic skills can be a false dichotomy. For example, teaching applied money concepts needed to make correct change and balance a checking account are academic skills that are certainly applicable (i.e., functional) to daily life.

Ward, Van De Mark, and Ryndak (2006) coined the term *blended curriculum*, in which academic and functional content are combined to meet students’ individualized needs across multiple contexts. Students who receive instruction in a blended curriculum still must have the content individualized, both in terms of academic and the functional skills. Consistent with the first three steps in Figure 14.1, teachers conduct an ecological inventory, or an assessment of activities and skills a particular student needs in current and probable future environments (Ward et al., 2006). This assessment process depends on teachers working closely with other team members—parents, related service providers, and the student him or herself. Individualized academic and functional content that is needed and valued by the student and his or her family receives priority over content that does not meet these criteria. Academic concepts that are not particularly applicable to a person’s daily life, or for which the student does not have the prerequisite skills, are not targeted or taught under a blended approach.

One of the biggest challenges in including students with ID in the general education curriculum is that academic skills traditionally are specified by grade level and taught according to a certain schedule. Students with ID usually fall behind in the early elementary grades in mastering the skills at the same rate. If students with ID are to learn skills that are needed to function in life, (a) teams must identify needed academic and functional skills to create a blended curriculum and (b) adaptations must be made on the individualized content through simplification and adapted instructional methods and the application of principals of UDL.

John would have been more successful learning to read, write, and calculate in ways that were functional to his everyday life had he started elementary school with a blended curriculum and an IEP specifying individually designed supports. Neither John nor his family members were meaningfully involved in planning his educational program, leaving John’s mother confused over the school’s failure to prepare her son for a job, even after 8 years of special education. John’s pattern of skipping school and getting in trouble might have been curtailed if he had experienced success in learning and if his secondary schools had practiced schoolwide positive behavior supports.

In recent years, there has been greater emphasis on students with ID accessing the general education curriculum, which is mostly academically oriented. Despite educational accountability trends that emphasize the teaching and learning of reading, math, and written language, there has never been a mandate for a “one size fits all” approach. Rather, deciding what to teach for an individual child has remained the responsibility of the child’s educational team. Educational team members must thoughtfully balance the need for instruction in academic and functional areas and eventually prioritize learning goals so that educational outcomes can be maximized. Among the most important considerations when deciding what to teach (and learn) are a child’s age, future plans, current skill level, and learning history (Shelden & Hutchins, 2008; Wehmeyer, Sands, Knowlton, & Kozleski, 2002).

Deciding How to Teach

A comprehensive review of teaching approaches that are useful to educators charged with teaching students with ID is well beyond the scope of this chapter, though some are identified in subsequent sections. However, the importance of teachers being knowledgeable about the array of instructional strategies that have been shown to work with students with ID cannot be overstated. Parents and advocates must insist that teacher-preparation programs produce sufficient numbers of educators who have the professional preparation and expertise necessary to be effective instructors. The shortage of well-prepared special education teachers is severe, chronic, and has persisted for at least 20 years (McLeskey, Tyler, & Flippin, 2004).

Many teaching methods that have been proven effective for learners with ID were developed from principles of applied behavior analysis. Perhaps the most important contribution of applied behavior analysis has been the emphasis placed on collecting data to monitor progress on learning goals. There is no shame in implementing a teaching method that is not successful; teaching students with ID meaningful skills requires perseverance and not every intervention is going to work for all of the children all of the time. However, there is shame in continuing with teaching methods that are not successful. It is critical that educators collect progress-monitoring data on learning goals that an education team has prioritized to determine whether their instruction is effective or if other approaches should be tried. How to teach a child with ID should ultimately be driven by data that show the child’s progress or lack of progress.

Once teams prioritize the needed academic and functional skills that a student needs to learn, it may be necessary to adapt the content through a collaborative process of planned simplification. Often, teams will specify needed accommodations (e.g., use of readers and scribes, untimed tests, calculators) to include on a student’s IEP. Frequently, team members, including the general education classroom teacher, will determine how instructional approaches might be modified to strengthen the likelihood for success in learning (teaching methods, materials, and the mode of student response; Janney & Snell, 2004).

Deciding Where to Teach

Fifteen years ago, debates regarding where students with ID should be taught were rather heated (see Fuchs & Fuchs, 1994; Wang & Walberg, 1988). L. Brown et al. (1991) calmed the debate by pointing out that very few people were ever in the “100% club” (i.e., never remove a child with a disability from the general educational classroom for any reason) or the “0% club” (never include a child with a disability in the general educational classroom for any reason). The current international legal and moral basis for including students with ID in the general education classroom is strong; currently, most countries have laws that also emphasize that these students must have access to the general education curriculum. Research findings provide evidence that such access is more likely to be gained in the general education classroom, providing a further impetus for inclusive practices (Soukup, Wehmeyer, Bashinski, & Bovaird, 2007; Wehmeyer, Lattin, Lapp-Rincker, & Agran, 2003).

SUMMARY

Considerable effort has been invested in developing approaches to promote the successful inclusion of children with disabilities in general education classrooms. Some of the most popular approaches are often a combination; the success of every approach, however, depends on having collaborative teams of general and special educators and related services staff who receive input from family members and have regular time scheduled for joint planning. These approaches include (a) assessing the general education classroom activities and schedule, (b) modifying classroom instruction and adding needed accommodations that are “only as special as necessary,” (c) delivering instruction through coteaching by special educators and general educators, (d) establishing cooperative learning groups and peer mentoring arrangements among students, (e) creating instructional materials based on the principle of UDL, (f) examining student performance data to assess progress and create needed improvements, and (g) carefully employing paraprofessionals to provide direct support in the classroom.

For students with more intense support needs, several authors recommend first conducting an ecological assessment of the focus student’s participation in the general education activities and then creating a program planning matrix (Demchek, 1997; Janney & Snell, 2004; Snell & Brown, 2006). The assessment reveals areas where adaptations are needed to increase participation (e.g., use of yes/no switch plate) as well as skills the student needs to be more actively involved (e.g., learning to use the yes/no switch to answer questions and to signal the teacher for opportunity to respond). Team members then list the student’s IEP objectives on one axis and the general education schedule on the other. The educational team places an X for each part of the day (i.e., activity) where an IEP objective can be taught (each objective will likely be addressed in multiple activities). The ecological classroom assessment and the program planning matrix serve as guides

for teaching needed skills in inclusive settings to students whose objectives differ greatly from their classmates.

Whatever approaches are used, success in inclusive classrooms will likely depend on the quality of teamwork, student-referenced and individualized supports, and problem solving among educational team members (Perner & Porter, 2008; Prater, 2007; Snell & Janney, 2005). Meaningful inclusive education relies on a school and classroom culture that values inclusion; a curriculum and instruction that accommodates for a wide range of students; and, as necessary, individualized adaptations that are thoughtfully planned and implemented for individual students who need them (Janney & Snell, 2004). The goal is that students with ID will be members of general education classrooms and participate both socially *and* instructionally alongside classmates.