

Research and Evidence-Based Practices to Promote Membership and Learning in General Education for Students With Extensive Support Needs

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Abstract

This article offers a definition of “inclusive” education based on schoolwide practices that foster a sense of belonging and provide the instruction and interventions to promote academic success for all students, with a focus on those with extensive support needs. Although placement in general education settings is a necessary condition for “inclusion” to occur, placement alone is insufficient to ensure that membership is fostered and instruction leads to progress in the curriculum. The research findings from studies examining the impact of general education participation on students with extensive support needs is reviewed. We discuss current directions in designing schoolwide organizational structures that support a system for efficient and effective inclusive education, and discuss recommendations for change.

Key Words: *inclusive education; evidence-based practices; intellectual disability*

The Education for All Handicapped Children Act of 1975 (EHA) and subsequent reauthorizations through the Individuals with Disabilities Education Act (IDEA; 2004) requires states to ensure that all students with disabilities receive a free and appropriate public education with their nondisabled peers in the schools they would attend if they did not have a disability. These laws define special education as specially designed instruction to address the unique needs of a child with a disability and ensure access to the general curriculum “so that the child can meet the educational standards... that apply to all children” (Assistance to States for the Education of Children With Disabilities and Preschool Grants for Children With Disabilities, 2006, 34 CFR §300.39). Schools must ensure that students with disabilities have equal access to the variety of educational programs available to their peers who do not have disabilities, and have equal opportunity to participate in nonacademic and extracurricular activities. Thus, equal access and equal opportunity are key for ensuring that students with and without disabilities can learn the intended, enacted, and assessed curriculum con-

tent and participate in the life of their school community (Taub, McCord, & Ryndak, in press).

Federal regulations that define how to implement the law clearly describe a legal expectation that public schools design standards-based instruction for all students, modify instruction as needed for students with disabilities, and provide specialized instruction to enable students with disabilities to learn in schools with their siblings, neighbors, and friends. Although schools are allowed to remove a student with a disability from general education classes and provide an alternate placement, they may only do so if the student cannot benefit from services in general education classes, even with individually designed supports and services. When recommending that a student with disabilities be educated in an alternate (i.e., more restrictive) placement, the school must consider any harmful effect on the student, and cannot remove a student solely because they need modifications to the general education curriculum for learning (Assistance to States for the Education of Children With Disabilities and Preschool Grants for Children With Disabilities, 2006, 34 CFR §300.116). Thus, the removal of a student

with disabilities from general education classes to an alternate “special education” placement should always be the exception—never the rule.

The reality, however, is that some students with disabilities rarely or never participate in general education instruction. In particular, the use of self-contained special education settings to teach students with extensive support needs persists (Kurth, Morningstar, & Kozleski, 2014). We define students “with extensive support needs” for the purpose of this article to mean students who have been labeled as having intellectual disability, autism spectrum disorders, or multiple disabilities. These students are among those most likely to be removed from general education (McLeskey, Waldron, Spooner, & Algozzine, 2014), least likely to have equal access and participation in the general education curriculum (Taub et al., in press), and least likely to have opportunity to learn the general curriculum (Jackson, Ryndak, & Wehmeyer, 2008-2009; Taub et al., in press), despite a wide range of evidence that participating in general education classes and curricula results in increased skill development.

In this article, we initially describe the benefits for students with extensive support needs when they are placed in general education and learn alongside their peers without disabilities. We offer a definition for “inclusive” education that is based on equity and not place, and describe the evidence-based educational practices that distinguish effective inclusive schools where all students receive the instruction that they need to achieve positive social and academic outcomes. Finally, we provide recommendations for thinking about designing inclusive school for the future.

Placement Matters

Reviews of research on the impact of placement in general education classes clearly demonstrate that when students with extensive support needs are taught in general education classes, they have more access to the general curriculum and effective instruction, achieve more academically, and have better social and behavioral outcomes (Bui, Quirk, Almazan, & Valenti, 2010; Ryndak, Jackson, & White, 2013; Sauer & Jorgenson, 2016). In addition, the research on the impact of placement of students with extensive support needs on their peers without disabilities shows either a positive impact or no negative impact on

their academic achievement (e.g., Hehir, Gridal, Freeman, Lamoreau, Borquaye, & Burke, 2016).

Benefits to Students With Extensive Support Needs

Since 1990, research studies have demonstrated a variety of benefits for students with intellectual and developmental disabilities who are educated in general education classes. Membership and participation benefits include increased student engagement (Helmstetter, Curry, Brennan, & Sampson-Saul, 1988; Hunt, Farron-Davis, Beckstead, Curtis, & Goetz, 1994), improved communication (Fisher & Meyer, 2002), improved expressive language and literacy skills (Buckley, Bird, Sacks, & Archer, 2006; Ryndak, Morrison, & Sommerstein, 1999), more satisfying and diverse friendships (Guralnick, Connor, Hammond, Gottman, & Kinnish, 1996), higher levels of social engagement with peers without disabilities (Fryxell & Kennedy, 1995; Ryndak, Ward, Alper, Storch, & Montgomery, 2010), less disruptive behavior (Buckley et al., 2006; Helmstetter, et.al. 1998; Ryndak et al., 1999), and more social competence (McGregor & Vogelsberg, 1998; Ryndak, Ward, Alper, Montgomery, & Storch, 2010).

Research has also demonstrated that students with extensive support needs acquire academic benefits when included in general education instruction, such as increases in literacy skills (Kliwer & Biklen, 2001; Ryndak et al., 1999). This is particularly important when comparing the outcomes for students with similar needs when they are taught in general education classes versus outcomes for students taught in separate special education classes. Hehir et al. (2016) describe several studies that demonstrate significant improvement in language and math measures when students with disabilities spent a larger portion of their day in general education classes with peers who do not have disabilities—when compared with students who had similar disabilities and support needs, but spent a smaller proportion of their school day with peers without disabilities in general education classes.

Benefits to Students Without Disabilities

A large-scale report by Waldron, Cole, and Majd (2001) demonstrated that students without disabilities made comparable or greater gains in math and reading when taught in general education classes in which students with learning disabilities

were engaged in the same instruction, and a few studies (e.g., Hollowood, Salisbury, Rainforth, & Palombaro, 1995; McGregor & Vogelsberg, 1998) have found a positive impact on the academic achievement of peers who do not have disabilities when students with and without disabilities are taught together.

A recent review of international research found that the vast majority of studies conducted in the United States, Australia, Canada, and Ireland demonstrated either a positive effect or no negative effect on the academic, social, and personal development of students who do not have disabilities when they were educated with peers who had intellectual, learning, or other disabilities (Hehir et al., 2016). Other benefits to students without disabilities who learn in general education classes with students who have extensive support needs include reduced fear of human differences, increased comfort and awareness of differences, growth in social cognition, improvements in self-concept, growth of ethical principles, and caring friendships (Staub & Peck, 1995). Teachers, parents, and paraeducators also believe that students who do not have disabilities benefit when educated with peers who have extensive support needs by developing greater empathy, greater awareness and tolerance of differences, learning to help others, and acquiring specific skills (e.g., sign language; Downing & Peckham-Hardin, 2007).

Opportunity to Learn: General Education Classes Compared With Special Education Placements

Early studies, such as those described by Helmstetter et al. (1998), found that teachers in general education classes offer more instruction, a comparable amount of 1:1 instructional time, address academic content more, and use peers who do not have disabilities to support instruction compared to teachers in special education classes. They found a significant difference in the amount of noninstructional time available: 58% of the time in special education classes was not devoted to instruction, in contrast with only 35% of the time in general education classes. McDonnell, Thorson, and McQuivey (2000) found that students with disabilities were (a) 13 times more likely than their peers without disabilities to receive instruction directed exclusively toward them during whole-class activities, and (b) 23 times more likely to

receive 1:1 instruction when educated in general education classes. Soukup, Wehmeyer, Basinski, and Boyaird (2007) found that students who spent a greater amount of time in the general education classroom worked more of the time on grade-level standards and were more likely to have higher access to the general curriculum than students with low general education participation rates.

In an analysis of self-contained classes, Kurth, Born, and Love (2016) examined special education classes that were spacious, well-staffed by educators and paraprofessionals, and supplied with adequate resources. In spite of these supports and resources, they found a remarkable lack of time that students spent in instruction, and the instruction that did occur was provided primarily by paraprofessionals. There were few opportunities for students to respond to instructional cues, a high level of distractions in the classroom, a lack of communication supports for students, and a lack of individualization of instruction. Research consistently paints a picture that depicts students with disabilities who are educated in special education placements as receiving less instruction, having fewer opportunities to learn, and fewer opportunities to use knowledge and skills during instruction and other meaningful activities.

Inclusive Education

Placement, Instruction, and Opportunity to Learn

Wehmeyer (2006) notes that, although research has clearly shown that students with extensive support needs have “access” to the general education class and curriculum through placement, their progress in the state standards is not ensured. When students with extensive support needs are placed in general education classes, the extent to which they receive effective instruction on the general education curriculum that reflects the state standards, are engaged as valued academic and social contributors to the class, and are instructed with evidence-based strategies that promote progress in the intended general education curriculum is subject to the expertise, experience, talents, and personal values of their educators, as well as their school’s organizational and administrative support.

In an analysis of over 2,000 articles, Rix, Sheehy, Fletcher-Campbell, Crisp, and Harper (2015) found that the level of intensity of educational services provided to students with

disabilities was not synonymous with participation in, or segregation from, general education classes and instruction on the general education curriculum. They suggest that recognizing one end of the placement continuum as “inclusive” does not stop that placement from actually being isolating or exclusive. Similarly, considering alternate self-contained special education placements as *special* “does not mean that it [the placement] is doing anything that is special or different from that which is done elsewhere” (p. 331). Taub and colleagues (in press) provide an extensive discussion of how placement (i.e., class, or context) and numerous other aspects of that placement (e.g., teacher, instructional practices, materials, assessment practices, supports, accommodations) collectively must be addressed for any student, with or without disabilities, to truly have opportunity to learn the curriculum. Further, they describe the importance of alignment between the intended curriculum (i.e., what a teacher should teach—state standards), the planned curriculum (i.e., what a teacher plans to teach), the enacted curriculum (i.e., what the teacher actually teaches), and the assessed curriculum (i.e., what the teacher assesses). Ideally, in general education classes, the core instruction reflects a clear alignment of these curricula and the use of evidence-based instructional practice, resulting in opportunity to learn for all students, both with and without disabilities.

Inclusion Confusion

Confusion about the definition of “inclusive education” in the education community, as well as what it means to offer inclusive education services, persists (McLesky et al., 2014). This is exemplified in the argument of opponents to inclusive education who confuse concerns about placement with concerns about providing individualized instruction aligned with grade-level and content-area standards and designed to address specific academic skills (e.g., Fuchs & Fuchs, 1994; Fuchs et al., 2015; Kauffman, 1990; Kauffman & Bader, 2016). Often these studies focus on the acquisition of discrete academic skills (e.g., fractions) for students with learning disabilities and compare specialized instruction in a special education “placement” to instruction in general education classes. This comparison misses the point that location, in and of itself, is an insufficient descriptor of the type, intensity, and appropriateness of instruction that occurs in any placement. “Inclusion” as a general education

placement is not comparable to “specialized instruction” offered in any location. Kauffman and Bader (2016), for example, state that “full inclusion of students with disabilities focuses on where students are taught, not on instruction” and assume that those promoting “inclusion” care more about getting students into a physical setting than what happens to them once they are there. We propose that efforts to equate the term “inclusion” to “instruction” is invalid.

Inclusive Education Is an Equitable Education

Years ago, despite the prevailing practice of using the term “inclusion” to indicate merely the placement in which services were provided, Skrtic, Sailor, and Gee (1996) defined “inclusive schooling” as a system of supports provided to address the needs of a subset of students, and not as a placement. They described inclusive education as an “equity movement” supported by research in effective teaching and service delivery. They emphasized that inclusive schools “represent school improvement on many levels for all students, not just the physical placement of individuals with various disabilities in general education classrooms” (p. 149). Rather than a placement system, Skrtic et al. described inclusive schools as offering full membership and meaningful ways for all students to participate and grow in the social and learning contexts of their peers who do not have disabilities.

Consistent with this concept, today’s definition of inclusive education has moved toward a definition of supports and services within whole-school restructuring to create school communities in which all students are valued (Artiles & Kozleski, 2016; McDonnell & Hunt, 2013). Examples of “inclusive schools” have a common set of practices that define an educational system that works for all students—a system that is capable of teaching students with extensive support needs along with their peers who do not have disabilities. In a case study of a middle school considered to be a model of inclusive practices, Olson, Leko, and Roberts (2016) describe a school culture in which educators share instructional responsibilities, collaborate in teaching teams, and believe that general education classes and other contexts are most appropriate for all students. Within this school culture, students with extensive support needs were observed in multiple academic settings

engaged in the same instructional activities as their peers of all abilities. Beyond being engaged in the same activities, students with extensive support needs were viewed positively by their peers who did not have disabilities, and learning environments and instruction were varied to meet the variety of different learner needs. Peers were integral to supporting each other academically, behaviorally, and as valued members of the school community. In a similar case study, Sailor (2010) illustrates how a middle school transformed from a traditional school to one in which: (a) special education rooms were repurposed for use by all grade-level students; (b) a tiered system of academic and behavioral supports was implemented to address the instructional needs of students, based on screening and progress monitoring results; and (c) collaborative planning teams and shared responsibilities existed among educators.

For the purposes of this article, “inclusion” refers to practices that are designed by schools to enable them to deliver equitable educational services to all students, with supports offered to any student who needs them for social and academic success, and with a focus on the use of evidence-based instructional practices to maximize the learning of each and every student. With this shift, “inclusion” is not considered a student’s placement; rather, it is a way that a school organizes its resources, considers individual student learning needs, and designs instruction so that interventions and supports are available on the basis of the strengths and needs of the student population.

Evidence-Based Practices for Teaching Students in Inclusive Schools

Wehmeyer and Shogren (2017) edited a recent text on research-based practices for educating students with intellectual disability and identified a variety of instructional practices, specific student supports, and schoolwide practices for which there is evidence of positive impact on learning and social connections. For example, Kurth, Marks, and Bartz (2017) identify specific practices in inclusive schools that have a research base for improving outcomes for students with extensive support needs. Copeland and Keefe (2017) discuss evidence-based literacy learning strategies, and Saunders, Browder and Root (2017) describe evidence-based approaches to

math and science instruction. Coupled with other literature, several common themes emerge after reviewing the research. Chief among them: A quality, inclusive education must begin with general education instruction.

The Place to Start: General Education Core Instruction

On November 16, 2015, the United States Department of Education released a “Dear Colleague” letter (U.S. Department of Education, Office of Special Education Programs, 2015) that clarified the interpretation of “general education curriculum” for students with individualized education programs (IEPs), including those with intellectual disability. The overwhelming message was that all students should be receiving instruction in the general education curriculum, including the state-adopted standards. The purpose of the letter in relation to students with extensive support needs was to “ensure that annual IEP goals for these children reflect high expectations and are based on the State’s content standards for the grade in which a child is enrolled” (p. 5). The IEP’s role is to support instruction and access to the general education curriculum rather than to create an alternate curriculum.

If we are to assume that, in an inclusive school, students with a variety of talents, cultures, abilities, and differences are welcome and that educators in such a school work to create instruction, interventions for struggling students, and supports for the unique needs presented by individual students, then we are describing a coherent, collaborative, and integrated educational system. Within a school engaged in inclusive school reform, evidence-based instruction and supports address teaching, learning, and assessment for each and every student in the school.

Universal Design for Learning. When considering curriculum, it has become important to view it through a lens of Universal Design for Learning (UDL) frameworks. Jackson (n.d.) compiled a report for the National Center on Accessing the General Curriculum, where he specifically highlighted the needs of students with extensive support needs and how adopting a UDL framework incorporates evidence-based practices to improve access and outcomes for all students. In the past, students were seen as “failing” when not achieving academic standards; UDL shifts to considering the barriers presented by curricula that

are not designed for the variety of student learning needs in a diverse school community. UDL reimagines the role of the teacher as a thoughtful designer of the class environment, curricula, instruction, and materials in order to remove or reduce potential barriers to learning. UDL proposes frameworks within which strategies and methods can be created for reaching different learners. Although research on UDL as a framework is relatively new, it has promise for addressing the needs of all students. Nelson and Johnson (2017) describe studies on a variety of UDL strategies (e.g., Learning by Design with multimedia e-books; Book Builder™, a free electronic text platform; text-to-speech supports built into an online program) that facilitate the academic learning of students with intellectual disability. Research on UDL as a holistic framework is still at the early stages; however, there is solid research that validates several of these practices in mixed-ability and inclusive classes.

Cooperative learning. Cooperative learning requires students to work with their peers to accomplish a shared or common goal within a classroom lesson. The goal is reached through interdependence among all group members rather than working alone. Many early studies (e.g., Slavin, 1984) found cooperative learning had a positive effect on student achievement, as well as improved the social acceptance and friendships among students with disabilities and their peers without disabilities. More recently, Copeland and Cosbey (2008-2009) reported that cooperative learning strategies were effective for improving social and academic skills for students with intellectual disability while having no negative impact on students who do not have an IEP. It is notable that Causton-Theoharis, Theoharis, Orsatti, and Cosier, (2011) found that there was little opportunity for cooperative learning to occur in the self-contained classrooms.

Differentiated instruction. Differentiated instruction is a process to approach teaching and learning for students of differing abilities in the same class. The intent is to maximize each student's growth and individual success by meeting each student at their current skill level, rather than expecting students catch up to the curriculum (Hall, 2002). Huebner (2010) reports that a growing body of research shows positive results for differentiated instruction in mixed-ability classrooms and cites several studies that confirm the benefits of differentiation for learners of varying

abilities. For example, Baumgartner, Lipowski, and Rush (2003) evaluated the use of differentiation, including flexible grouping, student choice of learning tasks, self-selected reading time, and access to a variety of texts on a program to improve reading achievement among elementary and middle school students. All students improved their decoding, phonemic, and comprehension skills, and their attitudes about reading and their own abilities improved.

Data: Using formative and summative assessment. An important part of any curriculum and instruction is the appropriate use of student data to inform instruction to promote learning. Formative assessments are generally products that demonstrate student knowledge or skill, and are a means of involving students in assessing their own learning. Summative assessments compare student performance and progress to a benchmark or standard. As teachers and schools set policy related to student testing and performance measures, the goal should be to ensure that students with disabilities—even those with extensive support needs—not only access the same content as their peers but also participate in an assessment system designed for them to demonstrate their knowledge and skills. School teams need to collaborate with each other and with data analysts or technicians to identify how to measure learning and instructional needs and plan the interventions and supports for learners who struggle academically, behaviorally, socially, and emotionally.

Positive behavior supports. One of the greatest barriers for students being included in the life of their school and classroom instruction is behavior that interferes with the delivery of a lesson or learning. If a student's behavior disrupts their own learning or that of other students, then that student is at risk for removal, suspension, expulsion, or placement in an alternative educational setting. Unless there is a proactive, positive approach to teaching appropriate social behavior and understanding the messages behind the problem behavior, a student will be at risk for exclusion from age-appropriate, inclusive school experiences. Extensive research demonstrates the success of a) behavioral principles to prevent and teach prosocial behavior (e.g., Brown, Anderson, & DePry, 2015); and b) instituting a schoolwide approach to providing positive behavior support (e.g., Horner, Sugai, Smolkowski, Todd, Nakasato, & Esperanza, 2009). A variety of strategies for supporting and responding to student behavior,

using data to determine appropriate behavior interventions, and developing an equitable school discipline approach can be found on the www.pbis.org website.

Peer-assisted learning. Peer support interventions are an effective alternative to traditional paraprofessional support models for students with low-incidence disabilities (Carter, Cushing, Clark, & Kennedy, 2005). Involving peers in tutoring or mentoring relationships can have positive outcomes for students with and without disabilities; classwide peer tutoring models have been shown to result in increased academic and social gains for students with and without disabilities (McDonnell, Mathot-Buckner, Thorson, & Fister, 2001). A highly researched strategy, peer-assisted learning (PAL), involves reciprocal tutoring roles, opportunities to respond and experience success, structured activities, and supplemental practice of skills taught in the core curriculum. Several years of studies and large-scale experiments have shown that PAL results in improvement in the reading achievement of low-, average-, and high-achieving students, including those with disabilities (McMaster, Fuchs, & Fuchs, 2007). In a study investigating the effects of peer-delivered self-monitoring strategies with middle school students who had extensive support needs, results showed an increase in 11 identified academic survival skills for all students (Gilberts, Agran, Hughes, & Wehmeyer, 2001). To be effective, highly structured interactions are planned, students have clear responsibilities, and teachers foster academically focused, positive social interactions for learning.

Culturally responsive teaching. Culturally responsive teaching requires that educators value students' cultural and linguistic resources and build upon this understanding, rather than view it as a barrier to learning. Culturally responsive teachers use students' personal experiences and interests as the base upon which they facilitate student learning and skill development. As described in a recent publication of the CEEDAR Center (Aceves & Orosco, 2014), various research studies show the power of drawing upon students' culture, language, or other aspects of their identity (e.g., disability) to learn academic subjects. If we consider that families and children with disabilities are going to have different constructs of disability based on their own expectations and norms, it would behoove educators to situate their instruction within a paradigm that views disability as a culturally constructed experience, one that

shapes and influences everyday life and classroom learning experiences.

The Practices to Add: Specific Practices for Students With Disabilities

Incorporating restricted interests. Restricted interests are the topics, objects, or actions that become the focus of a student's attention, interaction, or enjoyment, sometimes to the exclusion of other activities. Students with autism or other neurological disabilities related to attention deficits, anxiety, or executive function disorders may have a hyperfocus on topics related to learning. This can challenge a teacher when the class, as a group, is expected to attend to a discussion, transition to a new activity, or follow direct instruction steps. Specific strategies for supporting students in how to focus attention are important for teachers to understand. Teachers may be tempted to try to reduce or eliminate behaviors that they believe are competing for instructional attention. But incorporating the "special interests" of children, especially those with autism spectrum disorders, into classroom instruction can lead to increases in learning and social skills (Gunn & Delafield-Butt, 2016). Teachers need to understand the role of repetitive behavior, special interests, and the relationship of intensive competing behavior to reducing anxiety or stress.

Response prompting. Response prompting as a teaching method for students with extensive support needs has historically been effective for teaching discrete skills and a series of behaviors, including academic skills. This method is used primarily in one-on-one or small group instruction when a student does not or cannot initiate an action when requested, or is learning a new skill. A series of verbal cues, gestures, modeling, and physical assistance is systematically provided until the response is performed and faded as the student demonstrates increased initiation of the response. A number of studies have found response prompting effective for teaching social interaction and communication skills, as well as academic skills for students with and without disabilities (Copeland & Cosbey, 2008–2009).

Distributed practice opportunities embedded in natural settings. When students with extensive support needs have multiple opportunities to respond to instruction and practice a skill, they are more likely to learn and retain that skill. It

is even more effective if those opportunities are embedded throughout the school day in situations where the skill would be naturally required (Copeland & Cosbey, 2008–2009). By explicitly embedding systematic instruction in the general education setting through various support providers (general education teachers, peers, etc.), teachers provide students with the level of support they need to be successful (Jimenez, Browder, Spooner, & DiBiase, 2012). Because students with extensive support needs may have difficulty transferring new skills to a new setting (Westling & Fox, 2004), planning to apply learned skills to other natural environments will facilitate generalization and the likelihood that the skill will be sustained over time.

Functional communication training (FCT). When students lack a formal and functional means of communicating, they may resort to an alternative behavior to express emotion, need, desire, or other messages. However, this behavior may negatively impact the student’s social interactions, participation, and learning in school. FCT is a systematic method to teach socially acceptable and effective communicative behaviors following an assessment of a) the function served by an interfering behavior and b) motivators for maintaining the problem behavior. FCT includes behavioral methods such as a differential reinforcement to teach an alternative means of communication (e.g., use of vocalizations, picture systems, or electronic systems) and extinction to reduce or eliminate reinforcers of the problem behavior (Fettig, 2013).

Academic, behavioral, and communication interventions. The What Works Clearinghouse (WWC) reviews research on programs, products, practices, and policies that help educators make evidence-based decisions about instruction and interventions for different subject areas and student populations. For students with disabilities, a variety of interventions have been demonstrated to result in positive outcomes when implemented as intended with the target population. (See <https://ies.ed.gov/ncee/wwc/FWW/Results?filters=,Children-Youth-with-Disabilities>.) Typically, interventions are either incorporated into the structured and unstructured activities across the school day, or delivered to students who need increased instruction in targeted skills in small group lessons. The difference between special education placement and homogeneous targeted-group instruction is that, in the latter, the

intervention is not limited only to certain groups of children based on their disability label but, rather, to any student who needs additional instruction to acquire that skill. See Copeland and Keefe (2017) and Saunders et al. (2017) for examples of research-based academic interventions for students with extensive support needs.

Augmentative and alternative communication (AAC). Many students with extensive support needs are challenged to communicate orally or with a system that can address the variety of ideas, feelings, choices, and desires that they have. Selecting and designing an AAC system is critical, not only for social interactions, but also for demonstrating learning and participating in all aspects of school life. AAC includes all forms of communication (other than oral speech) to express thoughts, needs, wants, and ideas. Students who do not have oral speech or have problems using oral speech to communicate will need to have a supplemental system, such as picture and symbol communication boards and electronic devices, to increase social interaction, school performance, and general participation in the school community.

Peer networks. Although extensive research shows the impact of peer-mediated interventions on the learning and engagement of students with disabilities, from preschool to high school age (e.g., Carter, Cushing, Clark, & Kennedy, 2005), there has been limited research on supporting social interactions of high school students with extensive support needs. One method to address this is through the development of peer networks: establishing a cohesive social group around an individual student to promote social, communication, and other outcomes during the school day. An adult facilitator usually leads the initial network meeting of a few students to plan social activities that include a “focus student” who has a disability. As the peers increase their leadership, the adult facilitation fades. Gardner and colleagues (2014) found peer networks substantially increased the social engagement and peer interactions of students with disabilities, offering opportunities for connecting students within general education classrooms.

Self-Determination instruction. Being able to establish goals and make plans to achieve those goals, make choices based on personal preferences, solve problems, make decisions, and act on your own behalf are self-determination skills that have been linked with positive adult outcomes for people with disabilities, including those with

extensive support needs (e.g., Wehmeyer & Palmer, 2003). When students with extensive support needs are intentionally taught self-determination skills, they are better able to regulate and evaluate their own learning, and these skills are strengthened when learning occurs in general education settings (Hughes, Agran, Cosgriff, & Washington, 2013). Instructional strategies and supports for students with disabilities to learn self-determination skills and be involved in their own educational planning have been demonstrated to be effective in promoting self-determination in the context of education (e.g., Palmer, Wehmeyer, Shogren, Williams-Diehm, & Soukup, 2012).

A Framework for Inclusive Schooling

Inclusive education is becoming widely recognized as a system of instructional and organizational structures to provide an equitable education to all students who attend a school while addressing their diverse learning needs. In such a school, all students, including those with extensive support needs, are “included” in and have access to all the supports, services, and activities available to any other student in the general education system (Copeland & Cosbey, 2008-2009); Downing & Peckham-Hardin, 2007; Hehir et al., 2016; McCart, Sailor, Bezdek, & Satter, 2014; Sailor, 2016; Sailor & McCart, 2014). A collaborative school culture and individualized student planning are at the core of inclusive schools; with services integrated for effective and efficient delivery to those that need them. If we are to reject the definition of inclusion as solely or primarily an indicator of placement or location of education, we need to understand the components and conditions for an effective, equity-based inclusive education system.

Schoolwide Framework for an Integrated Multi-Tiered System of Supports

Large-scale, schoolwide organizational initiatives that involve systems change with evidence-based practices are response to intervention (RTI) and positive behavior interventions and supports (PBIS). Both are preventive, problem-solving, and decision-making methods to address the intervention needs of students for whom the core instruction and classroom systems are insufficient for success. Both systems involve universal screening to identify students at risk of failure, ongoing

progress monitoring to guide decisions related to learning needs, a tiered continuum of interventions and supports applied according to student performance, a data-based decision model, and fidelity assessments to measure implementation and assist with evaluation of the impact of the interventions in relation to student progress. Although RTI focuses primarily on reading and math learning (see <http://www.rti4success.org/>), PBIS offers a framework for addressing problem behavior (see <http://www.pbis.org/>).

Multi-Tiered system of supports. In the last several years, education reform efforts recommend that the resources and efforts toward RTI and PBIS systems be braided to address the complex social, emotional, behavioral, and academic learning needs of a wide variety of learners (Shogren, Wehmeyer, Lane, & Quirk, 2017). Such an integrated system emphasizes the value of core general education services in a multi-tiered system of supports (MTSS) to determine the specific interventions needed for struggling students within a data-informed decision model. It not only addresses students who struggle because of academic learning needs, but also students with disabilities, those whose first language is not English, students coming from cultural backgrounds that differ from the majority of families and educators in the school community, and students living in poverty who may have access to fewer resources. MTSS requires that administrators, district personnel, classroom teachers, and specialized educators work together in a cohesive and collaborative culture with shared responsibilities for all learners (McIntosh & Goodman, 2016).

Personalized learning plans. In a 2010 report on personalized learning, Wolfe defined educational equity as an outcome achieved when the system “meets each child where she is and helps her achieve her potential through a wide range of resources and strategies appropriate for her learning style, abilities, and interests, as well as social, emotional, and physical situation” (Software & Information Industry Association, 2010, p. 6).

Personalization provides the opportunity to dramatically redefine the very concept of equity: from one that goes beyond providing all students with the same educational inputs and opportunities to one in which all students have access to a unique learning experience (and resources) based upon their individual needs. (p. 9)

By looking at a variety of data points through MTSS, considering students' entry knowledge and skills, and incorporating strategies specific to student characteristics, educators can work together to design personalized learning plans that are flexible and student-driven.

SWIFT as an Organizational Framework for Inclusive Schools

The School-Wide Integrated Framework for Transformation (SWIFT) Center, a national inclusive school reform center, works with states, districts, and schools to develop and demonstrate such systemic school practices. McCart et al. (2014) describe SWIFT as a theoretical framework for an inclusive educational delivery system where resources are braided to benefit all learners and all adults in the system work in a coherent manner for all students. MTSS is at its core, with other features defined to support implementation. The constructs for an inclusive schoolwide framework that supports MTSS are described in the following sections.

Strong, distributed, and collaborative leadership. Principals focus on building a culture of trust, shared leadership, collaboration, and inclusion of staff and families to foster effective implementation and sustaining of inclusive practices. Principals in an inclusive school will ensure that families and students with extensive support needs are included in all discussions and every part of the educational organization.

Strong educator support system. Staff are provided with professional learning opportunities for the skills needed for instruction and ongoing coaching when implementing new practices. In concert with district-level supports, administrators will seek input when challenged by students who present unique needs not previously encountered.

Fully integrated organizational structure. All students and all adults are considered part of the whole school framework, with each individual receiving what they need for participation, membership, and learning. School schedules are designed to support collaboration, and professionals and paraprofessionals are deployed as part of a schoolwide approach to ensuring that students receive the supports and services that they need. Equity is the guidepost for accessing learning, as well as nonacademic activities and all aspects of school life.

Strong and positive school culture. When families are engaged, staff have a voice in school decisions, a climate of respect permeates a school, and a more unified approach to teaching and learning will occur. Particular attention is given to promoting a sense of belonging by all in the school community.

Trusting family partnerships. Schools implementing the SWIFT framework will engage in intentional actions to promote family participation in school decisions, as well as family participation in decisions that affect their child. Cultural and logistical considerations need to be addressed so that families feel welcome and willing to participate in school community activities.

Trusting community partnerships. External members of the school community (individuals, organizations, businesses) may have resources or social connections that can strengthen the work of the school. Such arrangements may provide additional support, particularly to schools that would benefit from such partnerships.

Strong district-school relationship. When schools are faced with leadership or staff turnover, resource needs, or students with extensive support needs moving from one school to another, the school district or governing body needs to provide direction and leadership in organizational decisions. This may mean professional learning, family communications, or decisions to implement new practices—all for the purpose of supporting school and student success.

Aligned district policy. Policy for a variety of educational procedures, such as the delivery of instruction, teacher supports, funding, access to and availability of curriculum and interventions, discipline, and so on, may be barriers to or facilitators for effective equity-based inclusive education. In a SWIFT framework, the school leadership works closely with district leadership to ensure that policies are aligned to support inclusive education and implemented as intended.

Considerations and Recommendations

Student Membership and Belonging

Inclusive school communities offer the context for students to become valued members of a social group and have opportunities for developing positive social relationships that may have a long-term impact on a student's life. McDonnell and Hunt (2013) list evidence of the impact of

quality social relationships on a student's social and emotional well-being, and point out the need for actively encouraging such relationships as priorities within the school community. Feldman, Carter, Asmus, and Brock (2016) conclude that students with extensive support needs are often situated in classrooms where they are not close to peers, and they do not always stay in class for the whole instructional time period. It is mandatory that educators plan for all students—with and without disabilities—to be welcome members of the school community with high expectations for participation and contribution.

Adult Collaborative Assessment, Planning, and Teaching

It would be impossible and unreasonable to list the variety of articles, chapters, books, and documents that identify collaboration and cooperation as lynchpins of education. Each and every piece of writing in modern education discusses collaboration, collaborative teaming, and cooperative work; yet, there are few exemplars of how to accomplish this within the organizational structure of the school. This kind of work requires a real change in the way educators are expected to work—not as content or specialist authorities but, rather, as members of a group in which each member listens, defers, communicates, and supports each other to organize ideas into a goal-oriented plan. It also requires that schools open up their thinking about teacher and student schedules, so that teaching, learning, and planning relationships can be formed and implemented for the benefit of students.

Data-Informed Decision Systems

Given the previous discussion about evidence-based practices, it is clear that—in addition to attending to individual student instructional needs—our schools must create systems for educational equity and supports that consider both academic and behavioral needs, as well as other unique student characteristics. This will require that school districts have data systems that they understand and use for coaching and planning instruction, interventions, and supports. Data analysis and representing student data in a usable and understandable way is rare. Our schools need support from district and state agencies to be proactive instructional planners.

Teacher and Administrator Preparation

Outside of research circles, discussion of the problems with teacher preparation are abundant. Many university faculty are not current with educational practices. Many have not been in the position of teaching or working with schools, and many are relying on the knowledge and experience of their former professional life. This is highly insufficient and unacceptable for our profession. We need to demand that our universities provide training that exemplifies the future rather than the present, let alone the past. We need to expect that our teacher and administrator training programs have current research as part of their agenda, and that they will challenge educators to consider an inclusive future for all people. We need to expect that our university faculty be able to teach a class of students with and without disabilities—so that they can share the strategies that work and do not work in different settings and circumstances.

Attend to the People

We would like to be sensitive to the fact that the strategies, organizational structures, and practices that we recommend require a change—change in the way educators have done business for a very long time. We do not take this lightly. Although we do not hesitate in our yearning for schools to build capacity to include all learners, it cannot be at the expense of either adults or children currently in the system. This does not mean stopping or slowing down; it means attention. We must pay attention to the people who are expected to make change. And we must support them in moving forward.

Conclusion

Placing students with disabilities in general education classes must be accompanied by effective collaborative planning among educators, design of evidence-based instruction and intervention, and strategic implementation of schoolwide practices for all students. Without that, students with disabilities will be denied the education that they deserve and to which they are entitled by special education law. Students with extensive support needs have, for far too long and more than other student groups, been excluded from the social and academic opportunities made available to their peers. We believe that, when states,

districts, and schools strategically and systemically include students with extensive support needs, all students benefit. Research backs that up. The time to change is now.

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