Fifty Years of Progress in Meeting the Needs of Students with Extensive Support Needs

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ABSTRACT

We start this commemorative piece on IDEA celebrating 50 years of progress for students with extensive support needs (ESN) who historically were categorically excluded from public school. Following, we briefly cover significant court cases, historical precedents, and paradigm shifts in the field that led to the passage of PL 94-142 in 1975. Next, we highlight some of the major advances and practice-changing innovations in designing appropriate educational programs for these students by answering questions about where and by whom these students should be taught, the content of their curriculum, and the instructional strategies used to teach them. In the third section of the article, we attempt to emphasize the philosophical underpinnings of the utilized practices and their implications for research and practice. We close in the fourth section offering some observations and recommendations that should be considered in efforts to provide students with ESN quality educational services and support. While the progress we have achieved is nothing less than extraordinary, there are still many questions to be resolved.

KEYWORDS

Extensive support needs, PL 94-142, special education history, special education progress

A good place to start this commemorative piece is with a discussion of the historical perspective and foundational milestones leading up to the passage of PL 94-142 in 1975 (Education for All Handicapped Children Act of 1975). At the time, the rule--not the exception--was that students with disabilities, particularly those with intellectual or developmental disabilities, were categorically excluded from public school experiences. An example of this practice is illustrated by the court case of *Beattie v. Board of Education of Antigo* (1919), in which Merritt Beattie, a young boy with physical disabilities who had issues with walking, speaking, and drooling, was excluded from public school in Antigo, WI. The court found that Beattie's physical condition negatively impacted the school environment, and the board's decision to exclude him was made in good faith and was appropriate. This is a significant case in the history of special education, demonstrating that before the Civil Rights Movement of the 1960s, schools could categorically exclude students with disabilities. It highlights a time when the focus was on the perceived disruption caused by students with disabilities, rather than providing them with appropriate educational opportunities. The practice of exclusion and segregation for students with disabilities lasted well into the 1970s.

There were at least three legal precedents (*Brown v. Board of Education, 1954*; *Mills v. Board of Education of DC, 1972*; *PARC v. Commonwealth of Pennsylvania, 1972*) that were instrumental in serving as the antecedent conditions for the passage of PL 94-142 in 1975 (EAHC Act of 1975) and in doing so changed special education practice in a significant way. A detailed explanation of these cases and others can be found in the excellent article on legal landmarks that shaped rights and services by Bateman and Yell (2026, this issue).

TABLE 1: Philosophical Underpinnings and Historical Outcomes for Students with ESN

Philosophical Advance (Seminal Reference)	Description	Historical Outcomes
Principle of Normalization (Wolfensberger, 1972)	Movement to support rights of all persons to live a normal, typical life	• Deinstitutionalization as persons with ESN move into supported community settings; • Movement toward free and appropriate public education for all
Criterion of Ultimate Functioning (L. Brown et al., 1976)	Belief that all persons have the right to reach their full potential and be socially integrated into their communities	• Public school services for all students with ESN ages 6-21 with goal of successful transition into community-based living and working programs
Educational Synthesizer (Bricker, 1976)	Educational approach in which professionals collaborate across disciplines to support persons with ESN	• Transdisciplinary approach for related services to be offered in natural settings where needed; • Role release with professionals sharing expertise and coaching others to provide support
Self-Regulation (Mithaug & Hanawalt, 1978)	Realization that individuals with ESN need to make their own decisions to control their lives	• Schools begin to systematically teach students choice making and other self-determination skills
Teaching of Chronological-age Content (L. Brown et al., 1979)	Transition from developmental approach to teaching age-appropriate skills	• Application of ABA in providing systematic instruction (e.g., response prompting procedures) to teach functional skills to students with ESN to facilitate independence across settings
Principle of Partial Participation (Baumgart et al., 1982)	Partial participation of students with ESN in age-appropriate activities is recognized as an achievement indicator	• Students with ESN begin to use adaptations and accommodations (e.g., assistive technology) to support participation in activities with peers in inclusive settings
Opportunity to Attend Neighborhood Schools (L. Brown, Ford, et al., 1983)	Right of students with ESN to attend the public school they would attend if they did not have a disability	• Students moved from clustered services in designated schools to attending classes in schools with neighborhood peers; • Opportunity for inclusion
Community-Based Instruction (L. Brown, Nisbet, et al., 1983)	Instruction on skills conducted in natural settings where skills are needed to facilitate generalization and maintenance	• Students with ESN begin receiving planned instruction in community settings or in realistic simulations that will facilitate successful transition
Least Dangerous Assumption (Donnellan, 1984)	Belief that, in the absence of data, educational decisions should be based on what will cause the least harm should the decision be wrong	• Assumption that students with ESN can learn age-appropriate academic content and profit from inclusion in general education classes with access to general education content specialists
Positive Behavior Interventions and Support (Horner et al., 1990)	Replacement of aversive strategies with positive behavioral interventions; Identification of support needed to function across settings	• Reinforcement of desired behaviors over punishment of undesired behaviors; • Identification of causes to prevent challenging behavior; Multitiered systems of support provided so all students can participate in inclusive settings
Access to the General Curriculum (IDEA, 1997)	Developing educational goals based on the general curriculum (standard curriculum used for all students); assessing student's involvement in and progress in the general curriculum	• Mandate that educational goals are based on general curriculum, contingent on student age, grade, and learning needs; • Increased expectations for learning goals; increased instruction academic content

The first historical precedent to opening public schools to students with disabilities was a debate between Goldberg and Cruickshank (1958), which focused on the responsibility of the public schools in serving students labeled as "trainable" (i.e., IQ 35-50; moderate to severe disabilities; extensive support needs [ESN]). Ignacy Goldberg defended the position that the public schools had a responsibility to serve this population, while William Cruickshank took the position that it was not the responsibility of the schools to serve these students. A second important foundational milestone, leading up to the passage of PL 94-142 (EAHC Act of 1975), was a critical documentation of the lack of

services in schools and other places for this group of children (Sontag et al., 1973). Sontag et al. commented that at this time there were no preservice and in-service teacher training programs, no doctoral level personnel preparation programs in place to lead these training efforts, and no training programs for parents. Additionally, special education organizations (e.g., The Council for Exceptional Children [CEC], American Association on Intellectual Disabilities [AAIDD, AAMR [… Mental Retardation at the time]) had little to no interest or were ambivalent about the benefits of educational programming for this population (Sontag & Haring, 1996).

In the early 1970s, there were significant paradigm shifts that were creating the foundation for a new philosophy and discipline to serve students with severe disabilities (extensive support needs; ESN). For example, deinstitutionalization (Wolfensberger, 1972) became the order of the day (see Table 1 for important philosophical advances). Successful applications of behavioral principles (i.e., applied behavior analysis [ABA]; Baer et al., 1968) were being demonstrated by researchers and implemented by practitioners validating that behavior change in important functional areas (e.g., eating, Azrin & Armstrong, 1973; toileting, Azrin et al., 1971; Azrin & Foxx, 1971; other self-help skills, Ball et al., 1971) could be achieved. By 1974, there were over 200 successful demonstrations of teaching self-help skills to this population (Kazdin, 1978; Sontag & Haring, 1996).

With the momentum generated by these court decisions and growing evidence that students with ESN could learn important self-care skills such as toileting, feeding, and dressing, a professional organization dedicated to this effort was established in 1974: the American Association for the Education of the Severely and Profoundly Handicapped (AAESPH), now known as TASH. In November 1974, coordinated with the First Annual Seminar of Research and Demonstration Programs for the Severely and Profoundly Handicapped Children and Youth funded by the Bureau of Education of the Handicapped (BEH), the idea was explored and supported for developing a new professional organization (Sontag & Haring, 1996). Dr. Norris G. Haring from the University of Washington became the founding President of the organization.

The purpose of this commemorative essay on IDEA is to highlight 50 years of progress in meeting the needs of students with ESN. In doing so, the second section of the article emphasizes the *where*, *who*, *what*, and *how*, while the third section covers how current practices have evolved within the scope of a move toward inclusive education for all. In the final section we offer some observations as recommendations as we move forward with the next decade of progress.

MAJOR ADVANCES AND PRACTICE-CHANGING INNOVATIONS

Students with ESN comprise a heterogenous group with multiple types of disability (e.g., autism, dual sensory impairments, intellectual disability, physical disability, significant communication disorders, complex healthcare needs) who require varying levels of supports. Although PL 94-142 paved the way for students with ESN to receive a free and appropriate public education, what that looked like was unclear. Prior to PL 94-142 (EAHC Act of 1975), students with ESN, for the most part, had been placed in institutional settings or remained at home in the care of family. Since many assumed they could not benefit from an education, prior emphasis had been on caregiving and meeting healthcare needs. While existing teacher education programs prepared special education teachers to work with students with mild to moderate intellectual disability, programs that focused on teaching students with ESN were rare.

In the 1970s there was little to no research on effective practices to teach students with ESN (Sontag et al., 1973). Pioneers in the field began to brainstorm and establish basic principles that would guide practices based on the "criterion of ultimate functioning" (L. Brown et al., 1976) – the belief that all students had the right to reach their full potential in life – and the "least dangerous assumption" (Donnellan, 1984) – the belief that, in the absence of conclusive data, consideration should be given to making educational decisions that will do the least harm should they prove to be wrong. Once these pioneers created a vision of desirable practices based on basic rights, democratic values, logic, and human dignity, school districts began to set up programs to serve students with ESN, and researchers in the field began to collect data on the effectiveness of various practices, refining them as indicated. This led to a continuum of practices across the last 50 years that, through systematic and longitudinal research, shaped special education services for students with ESN.

The following sections provide information on the progression of educational practices for students with ESN from implementing promising practices based on concepts to establishing the research-based and evidence-based practices that currently guide educational programs. Specifically, the sections address the where, who, what, and how when providing instruction, related services, and support to students with ESN. While the concepts that served as the foundation for best practices

are described, the subsequent supporting research is summarized since it is impossible to cite all the extensive list of research studies conducted over 50 years that has led to the evidence-based practices presently used.

Where Should Students with ESN Be Taught?

When school districts began providing services for students with ESN, they often placed students, K-12, in a separate school or in a segregated classroom within a school. There were several reasons for this, including (a) the paucity of certified special education teachers with the skills to provide services, (b) the convenience of a central location for related service personnel to provide services for a cluster of students, (c) the fear that students with ESN might disrupt the education of other students, and (d) the belief that all students, regardless of age needed to follow a similar developmental curriculum. In 1983, L. Brown, Ford, et al. pointed out the benefits of placing students with ESN in the neighborhood schools they would attend if they did not have a disability. For example, inclusion in neighborhood schools provides the opportunity for students with ESN to participate in activities and form friendships with peers without disabilities that can carry over to non-school settings, and to have peers without disabilities as partners in communication and role models for social skills. The move to age-appropriate neighborhood schools slowly evolved from placement in a segregated classroom within a school to participation within general education classrooms on a limited or fulltime basis. Although most research with students with ESN has been conducted in segregated classrooms, a sufficient (and growing) amount of research conducted in inclusive classrooms exists to support the model as appropriate for conducting systematic or embedded instruction; facilitating friendships with peers without disabilities; and providing exposure to experts who teach core content. In addition, some related services (e.g., occupational, physical, and speech/language therapies) can be delivered within inclusive settings during daily routines and activities without stigmatizing students.

Based on the difficulty that students with ESN may have in generalizing skills, L. Brown, Nisbet, et al. (1983) proposed teaching in non-school settings, a practice known as community-based instruction. Noting that this is not always practical or even possible, Nietupski et al. (1986) offered the option of teaching community skills in realistic simulations (e.g., authentic materials, natural cues and reinforcers) within the classroom setting. Community-based instruction is especially advantageous for students who are nearing the age of transition to adulthood when community skills will be needed to facilitate independence.

Who Should Teach Students with ESN?

In 1976, Bricker proposed a model in which the special education teacher serves as an "educational synthesizer" working across disciplines to coordinate services with the team members who support students with ESN. In this transdisciplinary approach, team members may practice "role release" by sharing their knowledge and teaching others how to perform the functions of their respective disciplines. In addition to increasing the amount of time a student receives instruction and services, generalization of skills may occur when skills are taught across multiple instructors in routines and settings where they are needed. Over the past 50 years, a large body of research has shown that a variety of individuals, when coached, including general education teachers, instructional assistants, peer tutors, related service delivery personnel, and family members or other caregivers, can deliver effective instruction with a high degree of reliability and precision.

What Should Students with ESN Be Taught?

School personnel initially believed it was necessary to teach a developmental curriculum to students with ESN based on the premise that prerequisite skills must be mastered before a student can be taught a higher-level skill. Recognizing that some students may never master basic skills, L. Brown et al. (1979) proposed a functional approach to identifying an age-appropriate curriculum, in which team members, including parents, would identify current and future critical skills individual students needed to achieve independence in community, domestic, educational, vocational, and recreation/leisure environments and the naturally occurring routines in which those skills could be taught. While research over time demonstrated that students with ESN could learn to perform a wide range of functional skills, Baumgart et al. (1982) proposed applying the "principle of partial participation" by brainstorming adaptations and accommodations (e.g., use a calculator, the next dollar strategy, or a credit card in making purchases; use picture symbols, a communication device, or manual signing to engage in a discussion) that would enable a student to participate in all activities whether or not they could perform each step in the same manner as peers.

As students with ESN demonstrated the ability to learn functional skills and to participate in inclusive settings, researchers (as well as teachers and parents) recognized that they also could benefit from learning selected

Procedure (Evidence Base)	Description of Procedure	Advantages
Simultaneous Prompting (Tekin-Iftar et al., 2018)	• Instructor conducts daily probe (i.e., test) trials to assess student performance • Following probe trials, instructor conducts daily training (i.e., teaching) trials by immediately providing controlling prompt[1] • Probe/training trials proceed in this sequence until student reaches criterion during daily probe trials	• Requires minimal effort, using only a single controlling prompt[1] and data collection during probe trials. • Can be flexibly embedded throughout the school day, with probe and training trials occurring at different times. • Effective for teaching both discrete[2] and chained[3] tasks while minimizing errors and reducing student wait time for assistance.
Time Delay (Browder et al., 2009)	• The instructor initially provides the controlling prompt immediately, then gradually increases the delay before prompting to encourage independent responding. • Instruction continues until the student consistently responds correctly before the prompt is delivered.	• Easy to implement in general education settings by a variety of personnel. • Uses a single controlling prompt with natural prompt fading and reinforcement regardless of assistance needed. • Effective for teaching discrete and chained tasks while promoting fluency through timed responding.
System of Least Prompts (Shepley et al., 2018)	• The instructor uses progressive time delay, waiting a set interval before providing increasing levels of assistance until the student responds correctly. • Prompts are systematically faded across sessions until the student performs all steps independently.	• Easy to implement in general education settings using a least-to-most prompting sequence ("tell, show, help") that provides only the assistance needed and systematically promotes independence. • Effective for teaching discrete and chained tasks, with reinforcement throughout and increased support as needed to minimize errors.
Most-to-Least Prompting (Kutlu, 2023)	• Begin with the most intrusive prompt needed to ensure correct responding and continue until performance is consistent. • Gradually fade prompts to less intrusive levels across sessions until the student responds independently and consistently.	• Easy to implement and embed in daily activities by a variety of personnel. • Uses a most-to-least prompting sequence that systematically fades support while promoting independence. • Well-suited for students requiring substantial assistance, with reinforcement provided throughout and additional support available to prevent errors.
Graduated Guidance (Tekin-Iftar et al., 2023)	• The instructor closely follows the student, providing only the level of physical assistance needed at each moment and gradually reducing support until the skill is performed independently.	• Easy to implement and embed in daily activities, using physical guidance, reinforcement, and prompt fading to promote independence. • Effective for teaching gross and fine motor skills to students requiring substantial support while maintaining a low error rate.

Note. [1]Controlling prompt – Amount of assistance likely to result in correct response (e.g., verbal direction, model of correct response, physical guidance); [2]Discrete task – Skill with a single step (e.g., math fact, vocabulary word); [3]Chained task – Skill consisting of multiple steps (e.g., math problem, paragraph composition)

content taught in the general curriculum (Browder et al., 2006, 2008, 2009; Spooner et al., 2011; see Access to the General Curriculum later in the article). This required researchers to survey the instructional methods used in general education and combine them in a systematic way with strategies shown to be effective in the field of special education. This did not mean ignoring the need to learn functional skills but, instead, indicated it was possible to teach core content based on the students' individual needs with applications that would be meaningful and relevant in a student's daily life and future settings.

How Should Students with ESN Be Taught?

ABA (Baer et al., 1968) has a long history of being an effective approach to teaching skills to students with ESN (Smith & Eikeseth, 2011; Spooner & Browder, 2015). In the beginning, this consisted of repetitive discrete trial instruction (e.g., basic sight words or math facts taught with flashcards). As functional skills became more important in the curriculum, researchers demonstrated that students with ESN could learn complex chained tasks by breaking them down into a series of discrete skills which could be taught step by step or in larger "chunks."

With ABA as a foundation, researchers found that inserting prompts (e.g.,

verbal direction, model, physical guidance) in instructional trials and then fading them over time as indicated was both an effective and efficient way to teach students with ESN (Ault et al., 1989; Collins, 2021). These response prompting procedures are nearly errorless, resulting in an increased delivery of reinforcing consequences (e.g., praise) for students and the likelihood students will consistently repeat the correct response. To date, by conducting meta-analyses of the research, investigators have identified the following five response prompting strategies as being evidence-based in teaching a wide range of skills (see Table 2): (a) simultaneous prompting (Tekin-Iftar et al., 2018) -- providing daily test trials to determine if a student can respond independently before providing training trials with immediate prompts if instruction is indicated; (b) time delay (Browder et al., 2009) - initially providing an immediate pre-identified prompt, then slowly fading that prompt by providing longer intervals of time for students to respond independently; (c) system of least prompts (Shepley et al., 2018) - initially providing the least amount of assistance needed to make a correct response prior to providing more intrusive assistance; (d) most-to-least prompting (Kutlu, 2023) - initially providing the most intrusive prompt needed and then fading to less intrusive prompts over time; and (e) graduated guidance (Tekin-Iftar et al., 2023) making a moment-to-moment decision on whether to provide physical assistance to a student.

There are several benefits to using systematic response prompting procedures. Research has shown that the procedures are easy to learn. Additionally, these procedures can be reliably used by a variety of instructors to teach skills across a variety of domains (e.g., academic, social, functional, and behavioral skills). Further, rather than remove a skill from a task or routine, the skill can be taught in a setting and at the time in which it naturally occurs. In addition, the procedures are simple to embed in natural routines or during academic instruction in general education classes. Crucial to systematic instruction, daily data are collected and analyzed, allowing instructors to make data-based decisions on whether a strategy is working or needs to be refined (e.g., use a different prompt, change a reinforcer, teach an easier version of the skill).

Where Do We Go from Here?

While we have learned much about the best way to provide a quality educational program for students with ESN over the past 50 years, the reality is that a continuum of practices (and placements) still exists due to a discrepancy between what the research indicates is effective and what actually occurs in educational settings. The following section provides an overview of implications and an explanation of various factors that drove educational programs for students with ESN.

IMPLICATIONS FOR RESEARCH AND PRACTICE

As mentioned above, we believe it is important to discuss several factors responsible for facilitating changes to our field. These factors include the historical basis for change, scientific findings, legal mandates, parental advocacy, and serving and supporting students.

Historical Basis for Change

As indicated previously, until the *PARC v. Penn* ruling (1972) and PL 94-142 (EAHC Act of 1975) were passed, most students with ESN were denied public education. Instead, these students were sent to state residential facilities (institutions) in which they often lived under horrendous conditions and received little or no education (Wehmeyer, 2014). Children with ESN who were not institutionalized received at best a piece-meal education delivered by church groups, volunteers, or social advocates. The belief at the time was that it was best to segregate them in special facilities or keep them unseen if they lived at home. That said, in the 1950s to the 1980s several events occurred that profoundly impacted how students with ESN were educated, supported, and understood. The following section examines the specific reasons for this change. These factors included: scientific findings, parent advocacy, legal mandates, and consumer advocacy.

Scientific Findings

An emerging realization in the 1970s was that students were more capable of learning than previously thought, but the instructional practices used had not been sufficient (Horner & Halle, 2018). Horner and Halle suggested that students with ESN can gain much when effective systematic and data-based instructional practices (e.g., response prompting procedures) were applied, and when instruction was individualized and supported. Further, they made a compelling point by observing that to produce reform in an educational system, it is critical to have a vision. For individuals with ESN, such a vision is to create opportunities for them to participate in and benefit from a variety of equitable and satisfying school and community experiences (L. Brown et al., 1976). To achieve this vision, it is critical that we employ proven effective practices as reported in the published research.

IDEA (1997) does not explicitly mandate that specific instructional practices are used, but it requires that the practices used are technically sound and will produce measurable gains in

student learning. We owe much to research for broadening our understanding of students' learning capacity and how we can facilitate this learning. One additional point of note is that although educational practices for students with ESN should be based on the use of research-based strategies, positive social and cultural values (e.g., movement toward non-aversive approaches to change behavior; Horner et al., 1990) also need to be considered when determining practices; in other words, what feels right, even if there is no research to validate the procedure.

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Legal Mandates

As detailed earlier in this article, numerous legal rulings and court decisions have served, arguably, as the most important change agents affecting the delivery of quality educational services to students with ESN. No longer did school districts have the discretion to deny educational services in a public school to students with ESN. Now, a free public education must be provided to all students, including those with ESN, and these students must be placed in an appropriate classroom based on the least restrictive environment (LRE) model.

What is crucial to note is that laws guaranteeing that students with ESN are provided a free public education are part of the broader civil rights movement that have been advocated for the last 50 years—in short, all individuals, regardless of gender, color, or disability, are provided equal protection (Ferguson et al., 2013). Too often when legal protection for individuals with diverse backgrounds was considered, people with disabilities, particularly individuals with ESN, were not included. This of course is no longer the case.

Parental Advocacy

The impact of parents in both advocating for change and helping to drive legal action cannot be overemphasized. As Wehmeyer (2013) indicated, passage of the *PARC v. Penn* ruling (1972) and PL 94-142 (EAHC Act of 1975) were largely due to the concentrated efforts of parents to make change. The social changes that occurred in the 1940s-1970s and the advances in medicine and science empowered parents to challenge traditional opinions on how to treat and what to expect from their children with ESN. As Wehmeyer (2014) noted, parents of children with intellectual disability, especially children with severe intellectual disability (ESN), were frustrated with their children being thought of by society as objects of scorn, pity, or sin. Although *intellectual disability* was the accepted term at the time of the 2014 publication, scholars and advocates now prefer alternative terminology because they view the term as potentially stigmatizing. They wanted their children to be accepted and respected as were typical children without a disability.

Starting in the 1950s parents started parent education and support groups (e.g., National Association for Retarded Citizens [Arc] and TASH) to learn from each other, develop grassroots initiatives to change public opinions about and expectations for people with intellectual disability, and demand that their children should live, be educated, and work in their home communities. Parents and prominent individuals such as Roy Rogers and Dale Evans, Pearl Buck, and Eunice Kennedy Shriver challenged professional beliefs at that time that individuals with ESN need to reside in segregated institutions and that they have little or nothing to contribute to society. The fact that parents need to approve their child's IEP is a product of their advocacy.

Serving and Supporting Students with ESN

As mentioned previously, the use of systematic instruction has served as the primary instructional approach in teaching students with ESN. Systematic instruction includes five components: precise identification of students' instructional needs, delivery of task analytic instruction, the provision of an appropriate level of assistance, evaluation of students' progress, and modification of instruction as needed. As the field developed, additional instructional and behavior management initiatives were investigated. These have included access to the general curriculum, self-determination, positive behavior and intervention support, and peer support. In effect, these priorities serve as the curricular framework for students with ESN.

Access to the General Curriculum

Following the LRE model, inclusion has largely been thought of as a physical action that involves moving

a child from a more restrictive classroom placement (e.g., self-contained classroom) to one that is less restrictive (e.g., general education classroom). Although the number of students with ESN who have been included in general education classrooms has dramatically increased over the last 50 years, it is far below the desired placement level professionals wish (see Agran et al., 2020). One notable change though is an adjustment in our understanding of what to teach students with ESN. Rather than continuing to have a situation in which there are essentially two curricula—one for typical students and one for students with ESN—educational goals for all students must now be based on the general education curriculum (IDEA, 2004); specifically, the state-adopted general education standards (Gee et al., 2025). According to IDEA (2004), students need to be provided access to the general curriculum, and school districts need to demonstrate the students' progress in acquiring new skills. Such progress will be determined by their performance on a state approved "alternate assessment." The No Child Left Behind Act of 2001 (NCLB, 2002) required that assessment would apply to ALL students, including those with ESN, which was a novel idea. Although some states had alternate assessment procedures in place for students with ESN (Browder et al., 2005; Towles-Reeves et al., 2009), this required a shift in focus from functional skill instruction to standards-based instruction on core content as the scores of students with ESN contributed to the high-stakes consequences for assessing the academic progress of all students across school districts.

Inherent with this mandate and based on current research (see Gee et al., Olson et al., 2016), an increasing number of students with ESN should be placed in general education classrooms as those settings are the obvious and natural environments to teach the general curriculum. As numerous researchers have reported (see McDonnell & Hunt, 2014; Spooner et al., 2014), students can learn content aligned with grade level with the skillful and consistent application of evidence-based practices.

Self-Determination

Historically, special education has followed a teacher-controlled model in which teachers were given full responsibility for goal setting, instructional delivery, and program evaluation. In this respect, teachers served as the primary change agents with the students' roles essentially that of being the recipients of the services provided to them (Mithaug, 1996). Numerous studies in the last 50 years have strongly demonstrated that students with ESN can, with varying degrees of competence, set goals for themselves; apply self-directed instructional approaches; cue, observe, and reinforce their own behavior; and evaluate their progress (Alsaeed et al., 2024; Shogren et al., 2019).

Current understanding of self-determination bases itself on the *Causal Agency Theory* (Shogren & Raley, 2022). The Causal Agency Theory posits that self-determination is manifest when individuals serve as causal agents in their own lives. As Shogren and Raley noted, students will learn to grow and demonstrate self-determination if we provide them with support and opportunities to display these skills. Strategies associated with self-determination include choice making, goal setting, self-instruction (i.e., self-directed verbal prompts), self-monitoring, and self-reinforcement. Research has demonstrated that the above strategies have facilitated students' acquisition of a broad range of students' academic, functional, social, and behavioral skills (Agran & Hughes, 2014; Shogren, 2013). Most importantly, the widespread attention to promoting students' self-determination has enhanced overall social expectations about the capacity and capability of students with ESN. A student's display of self-determination provides a reliable and observable measure of their independence.

Positive Behavior and Intervention Supports

We have learned much in the last 50 years about managing students' display of severe challenging behavior. A common misunderstanding is that all or most students with ESN engage in such behavior. This is of course not the case; nevertheless, students with severe challenging behavior may display aggressive behavior that can cause physical harm to themselves or to others (e.g., paraprofessionals). Historically, behavior management practiced in schools followed an "eliminative" approach in which punitive or aversive practices (e.g., corporal punishment) were used to eliminate problem behaviors. Minimal effort was made to identify the cause of the behavior, and treatment was largely restricted to only a specific environment. Although this approach may decrease the behavior for a short time, there was increased opposition by teachers, psychologists, and parents to this aversive approach because it caused unjustifiable pain to the student, was often executed for relatively minor infractions by the student and was in violation of humanistic values espoused at the time by TASH and other professional organizations.

Advanced by Horner and colleagues (see Horner et al., 1990), a more positive, non-aversive approach was recommended (i.e., Positive Behavior Interventions and Support ([PBIS]). Such an approach was based on ABA principles, as mentioned earlier in this article, and positive behavior interven-

tions were promoted (e.g., differential reinforcement; F. Brown & Bambara, 2014). Furthermore, functional assessments were recommended to identify probable and consistent causes of the behavior (e.g., attention getting, escape). With these data setting events and antecedents can be identified, and appropriate environmental manipulations determined. A principal difference between positive behavior support and traditional approaches was that in the former particular attention was paid to the antecedents or setting events that may have provoked the behavior, whereas the latter focused on eliminating the behavior by punishing the student. With PBIS, once the behavior is identified, systematic efforts to support the students are provided to minimize the probability of the behavior from occurring. Most importantly, rather than blaming the student, efforts are made to understand what environmental factors may be controlling the behavior (Jackson, 2018).

PBIS represents a crucial and important awareness in our field, stressing that students with ESN who have challenging behavior can indeed behave appropriately if we, as professionals, are committed to using positive evidence-based practices that provide the student with a supportive, reinforcing, and humane environment. Discouraging students from engaging in challenging behaviors will prevent their occurrence in the first place. Ultimately, this is the specific aim of PBIS.

Peer Support

There is no question that the significant achievements of students with ESN would not have been possible if these students had not been supported by and received assistance from paraprofessionals. Paraprofessionals provide students with immediate and personal attention that would otherwise not be available; however, several issues have been raised regarding the ubiquitous use of paraprofessionals. First, paraprofessionals are often asked to make critical instructional decisions without having sufficient training or knowledge to make such decisions (Giangreco et al., 2011). Second, the presence of paraprofessionals may limit the student's opportunities to receive supervision from teachers, particularly general educators. Third, students may become too dependent on paraprofessionals. Fourth, reliance on paraprofessionals may decrease the general educator's motivation to teach and become more familiar with these students. Last, and most importantly, the continual presence of a paraprofessional may only serve to alienate and separate students with ESN from typical students. To ameliorate the possibly harmful effects of the overutilization of paraprofessionals, an alternative and always present resource that has received increased attention is to use peer tutors.

Research has suggested that peer tutors can be invaluable in implementing instruction formerly assigned to teachers, facilitate behavioral interventions, and provide support to and social interactions with students with ESN (Travers & Carter, 2022). Travers and Carter reported that using peer tutors to support students with ESN is mutually beneficial. For students with ESN, peer tutoring provides them with social contact, assistance with school tasks as needed, and allows them to feel they are valued members of the school body. For students who serve as peer tutors, it is of value in promoting their growth and development. It should be noted that the aim of using peer tutors is not to preclude the use of paraprofessionals as each represents a valuable resource but to prompt us on making sure each is utilized in the most effective and respectful way for students with ESN.

FUTURE DIRECTIONS AND RECOMMENDATIONS

The following are several observations and recommendations we encourage you to consider in your efforts in providing students with ESN quality educational services and support. These observations and recommendations are based on the variables discussed in the last section of this article (i.e., inclusion, access to the general curriculum, PBIS, and self-determination).

Promoting Inclusion

There are two major assumptions about the LRE model, which, as mentioned previously, serve as the principal decision-making tool to determine students' placement. The first assumption is that over time and across grade levels students will progressively be placed in less restrictive environments (classrooms). The second assumption is that ultimately all students, regardless of type or severity of disability, will be placed in general education classrooms. Placement in general education is on either a part-time or full-time basis. Full-time inclusion is understood to be 80% of the school day. The reality though is that fewer than 20% of students with ESN are placed in general education classrooms (Giangreco, 2020). In short, students with ESN spend minimal time in general education; indeed, only 5% of them are fully included (Kleinert et al., 2015). Unfortunately, there has been little or no movement of students with ESN to less restrictive settings. What is perhaps most distressing is that there is more than ample research to suggest that students with ESN do in fact learn faster in general education classrooms than in segregated ones (Gee et al., 2020; Ruppar et al., 2017). Despite the progress we have made in learning how best to teach students with ESN, our failure to provide them with appropriate

placements represents an abject failure in our placement system.

Numerous reasons have been suggested to explain this impasse. Such reasons include fixed opinions about the continued need for segregated classrooms, parent resistance, and resistance from teachers who claim they do not feel prepared to serve students with ESN in their classrooms (Krishnan, 2024). There are of course no easy solutions in correcting this situation. We believe, albeit hope, that with increased exposure to and interaction between students with ESN and general educators and administrators, there will be a positive change. Likewise, increasing both administrators' and parents' knowledge about students' success in general education will minimize their resistance and will help them recognize the benefits of inclusive education.

One approach beginning to receive increased attention is contextual analysis. Contextual analysis involves the consideration of the variables that may influence placement decisions (Jackson et al., 2022). These variables include school policy, teaching approaches, preparation of teachers, school climate, urbanicity, budget, and biased belief systems, among others. The effects of these variables may differ across school settings such that the settings themselves may produce differential responding; for example, students will perform at a lower level in a self-contained setting than in a less restrictive classroom, independent of the quality of instruction the student is receiving. As such, Jackson et al. suggest that students with ESN will have their education compromised when placed in more restrictive settings; in effect, the setting will disincentivize the students from learning. As reported in several research studies, students with ESN receive an inferior education in a self-contained classroom compared to general education (Kurth et al., 2014; Pennington & Courtade, 2015; Washington et al., 2012). They further indicate that these factors need to be considered and understood when making placement decisions so that the placement team has a complete and current body of knowledge to base their decisions.

Access to the General Curriculum

Although not explicitly stated in IDEA (1997), the assumption of this mandate is that the natural and appropriate place to teach the general education curriculum is the general education classroom (Olson et al., 2016). As such, segregated settings are not appropriate classrooms to provide access to the general educational curriculum. As Gee et al. (2025) noted, this is particularly perplexing as there are no published studies that have suggested segregated settings are superior to inclusive placements in promoting learning.

Although there may be some differences in how educators define access to the general curriculum, the consensus is that the general curriculum is based on state-adopted grade-level standards. Gee et al. (2025) indicated that oftentimes there is a disconnect between the IEP and the grade-level standards and teachers' continued reliance on prepackaged special education curricular materials serves as a barrier to facilitating access. Consequently, additional instruction should be provided to general educators on facilitating student access to general education, ensuring that IEP goals are reflective of parents' and students' wishes, congruent with the general curriculum, and adapted to students' learning styles. As Jackson et al. (2022) suggested, curriculum and context are extrinsically connected, and it is critical that teachers understand this relationship.

Last, in a comparison of the instructional outcomes relative to classroom setting (i.e., general education, self-contained setting), Lansey et al. (2024) reported that general education classrooms provide students with ESN more exposure to academic instruction, general rather than specialized curricular materials, and more time with peers and general educators. In this respect access is not just that of providing students with more instruction in academics but that of providing students with opportunities to become valued school body members—to learn with typical students, to be taught in the same classrooms where typical students are taught, and to be taught by the same teachers as those who teach typical students.

An argument from general educators may include a lack of preparation in evidence-based instructional strategies for students with ESN. Systematic evidence-based response prompting strategies, however, have decades of supporting research as to their effectiveness (i.e., how well a student learns content) and efficiency (i.e., how quickly a student learns content) in teaching skills to students with ESN (Collins, 2021), including core content (e.g., reading, writing, biology, health, geometry, civics), and can easily be embedded in classroom instruction by general education teachers. For example, Tekin-Iftar et al. (2017) demonstrated that general education teachers who received coaching in using an evidence-based response prompting procedure (i.e., simultaneous prompting) were successful in embedding the strategy to teach health core content to students with ESN during typical daily large group instruction across general education classrooms. The professional literature also has demonstrated the effectiveness of coaching paraprofessionals and classroom peers

Rather than designing behavior management plans that ostensibly only seek to eliminate the problem behavior, PBIS's goal is to identify the potential cause of the challenging behavior, replace it with a socially acceptable substitute behavior, and establish for the student a reinforcing and manageable environment.

to use systematic instruction in general education classrooms when students with ESN are included (e.g., Britton et al., 2017; Collins et al., 2021; Heinrich et al., 2016). Until teacher preparation programs change to models that provide training in evidence-based special education strategies to all educators, trained special educators can be valuable in facilitating both inclusion and instruction by sharing their expertise with others through coaching and support. General educators may have expertise in curriculum content, but they may lack knowledge about and expertise in addressing the unique learning needs of students with ESN.

PBIS

One of the major structural changes in special education is the adoption of a Multi-Tiered System of Supports (MTSS). Inherent in MTSS is the acknowledgment that all students need to be supported in varying degrees of intensity based on their instructional and behavioral needs. MTSS is typically structured as a three-tiered continuum of support, based on the intensity of support a student may require (e.g., intermittent *vs*. pervasive). MTSS has been used to provide instruction in academics (e.g., literacy, mathematics), as well as PBIS. As Horner and Halle (2020) indicated, there are several advantages of MTSS. First, it approaches a learning task based on a student's support needs (i.e., what assistance the student needs to achieve mastery) rather than their perceived disability. Secondly, since MTSS is designed to be a schoolwide system, teachers are encouraged to assume responsibility for all students, including those with ESN. Schools that utilize MTSS will employ best practices or evidence-based practices that can benefit all students. Third, rather than thinking of students with ESN as a distinct entity—a separate discrete population to serve—MTSS compels schools to consider itself a school for all children. To achieve this, all the elements needed to be successful must be considered (e.g., funding, staff allocations, teaming structures, placement policy). No doubt this has been a goal we have been working on achieving for the last 50 years and following a MTSS approach to education will help us achieve it.

There are some problems associated with MTSS that warrant consideration. First, there must be distinct differences across MTSS levels. Students may receive support that is either less or more intensive than a level previously provided. Second, students with ESN may be automatically placed in the most intensive level (Tier 3) despite their actual learning needs. In all, MTSS can be an ideal model to apply for students with ESN as it permits teachers to have insight about a student's true learning needs, but it is imperative that it is applied correctly and aligned with the student's instructional needs.

Self-Determination

There is no question that the PBIS initiative has provided teachers with an invaluable tool and resource to deal with their students' challenging behavior. Rather than designing behavior management plans that ostensibly only seek to eliminate the problem behavior, PBIS's goal is to identify the potential cause of the challenging behavior, replace it with a socially acceptable substitute behavior, and establish for the student a reinforcing and manageable environment. As Bambara and Kern (2005) noted, students may resort to displaying inappropriate behavior as their way of gaining control in what they experience is a stressful environment (e.g., literacy class). A potential problem is that invariably the individuals who serve as change agents are adults who are imposing external control. As Carr et al. (2002) recommended, the purpose of self-determination is to help students to learn that they should serve as causal agents, (i.e., change and manage their own behavior). If provided the opportunity, students can have a vital and active role in planning their own behavior change, implementing a self-directed strategy, and evaluating their progress. As Agran (2015) noted, behavior change is facilitated when a student is motivated to change the behavior (i.e., assume ownership). Such ownership is empowered when a student has an active role in manipulating the change. There is no question that preparing a student to have an active and meaningful role in a behavior change project will take considerable time and careful planning. The student will need to be taught to identify the problem behavior, discern

when it occurs, help determine and implement a behavior change strategy, and, last, evaluate progress in achieving the behavioral goal. On the other hand, we believe the benefits will far exceed the cost as it will enhance the student's self-awareness, competence, and, ultimately, acceptance by others.

Closing Comments

For much of Western history, individuals with ESN have been totally marginalized, separated, and considered uneducable. That said, in the last 50 years, we have discovered that students with ESN are far more capable and competent than previously thought. We have learned how to provide them with a diligent, systematic, and supportive education; how to encourage students to direct and manage their own behavior and learning; how to communicate with and respond to parents' concerns; and, lastly, but most importantly, how to create school environments in which students with ESN are accepted and supported as classmates and friends. Going beyond school, we are committed to ensuring that individuals with ESN are valued and respected as members of their communities.

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