

Planning Supports for Students With Intellectual Disability in General Education Classrooms

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Abstract

For most students with intellectual disability (ID), education in the least restrictive environment has been determined to be separate special education classrooms. One means to promote greater participation in general education classrooms is for educators to identify and arrange individualized supports that students need to be successful. We conducted focus group interviews with 33 educators in 6 schools from 3 states to explore how they currently plan supports for their students, obtain their opinions on the usefulness of a systematic problem-solving process for supports planning, and gather their perspectives on resources, including the nature of technical assistance, that would be most helpful in planning individualized supports. Themes from the focus group interview transcripts were identified and recommendations for increasing educator competencies in planning and monitoring individualized supports for students with ID in general education classrooms are provided.

Key Words: *inclusive education; support needs assessment; Supports Intensity Scale–Children’s Version; focus groups*

The American Association on Intellectual and Developmental Disabilities (AAIDD) and The Arc published a joint position statement on education that begins with the assertion that students with intellectual disability (ID) and related developmental disabilities (DD) “must receive a free appropriate public education that includes fair evaluation, ambitious goals, challenging objectives, the right to progress, *individualized supports and services* [emphasis added], high quality instruction, and *access to the general education curriculum in age-appropriate inclusive settings* [emphasis added]” (AAIDD, 2018, para 1). Each of the features of quality educational services identified by AAIDD and The Arc is important in its own right, but collectively they offer a comprehensive vision of what educational systems should be offering to students with disabilities and their families. We added emphasis to two of the indicators because we believe they go hand in hand, and it makes little sense to consider one without considering the other.

If the purpose of identifying and arranging *individualized supports and services* is to address mismatches between a student’s personal competencies and the environmental requirements (i.e., demands that are associated with settings and activities) and the most culturally valued educational activities and settings are linked to the general education curriculum and occur within general education classrooms, it is misguided to invest significant time and energy in providing *individualized supports and services* in settings and activities that are outside of general education classrooms and curriculum. Settings that segregate students with disabilities (even those settings that are, by all outward appearances, completely benign) are not highly valued by students, family members, educators, or society as a whole (National Council on Disability, 2018). Thompson et al. (2009) characterized supports as a bridge between the person and the environments (settings and activities) in which the person wants to participate. Providing *individualized services and*

supports to participate in separate, segregated settings due to being excluded from culturally valued, integrated settings can be considered a bridge to nowhere, or perhaps a bridge to the wrong destination. Segregated school environments tend to lead to segregated adult environments (Wagner, Newman, Camento, Levine, & Garza, N. 2006), and segregated adult environments are associated with limited life opportunities and experiences (Lakin & Stancliffe, 2007).

Although the AAIDD and The Arc's call for individualized supports and services in inclusive classrooms and access to the general education curriculum is well aligned with an abundance of research evidence supporting positive outcomes (e.g., Browder, Hudson, & Wood, 2013; Cole, Waldron, & Majd, 2004; Matzen, Ryndak, & Nakao, 2010; Roach & Elliott, 2006; Spooner, Saunders, Root, & Brosh, 2017; Wehmeyer, Lattin, Lapp-Rincker, & Agran, 2003), it is not a new idea. In 1975, the Education for All Handicapped Children Act (now the Individuals With Disabilities Education Act [IDEA], 2004) mandated that all students with disabilities be provided with an appropriate education designed to meet their unique needs in the *least restrictive environment* (LRE). The conceptual roots of LRE are usually attributed to Deno's (1970) seminal article in *Exceptional Children* (e.g., see Kavale & Forness, 2000). Deno envisioned special education services as a cascade of placements, with most children receiving their education in the general education classroom alongside their same-aged peers without disabilities and others receiving their education in increasingly restrictive placements (progressively farther away from general education classrooms and peers).

It is often forgotten that Deno's (1970) cascade was presented in the figure of a cone, with a minuscule number of students in the most restrictive placements (the section occupying the narrow point of the cone) and the largest number of students in the general education classroom (the section occupying the circular base). The reality for most students with ID, however, is that the LRE has been determined to be separate special education classrooms. In contrast to Deno's cone-shaped cascade, the placement distribution of students with ID in U.S. schools is diamond-shaped, with 49% of students in general education settings for less than 40% of the school day (U.S. Department of Education, 2018). To be fair, students with ID disability are unlikely to be in

extremely restrictive settings (e.g., institutions, homebound instruction), but they are also rarely educated in general education classrooms for most or all of their school day. To borrow the words of Steven Taylor (1998), today's students with ID are *caught in the continuum*, just as they have been for the past 40 years. Unless educators approach their work differently than what has been done in the past, there is no reason to believe that large numbers of students with ID will break through to the general education classroom.

Why has the pattern of placing students with ID in special classrooms been so persistent over time? The answer surely is not simple, and McDonnell and Hunt (2014) pointed out the importance of systems-level factors, such as the way schools are staffed and organized and the way in which funding is used, in creating inclusive schools. Without discounting the importance of system-level, structural factors, good inclusive education ultimately comes down to having educational team members with sufficient knowledge and imagination to find solutions to challenges that are inherent to meaningfully educating individual children with diverse characteristics in general education classrooms. The work of inclusive education is hard work, and the most convenient solutions (e.g., hiring a paraprofessional to manage a child during the day) are not necessarily good solutions (e.g., a child is physically included in a classroom but is not socially included and is not learning much; Giangreco, Suter, & Hurley, 2013).

Thompson, Walker, Shogren, and Wehmeyer (2018) suggested that systematic approaches to understanding students by their support needs in relation to curricular demands, instructional strategies, and participation requirements were needed to enhance the capacity of schools and general education classrooms to educate all students. They proposed a problem-solving process that was structured around three questions: (a) What to teach?, (b) How to teach?, and (c) Where to teach? (see Figure 1). Answering each question requires educators to proceed through a series of critical questions and essential actions. At the end of the process, there is a support plan specifying curricular adaptations, instructional supports, and participation supports a student requires to participate in general education classroom learning activities. The authors made a conscious effort to provide a problem-solving process that was systematic but not formulaic. A *formulaic process*

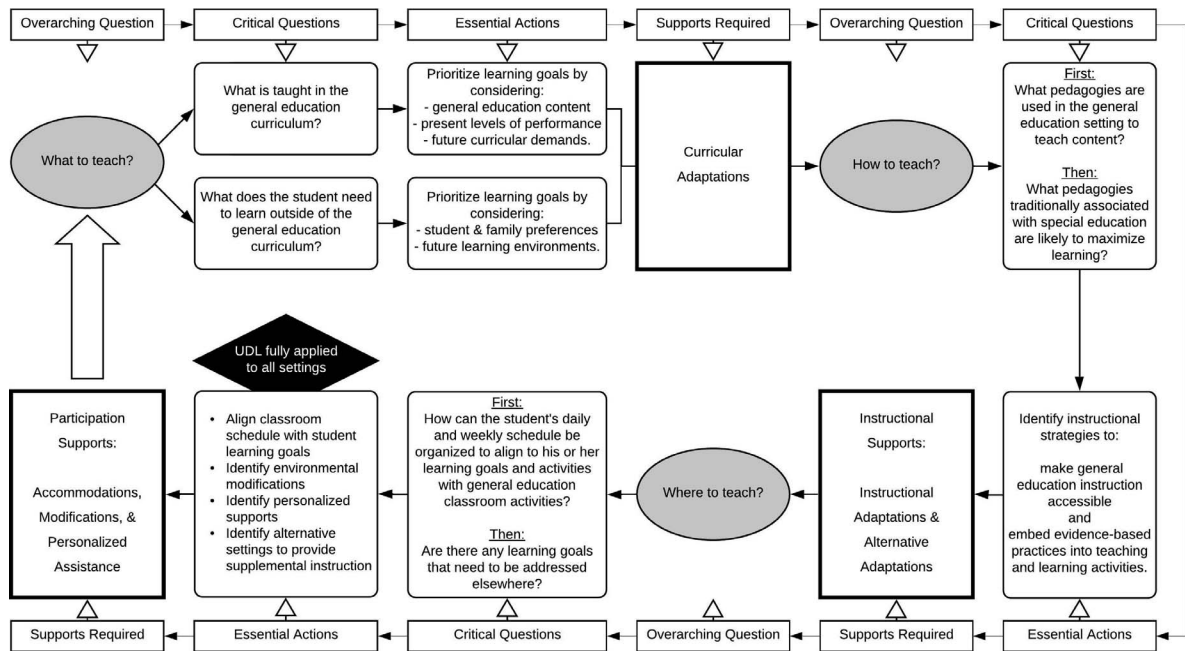


Figure 1. The General Education Supports Planning Model. Adapted from “Expanding Inclusive Educational Opportunities for Students With Significant Cognitive Disabilities Through Personalized Supports,” by J. R. Thompson, V. L. Walker, K. A. Shogren, and M. L. Wehmeyer, 2018, *Intellectual and Developmental Disabilities*, 56, 396–411.

is one where educators progress through a series of steps to produce a product (e.g., support plan), but the process does not encourage creative thinking or provide the flexibility to propose innovative solutions. Thompson et al.’s (2018) process emphasized the importance of problem solving, and they contended that

schools need a critical mass of educators who can correctly diagnose what is causing a person-environment (i.e., student-classroom) mismatch and creatively arrive at solutions based upon careful consideration of student characteristics (i.e., relative strengths, preferences, and relative limitations) and the tasks and skills necessary for full participation in a classroom. (p. 407)

The current investigation was initiated as the first step in a larger project involving work with educators on using support needs assessment results (i.e., findings from the Supports Intensity Scale-Children’s Version [SIS-C] assessment) within the Thompson et al. (2018) problem-solving process to identify and arrange supports for students with ID attending general education

academic classes. We sought to gain a clear understanding of educator perspectives on support needs and supports planning, and to get educator input on how they might use the problem-solving process we were introducing. The following questions drove our research:

1. How do educators currently plan, arrange, and implement supports for students with ID in general education settings and what information do they value in this process?
2. What are the challenges educators encounter in planning, arranging, and implementing supports for students with ID in general education settings?
3. What are educators’ attitudes toward using a systematic problem-solving process to plan, arrange, and implement supports for students with ID in general education settings?

Methods

Setting

Six focus groups interviews (henceforth referred to as “focus groups”) were conducted during April of

2019 with educators from elementary schools (i.e., Grades K-6) in three states (two each in Kansas, North Carolina, and Illinois). Two focus groups were held at elementary schools located in mid-sized cities (i.e., metro populations from 50,000 to 500,000); the other four focus groups were held at elementary schools in suburban communities of large cities (i.e., metro populations greater than 500,000). Four focus groups were conducted in the afternoon shortly after students had been dismissed from school, one was held in the morning prior to students arriving, and one was held during a work day devoted to in-service training for educators when students were not present. The school districts from which the focus group participants were recruited were relatively large, with the smallest district serving just over 6,000 students and the largest district serving just under 33,000.

Participants

School district administrators in Illinois, Kansas, and North Carolina were contacted based on working relationships that research team members had established through prior projects. The administrators reported that their schools included some children with IEPs in general education classrooms, but also had classrooms that included only students with IEPs who spent the majority of their school day with one another. The school administrators welcomed the expertise the research team might be able to provide to promote greater inclusive education, and identified special education teachers from six elementary schools as potential candidates to participate in a multiyear project focused on supporting elementary-aged students with ID to learn academic content in general education classrooms.

All teachers who were nominated by their administrators expressed a willingness to participate. Initial consulting with the teachers (and colleagues with whom they worked) started in the Illinois and Kansas schools prior to conducting the focus groups. The consultations consisted of half-day visits to observe classrooms and students and relatively short (e.g., 30 min) meetings with teachers either after school was dismissed, before school began, or during teacher lunch/planning times. In the North Carolina schools, no consultation had occurred prior to the focus groups.

The research team asked their contacts in the schools to recruit five or more colleagues to participate in a focus group, encouraging them to

recruit a diversity of colleagues in terms of educational roles (e.g., special education teachers, general education teachers, related service staff, school administrators). Potential participants received a flyer explaining the aim of the focus group (i.e., to get opinions and insights from educators to inform work on an upcoming project on inclusive education) and the parameters (e.g., focus group was to take about 60 min).

A sufficient number of participants were recruited to justify conducting a focus group at each of the six schools. Focus groups ranged from four to seven participants. Collectively, 33 educators participated, with 29 identifying as female and four as male. Thirty participants identified as White, one participant identified as Black, one identified as Asian, and one identified with two or more races. In regard to ethnicity, 29 participants reported they were not Hispanic, one indicated a Hispanic ethnicity, and three did not report an ethnicity. Seventy-five percent (75%) of the participants were special ($n = 16$) and general ($n = 9$) education teachers, with the remaining 25% consisting of three related service personnel (one occupational therapist, two speech/language therapists), two building principals, and three others (a paraprofessional, a student teacher, and an English for Speakers of Other Languages [ESOL] teacher). Thirty-one of the 33 participants provided information regarding the number of years they had been employed in their current position (range 0–20; $M = 5.39$) and total number of years employed in K–12 education (0–25; $M = 8.48$).

Focus Group Data Collection Procedures

All six focus groups were conducted in April of 2019. Guidelines for conducting focus groups presented by Vaughn, Schumm, and Sinagub (1996) and Krueger and Casey (2015) were adapted for this study. Specifically, a printed moderator packet (i.e., the focus group interview script) was prepared in advance that included specific text for a moderator to introduce each topic of discussion and pose questions to the participants. Moderators were encouraged to probe for additional information and paraphrase information from participants to clarify responses. Five members of the research team served as moderators. In two focus groups, an additional member of the research team was present as an observer.

Also, a printed participant packet was prepared in advance that highlighted the moderator's instructions and provided specific material (e.g.,

mock SIS-C assessment results, figure detailing the problem-solving process) about which participants were asked to comment. Each participant was provided their own packet to review. Participants proceeded through the packet sequentially and collectively as a group.

In each case, the elementary school hosting the focus group provided a private room in which to conduct the focus group. Once all potential participants arrived, the moderator explained the purpose and procedures, provided each participant with a gift card worth not more than \$25 as a “thank you” for coming, and requested participants sign a consent form if they were willing to participate. The consent form was explained and the procedures for conducting the focus groups that had been approved by the University of Kansas’ Human Research Protection Program were followed. All recruited participants signed the consent form, which provided the option of leaving the focus group at any point. Thirty-one educators participated for the length of the focus group interview, but two had to leave approximately 15 min prior to their focus group’s conclusion because of prior commitments.

Focus groups were audio recorded on a portable recording device. The six sessions ranged from 42 min 16 s to 61 min 01 s ($M = 53$ min 01 s). Audio recordings were (a) stored on a HIPAA-compliant server at the University of Kansas, (b) erased from the portable recording devices, and (c) sent to a third-party transcription service which produced a draft of a transcript. Each focus group moderator read through the draft transcript while listening to the recording, correcting any transcription errors and replacing identifying information with pseudonyms.

Data Analysis Procedures

The focus group transcripts provided the data for our study. We conducted a thematic analysis (Braun & Clarke, 2012; Vaughn et al., 1996) of the six focus group transcripts guided by our research questions. Next, we describe the procedures we used for analyzing data, which were consistent with the constant-comparative method for analyzing qualitative data originally proposed by Glaser and Strauss (1967).

First, two researchers independently listened to audio from all six focus groups and read the corresponding transcripts to identify what Vaughn et al. (1996) referred to as “big ideas” from the focus groups. These two researchers shared and

discussed their perspectives on what the big ideas were, came to agreement, and put these into writing. Second, the big ideas were shared and discussed with the rest of the research team, all of whom had been involved with one or more focus group. Based on this discussion, initial themes and an initial codebook were developed. Additionally, the research team agreed that the data set was saturated. That is, based on evidence of extensive repetition between the initial themes in the transcripts of the six focus groups, it was determined that it would be highly unlikely that additional focus groups would generate new information. A schedule was set up to code each transcript in a sequential order, and coding dyads were assigned.

Third, dyads of research team members independently coded the transcripts using line-by-line coding. After each member of the dyad finished coding, they negotiated final codes for their transcript and recorded descriptions and explanations for each code in an updated codebook to be used by subsequent dyads. Each subsequent dyad proceeded to code their transcripts in the same fashion (first independent coding, then negotiating final coding). This process for data analysis was iterative. That is, when each subsequent transcript was analyzed, the codebook was modified in some fashion (e.g., refining codes, combining codes, adding needed codes) and dyads who had coded previous transcripts returned to their coded transcript to modify and negotiate new coding based on any modifications made to the codebook. This iterative process (coding and recoding transcripts with every change to the codebook) was repeated until all dyads reported that (a) they had recoded their transcripts in light of the final changes to the codebook and (b) agreed that no further modifications were necessary.

Fourth, research team members followed up with all 33 focus group participants via e-mail as a member check. This was designed to (a) obtain their perspectives in regard to the accuracy of the initial themes the research team had identified, (b) seek additional information for clarification of thoughts and perspectives (including specific quotes) that were shared during their focus groups, and (c) request additional reaction to specific ideas presented during other focus groups. Of the 33 follow-up e-mails sent, 27 participants responded. The information provided in these responses were added to the data set (i.e., data from the original

transcripts), and the initial themes and codes were adjusted accordingly.

Fifth, the final codes applied to the transcripts provided the basis for identifying final themes. The six-member research team met in person to review all transcripts in relation to the codes generated and the initial themes that had been identified. Final themes were negotiated, and each theme was justified based on evidence of substantial support from the line-by-line coding of the transcripts. Moreover, each theme was considered in relation to the research questions.

Results

In the following section, we describe the results of our thematic analysis by research question. Quotes are attributed by noting the speaker's role in their school, their state, and either Focus Group A or B. To ensure the confidentiality of the participants, we do not offer further clarification of the speaker's identity. The quotations are the exact words of the participant, and we made no edits or corrections to improve grammar.

Research Question 1. How do educators currently plan, arrange, and implement supports for students with ID in general education settings and what information do they value in this process? Three themes emerged from educators' descriptions of their current practices and the information they value.

Theme 1: Educators do not use a structured process for planning, arranging, and implementing supports; current practices are mostly informal and are context- and educator-dependent. Across all focus groups, educators described their efforts to plan, arrange, and implement supports for their students with ID to access and participate in general education settings as informal, unsystematic, and even haphazard. Educators described a piecemeal approach that was driven by factors related to context and educator priorities and perspectives. Some educators reported holding brief, informal meetings to discuss various aspects of supporting students in the general education setting, which often took place while transitioning in the hallway, catching one another before or after school, or sending text messages or e-mails. For example, one special education teacher explained how she attempted to plan supports for the general education curriculum of a particular week, saying,

I always ask for [general education] teachers to give me their plans and just put it in my mailbox and it doesn't have to be a discussion because I think sometimes that hinders on us that they have to use their time to sit and talk to us. So instead I was like, "Just put it my mailbox and I'll figure out the instructions on this," or whatever, and kind of develop from there. (IL Group A)

Similarly, a general education teacher described supports planning with the speech language pathologist, stating that,

it's just in conversation within bringing the kid back [from elsewhere in the building] and talking about the strengths, the things that we're seeing in the class with the child and stuff. So, not that sit-down time. (NC Group B)

Educators also reported engaging in reactive problem solving to identify supports, rather than proactive planning. Some teachers described sending their students to the general education classroom and subsequently identifying supports to solve any problems that arose. Others described planning, arranging, and implementing supports that accommodated school schedules or the general education teacher's preferences and/or concerns rather than focusing first and foremost on their student's support needs. As one special education teacher explained,

Currently, it's like, "Alright, we're going to throw them in the general education classroom; now what are we going to do with them?"..It's, "Here, general education teacher, add another student to your roster and we'll figure it out as we go." (IL Group B)

In regard to the informal processes they used to plan individualized supports, a few educators identified instances in which the responsibility for identifying, arranging, and/or implementing supports was proportionally distributed among team members. More commonly, however, participants described instances where one member of the team (most often the special education teacher) was disproportionately responsible for planning and arranging supports. For example, a special education teacher suggested that "the gen ed [general educator's] responsibility is more of that core instruction and the EC [exceptional children]

teacher is going to be really supporting those IEP [Individualized Education Program] goals and try to help close the gap” (NC Group A).

The informal processes that characterized supports planning in the schools also impacted the availability of resources (e.g., modified materials, professional development for teachers) for supports planning and implementation. Educators suggested that resources used in the past, which were familiar and understood by everyone, often drove the decision-making process and therefore displaced consideration of new resources and/or new ideas that might better address student needs.

Overall, current approaches to planning supports were unsystematic, and the supports that were put into place were heavily context- and educator-dependent. Educators engaged in supports planning did not perceive their current approaches to be ideal. There were also a few special education teachers who reported that they did not engage in planning supports because none of their students were accessing general education classrooms.

Theme 2: When identifying, arranging, and implementing supports, educators expressed a desire for comprehensive information on both the student and the general education context. Educators specified that they wanted information about the student’s strengths, current skills and support options, areas of need, current behavior patterns and social context, and the goals and priorities as identified by educators, family members, and the student. For example, one general education teacher said,

I would say it would be helpful to know if [the student] has a behavior issue, or if he can just come in and sit down quietly and get ready to work, even if his level is wherever it is. Can he follow along with everybody else or is he in constant need of redirection and everything because of his behavior? (IL Group B)

Another special education teacher said, “[One] question would be if they [student] would have one-to-one support with them in the [general education] classroom” (IL Group A). Another special education teacher said, “I’m also thinking about family dynamics, like who, what are their supports outside of the school and do they have extra supports outside of the school or resources or are they on their own in the classroom” (KS Group B)?

Educators also specified information they needed about the general education context to plan, arrange, and implement supports for students with ID in general education settings. First, educators wanted information about the general education teacher, including their teaching style, dispositions and attitude, knowledge and skills for providing supports to students with ID, and academic and behavioral expectations both generally for all students in their classroom and specific to the student with ID and their supports. They also described the need for information about the classroom environment, including physical arrangement, materials, and the nature of learning activities in the class. For example, one special education teacher said, “From my side, I feel like knowing what your environment is like, having your expectations in your classroom would be good to know” (IL Group B), and her special education colleague added,

I was thinking of . . . fine motor expectations in the classroom, writing, and how the classroom is set up. . . . If we have to change the way the classroom is physically set up, does [the student’s] desk need to be in a public space? Is there enough space for the student to move around the classroom? (IL Group B)

Educators also reported that information about peers in the classroom was important information to inform planning. For example, one participant who was a speech therapist noted,

Are there behaviors of other students in the [general education] classroom? Or are there gonna be other students with special needs in that room as well or will this student [with ID] be the only one? He or she [general education teacher] can give a little more attention to that student or will there be a handful where she kind of has to [juggle]? (IL Group A)

Finally, educators reported that information about the team composition and expectations for each member’s role was needed.

Theme 3: Educators perceived SIS-C assessment information as an important component of comprehensive information needed to plan supports. When provided with a brief overview of the SIS-C, educators indicated that it seemed like a useful tool for gathering supports needs information but only a few participants were already

familiar with the instrument. However, most participants felt that SIS-C results would have limited usefulness to the supports planning process unless the results were accompanied by additional information for each existing section of the instrument. Such information might include a brief interpretation guide describing the meaning of scores and brief descriptions of why a student received a particular score. Additionally, there were topics that were not explicitly represented in the SIS-C for which they felt assessment information would be valuable (e.g., communication, sensory preferences, family information). For example, a speech therapist observed,

There is also no visual type of support [in the rating scale]. So I'm looking at moving around within a school and transitioning and I'm thinking [another teacher's] kids can do it independently when they have the visual [support]. So I'm thinking what type of support would you even put there? Because it's not really monitoring but there is no visual support [in the SIS-C] rating scale. (IL Group A)

Research Question 2. What are the challenges educators encounter in planning, arranging, and implementing supports for students with ID in general education settings? When asked to describe the challenges they encountered in their current supports process, a single theme emerged across the conversation in the six focus groups.

Theme 4: Educators perceived the most common barriers to including students with ID in the general education setting to be related to time, resources, and personnel. First, educators reported multiple challenges associated with time. This included a lack of time for collaborative planning, both within the special education team (e.g., special education teacher with para-professionals) and between the general education teacher and the special education team. For example, one general education teacher said, “We have time to collaborate with other areas in the building, but we do not get planning time with our special needs teachers, ever” (NC Group B). Educators also described ways in which competing responsibilities reduced the time available for planning, arranging, and/or implementing supports. In some instances, educators described the competing responsibilities within

the general education classroom of meeting the disparate needs of all students. In other cases, participants described the time-consuming responsibilities and scheduling challenges of the special education caseload. In one focus group, two special education teachers (SpEd 1 and SpEd2) had this exchange:

SpEd 1: If there's not enough people and there's too many students—not enough people meaning supports, teachers, TAs [teacher assistants] and things like that—and there's an abundance of students in the classroom, that's tremendous barrier for students with any disabilities, but specifically with someone who is intellectual disabled that needs heavy one-on-one instruction.

SpEd 2: You know, I so agree with you, [SpEd 1], I think. I literally go in my room and I literally, not figuratively [think], “Gosh, what am I going to do?” Here I am with 10 kids and a teacher that has 20 plus. To me, it's like here I have these 10 kids but each child is really three and it's adapting and modifying everything for their specific needs. And then you have days that I try to pull out and do as much inclusion as I can, but then if they're at different levels, it's like my one body needs to go here, two needs to go here, one needs to go here, I'm like—

SpEd 1: There's only one of you. (NC Group A)

Another general education teacher summarized the issues of time well, saying,

I think that the biggest challenge is time. We just don't have enough time to differentiate for each kid who needs it and to do everything that we can possibly do, whether that's finding the resources or just spending one-on-one time with them. We just don't have time. (KS Group B)

In addition to these drains on their time, educators discussed how time consuming it can be to identify specific supports for each particular student for each particular content area and grade level. As one general education teacher put it,

Well, the part I struggle with is I think for you guys [special education teachers], you have a spread of students. How can you possibly know

what the big things are to hit in K[indergarten] through 2[nd grade], or whatever grade span you're working with? I mean, [special education teacher's name] can't know the curriculum for Grades 3, 4, and 5 inside and out in order to know what kind of things to have her students focus on. You know what I mean? And I think that's a difficult thing. (IL Group B)

Second, educators identified limited resources as another barrier to the supports process. They identified limited environmental and instructional resources, including, for example, limited physical space in general education settings and minimal "libraries" of modified materials. Some educators indicated that, even when they had developed a set of modified materials, frequent district-mandated curriculum changes necessitated that they abandon these resources and repeatedly begin the work of building these libraries again. They also identified limited personnel as a resource barrier. This was connected to time barriers in that educators described insufficient personnel and competing schedules that prevented the special education teacher from observing the general education setting or having sufficient paraprofessional availability to provide supports. Educators also identified a lack of professional development and training resources as a common barrier (e.g., training in inclusive strategies for identifying effective supports).

Finally, educators cited challenges involving teacher dispositions and roles/expectations. For example, educators described experiences involving negative dispositions from both general and special education teachers toward providing supports in general education classrooms. A special education teacher spoke of the difficulty of working with colleagues with fixed mindsets about the roles and responsibilities of educators in a school, and how rigid understandings of what people's jobs were (and were not) could shape people's fundamental view of teaching and schooling. In response to a member check following the focus group, this educator said,

The statement about "fixed mindset" comes from experiences with teachers who have had a harder time including students with special needs in their classroom. They may not fully understand the purpose of providing accommodations or understanding the "why" behind the accommodations that are being provided. (KS Group A)

Others noted challenges in navigating the variation in buy-in for access to the general education curriculum from a variety of personnel (e.g., administrators, grade-level teams, special education paraprofessionals). Educators also described challenges related to team member roles (whether they chose them or not). This could be connected to fixed, inflexible responsibilities and roles within the school, competing responsibilities that created resistance to supporting a student with ID, and variation in expectations for how a student will access general education settings and who is responsible for what piece of the process. As one special education teacher described,

I notice a difference with even grade levels or things like that when you're with, say I have students that are both in first grade but have different teachers. So, I get completely different [experiences]; one I might get their two-week lesson plans, the other one I have to constantly go in and be asking for those things. So yeah, administrators and really who you're working with, I feel like it can make such a difference of how the student's environment is in there [the general education classroom] and the way the students [with ID] are considered. (IL Group A)

Educators raised additional concerns related to the challenges that arose when planned supports were not implemented and the influence of the "achievement gap" between students on the general education caseload and students with ID. According to a school principal,

The gap, from my perspective, of being able to support what you guys do in the [general education] classroom, the gap is really big and the older they [students] get the gap gets even bigger. If you have a fabulous fourth or fifth grade teacher who's amazing, [but] has never taught younger aged kids and the content there, sometimes that's where this little person [receiving special education services] might be and so they [general education teacher] don't have the skill set. (NC Group A)

Research Question 3. What are educators' attitudes toward using a systematic problem-solving process to plan, arrange, and implement supports for students with ID in general education settings? We shared Thompson et

al.'s (2018) process (Figure 1) for planning supports with the focus group participants and asked for their feedback. Their responses reflected two themes.

Theme 5: Educators were supportive of using a systematic problem-solving process as the basis for planning, arranging, and implementing supports, but had differing opinions about the ways it could be implemented effectively. Educators embraced the concept of using the systematic problem-solving process to guide planning, arranging, and implementing supports in the general education setting that is structured around three questions (*what, how, and where to teach*; see Figure 1). Some educators favored the sequential process shown in Figure 1 that involves planning around a *what-how-where* sequence of the questions. Other educators, however, preferred a more flexible process that would allow team members to address these same questions in any order that was responsive to the present considerations of the team. Take, for example, the following observation from a special educator,

I think you should follow certain strategies that work, which would fall under *How to Teach*, and then fit the content to that. So, if you have a certain type of lesson that really works well with the student, you would use that type of lesson format again. But just change the content as you go through the weeks because, otherwise, you're gonna keep changing, I mean obviously you want to make things diverse but otherwise you're gonna be changing [all the time]. (IL Focus Group A)

Additionally, several educators mentioned the importance of gathering information about the student to develop a student profile as critical to the success of using the planning process.

Educators reported two other factors that would influence the extent to which they embraced the systematic problem-solving process for supports planning. First, educators emphasized the importance of collaborative teaming that involves training of all team members and shared responsibilities in facilitating planning, arranging, and implementing supports. A special educator indicated that “if there's like a real team that's trained in this [process] and facilitates this process,” she would welcome the process shown in Figure 1 (NC Group B). Second, educators indicated they would be more likely to use the

process if team members met on a regular basis throughout the school year to evaluate the effectiveness of supports implementation and adjust strategies accordingly, and if a record of the supports a child had received and their effectiveness followed the child over time. For example, two general education teachers (GenEd 1 and GenEd 2) and two special education teachers (SpEd 1 and SpEd 2) had this exchange:

GenEd 1: [If the supports planning app had] like a “Chad” folder, and things that work well for Chad would go into Chad's folder and then

SpEd 1: Move with him.

GenEd 1: Right.

SpEd 1: For the next year.

Moderator: So student accounts inside this [app that accompanies the supports process] where you kind of have a running record of the things?

GenEd 1: Yeah.

GenEd 2: Different games or activities they've done. That way they're not starting from square one the next year, right?

Moderator: And you can see where they've been and how they've—

SpEd 2: Gives us a better picture. (IL Group B)

Theme 6: To implement a systematic problem-solving process effectively, educators expressed the need for tangible resources and technical assistance. In tandem with their support for a systematic approach to planning, arranging, and implementing supports, educators consistently reported that they would need tangible resources to effectively use the process in their contexts. The focus group moderators explained that there were plans to create a computer interface (an application for a tablet; hereafter, “app”) for guiding educators through the process. The educators were universally enthusiastic about accessing such a resource (e.g., “awesome” [IL Group B], “really useful” [IL Group A], “I'm a big fan of it” [KS Group B], “Wow” [KS Group A]), as long as it was designed to be feasible, useful, and efficient. Several educators suggested creating the app with features that allowed them to input

their own ideas and resources, as well as create student profiles, would facilitate efforts to coordinate supports across multiple grade levels and teachers, and prevent ideas that worked from being forgotten over time.

In addition to this app, educators reported that access to ideas for possible supports and materials for providing effective supports would be essential. They wanted tangible resources (e.g., a checklist of potential adaptations for a unit on plants) not just vague ideas (differentiated instruction). One general education teacher asked,

Do you have videos that I can watch of other teachers doing it [instructional practices], how to do it, resources or books? Or if you say that he needs flashcards, do you have a resource that has those, or just an idea of where I can go to see what is it so that I can make it myself to work for that child? (NC Group B)

In addition to tangible resources, educators asked for technical assistance to implement the systematic problem-solving process (Figure 1), including coaching for themselves and their colleagues. For example, an occupational therapist said they would appreciate watching someone model a support strategy but “then me doing it and have someone watch me and then say, ‘Oh, maybe do it this way differently’ or, you know, that’s helpful, too” (KS Group A). A special educator expressed interest in receiving assistance in bridging the knowledge gap between general and special educators, saying,

[It would be helpful] even just some training kind of one-on-one, . . .and being able to have [researchers] kind of explain to the general education teacher kind of where our programming is coming from and also help us to understand what their instructional programming is. (KS Group A)

Another special educator requested support for paraprofessionals (i.e., “TAs”), explaining,

As special education teachers, we’re not the one going into the gen ed. We’re not the ones thinking on the fly. We’re not the ones who are implementing that stuff [supports] inside the gen ed classroom. . . . So, I really think taking the *What to Teach* and then *How to Teach* and putting it into a “How to Teach for

Dummies” book and giving it and providing supports to the people who are actually in there. . . because I can’t be there to tell them what to do. . . .And so, trying to cut out that frustration for both the TAs and the gen ed teacher. I just think that having an idea for us to say, “Here’s some really good modifications.” (IL Group B)

One special education teacher indicated the importance of professional development delivered by the research project staff stating, “They [general education teachers] would not have as much experience with some of the other things. So I think maybe more coaching for your general education teachers, so that they are more familiar with it” (NC Group B). When discussing how project staff could help adapt a unit of Greek mythology, a general education teacher stated, “I just know 6th grade, and then it would [be] helpful to find that one piece that would be beneficial [to a student with ID], and then how would we adapt it so that they’re getting that information” (KS Group B).

Discussion

Most of the educators in our focus groups were either engaged in planning supports for students with ID in general education classrooms or had some prior experience with which to draw upon. The few with limited or no direct experience had to rely on their impressions of what was happening in their schools in terms of supports planning. The picture that was collectively painted by the focus group participants was one where educators of all stripes relied on informal practices to identify, arrange, and implement supports for students with ID in general education classrooms. Their efforts seemed to be more focused on assuring a student’s participation was manageable for everyone involved, rather than proactively considering specific resources and strategies that could enhance student participation. Educators were very open to using a systematic problem-solving process as a means to plan and deliver effective supports for students, but stressed that the process must be time-efficient and lead to better outcomes (e.g., better materials for students in classrooms, increased student learning).

The qualitative research method we used in this study encourages that, rather than asserting that any specific knowledge claims emerging from

our analysis can be generalized to other school settings, our findings be considered through a lens of transferability (Lincoln & Guba, 1985). The consistency in themes across the six schools, the variety of educators involved in our focus groups, the transparency of our approach to conducting the focus groups (e.g., we asked very straightforward questions), and our thick, detailed descriptions of the themes that emerged gives us confidence that readers will find many ways to transfer these themes to the variety of school contexts in which they are familiar. The themes that emerged from our data were not surprising to us, but we came away with a far richer understanding of (a) the dispositions and skills educators bring to the task of planning, arranging, and implementing supports in classrooms; (b) the challenges and barriers they encounter as they strive to include more children with ID in general education classrooms; and (c) what they perceive to be their greatest needs in terms of information and professional development to move inclusive education forward in their schools.

This research project was the first phase of research in a larger project involving educators' use of results from a standardized supports needs assessment (i.e., the SIS-C) within a systematic problem-solving process to support students with ID in general education classrooms. From the focus groups, we learned much to inform how we will work with educators as we implement the broader project in the six schools over the next several years. We believe that others who are involved in expanding inclusive educational opportunities at the school and classroom level, whether they be internal or external to a school district, can benefit from the findings of this research.

Comprehensive, Manageable, Actionable Information Needed

Educators considered the assessment of student support needs (i.e., results from the SIS-C assessment) to be a valuable and logical component of a supports planning process. Their impressions of the SIS-C aligned with its purpose. The SIS-C was developed specifically to measure support needs (as opposed to measuring deficits, as is the case for most standardized assessments used in the field of special education) of school-aged children and inform supports planning for environments specific to childhood, including

school learning and school participation (Thompson et al., 2016).

Despite a positive response to the SIS-C, educators indicated that additional information beyond that which was provided through SIS-C scores/results was needed. Specifically, they wanted information related to both student characteristics and the general education context to provide a *profile of student support needs*. For example, in addition to SIS-C results, educators wanted information about (a) student strengths and specific competencies, (b) previous and current supports that had worked, (c) the grade-level curriculum being taught in the general education classroom, and (d) the activities and resources in the general education classroom. Moreover, they saw a need for multiple sources of information to be integrated in a logical and accessible way. Developing a student profile report that synthesizes information from multiple sources in a way that is relevant to the needs of educators engaged in supports planning is a critical charge for our project.

Across the focus groups, educators acknowledged the importance of adjusting educational environments to be more accessible and welcoming to students with ID and providing individualized supports that increase the engagement of students in classroom learning activities. Thus, educators clearly embraced a social-ecological approach to understanding disability (Wehmeyer et al., 2008). In contrast, there was little evidence that focus group participants embraced what Kurth et al. (2018) described as a *readiness approach*, where inclusion opportunities are denied up until students demonstrate they are perceived as sufficiently prepared to independently function within a classroom and benefit from general education instruction. Our focus group participants were committed to supporting students with ID in general education classrooms. However, they felt their efforts would be more successful if they had better access to quality resources and technical assistance.

Barrier-Busting Strategies Needed

As mentioned previously, educators were not using a systematic problem-solving approach to supports planning and implementation in their schools. Focus group members valued the concept of employing the systematic approach in Figure 1 to plan and implement supports, but they mentioned barriers that could interfere with such a process. The barriers they mentioned offer

insight as to why systematic approaches to planning supports are not in place in schools, and also suggest factors that must be addressed for any such approach to be sustainable.

It did not surprise us that educators across all focus groups reported that the lack of time was one of the biggest barriers to including students with ID in general education classrooms. This finding was consistent with findings from previous literature that indicated over half of elementary educators believe inclusion takes too much planning time and schools do not have the resources to effectively implement inclusive practices (Hammond & Ingalls, 2003). Both time for collaboration and time to figure out instructional differentiation were specifically noted as significant barriers by the educators in our focus groups.

Implementing the systematic process (see Figure 1) shared in the focus groups will need to be time-efficient for it to be perceived as feasible by educators. By time-efficient, we mean that educators who engage in it will perceive it to be a good use of their valuable time because it yields positive results and prevents wasted time (e.g., spinning wheels, investing time and energy into supports that are not effective). Great difficulty in implementing a professional practice with fidelity (due to a lack of time or other factors) is a sure sign that a practice is not feasible. Poor feasibility is a leading explanation for the research-to-practice gap that has persisted in special education for multiple decades (Cook & Odom, 2013).

The other barriers identified during the focus groups were directed towards resources and personnel. Many educators were not confident that they had sufficient knowledge and professional development to do a good job of planning and implementing supports. They wanted resources and technical assistance on multiple topics, among which the most prominent was how to adapt curriculum that is presented in the general classroom so that content is meaningful to all learners. Moreover, educators noted that they still encounter challenges from administrators, teachers, and paraprofessionals in terms of “buy-in” on the issue of inclusive education. Simply put, although our focus group participants supported expanding inclusive education opportunities, all of them perceived that they had colleagues with negative outlooks on educating students with ID in general education classrooms.

Focus group participants suggested that using a systematic problem-solving approach could help

address this dispositional barrier because it would focus people’s attention on the task of figuring out how to include students with ID in general education classrooms. Moving discussions away from “Why are we doing this?” to “Let’s get busy and do this” may result in greater buy in from hesitant colleagues. A building principal summed things up well when speaking about the time and effort that has been expended over years trying to convince educators to include children with disabilities, and how the outcomes of such discussions are often dependent on personal factors (e.g., Is someone stubborn or are they prone to acquiesce? Is an early career teacher, who is trying to establish themselves in a new job, reluctant to challenge the assumptions of a veteran teacher who is well-established within a school and district?). The principal suggested that a systematic problem-solving process “takes the personal out. We’re doing this! Not, ‘Well it’s me, and I don’t have that skill.’” (KS Group A)

Focus group participants were optimistic that a computer interface could help with efficiency and, therefore, feasibility of using the process. They readily envisioned how such an app might best work to support their efforts. Specifically, they wanted the app to (a) promote collaboration, (b) be user friendly, (c) provide ideas for resources, and (d) have the capacity to produce a product in the form of a report or plan. In terms of *promoting collaboration*, focus group participants wanted multiple educators (e.g., general education teacher, special education teacher) to access the interface and provide their input, similar to how Google Docs enables people to collaborate online in a text-based document. In regard to *user friendliness*, educators were frank that a clunky system that takes a long time to figure out and/or does not always work would be poorly received. In terms of *resources*, focus group participants mentioned how useful it would be to access a bank of resources for suggestions for evidence-based instructional practices and supports, including checklists and worksheets embedded within the app, or links to online resources. Finally, the idea of the option to print out and/or review a tangible support plan was viewed as highly desirable. Some type of documentation of what the planning team decided and what needs to be done by whom was needed. If an app that could do all of these things was available, the focus group participants believed it would address many of the most

important barriers to implementing a systematic problem-solving process for supports planning.

Limitations

Findings from this investigation need to be considered in light of several limitations. First, the composition of the focus group was overwhelmingly (72%) comprised of White, non-Hispanic women. Although this lack of diversity is concerning, it mirrors the lack of diversity in the teaching profession. In 2015–2016, 76.6% of public school teachers were female and 80.1% were White-not Hispanic (National Center for Educational Statistics, n.d.). Nevertheless, findings could have been different if the racial, gender, and ethnic composition of the educators was more diverse. Second, no pretense is made that the school districts employing the focus group participants were representative of all schools in the United States. There were no schools from large city school districts. Although the three of the four suburban schools were in relatively densely populated areas with very diverse student populations, they were not within the boundaries of large cities. The two schools in mid-sized cities had student populations from relatively affluent and mostly White homes, and they do not mirror the demographics found in schools in rural areas. Our findings might have been different had teachers from a wider diversity of schools participated. In addition, the schools from which we recruited had already indicated a willingness to participate in the larger research project focused on inclusive education for students with ID. Recruiting from schools where such interest did not already exist may have produced different findings.

A third limitation was the time limit (1 hour) for the focus group interviews. The actual recording times ($M = 53 \text{ min } 01 \text{ s}$) reflects the time it took get organized (wait for all to arrive, sign consent forms, etc.) prior to beginning the focus group. We were sensitive to people's 1-hour commitment, and we did not want to go over the time frame. Because we also wanted to get through the entire focus group script (which we did in each case), there were instances of moderators ending discussions and announcing that it was time to move forward in every focus group. Additional insights could have been gathered had we extended the length of the focus groups, and this was especially true for the discussion of SIS-C results. The moderators felt educators had more

input to offer about the SIS-C and the direct assessment of support needs, and additional discussion about the SIS-C could have led to a richer data set.

The final limitation is that we did not ask about the relationship between supplementary aids and services that are required on a student's IEP and supports provided in general education classrooms. Among the most important requirements of federal law is that the IEP team must specify the *supplementary aids and services* that are to be provided to support a student's education in the LRE (IDEA, 2004). There should be a direct correspondence between identifying and arranging supports and the supplementary aids and services listed on the IEP, and educator insights into how this correspondence is manifested in their schools would have been enlightening. We elected not to introduce the topic of IEPs, however, due to the finite time we had to conduct the focus group and the array of topics we wanted to cover.

Conclusion

Planning, arranging, and implementing effective and feasible supports for students with ID to access the general education curriculum and setting is an essential piece of ensuring high-quality education for all students. Through six focus groups with educators, we gained new insights into (a) how educators are currently planning and implementing supports, (b) the barriers and challenges they face in this process, and (c) their ideas for how to use tools like the SIS-C and the proposed supports planning process to improve the efficiency and effectiveness of their efforts. The themes we present from these focus groups offer guidance for the ongoing work of developing and implementing tools for educators to use to build more inclusive schools.

References

- American Association on Intellectual and Developmental Disabilities. (2018). *Education: Joint Position Statement of AAIDD and The Arc*. Retrieved from <https://aidd.org/news-policy/policy/position-statements/education>
- Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbook of research methods in psychology, Vol. 2. Research designs: Quantitative, qualitative, neuropsychological, and biological* (pp. 57–71).

- Washington, DC: American Psychological Association. doi:10.1037/13620-004
- Browder, D. M., Hudson, M. E., & Wood, L. (2013). Teaching students with moderate intellectual disability who are emergent readers to comprehend passages of text. *Exceptionality, 21*, 191–206. doi: 10.1080/09362835.2013.802236
- Cole, C. M., Waldron, N., & Majd, M. (2004). Academic progress of students across inclusive and traditional settings. *Mental Retardation: A Journal of Practices, Policy and Perspectives, 42*, 136–144.
- Cook, B., & Odom, S. L. (2013). Evidence-based practices and implementation science in special education. *Exceptional Children, 79*, 135–144. doi: 10.1177/001440291307900201
- Deno, E. (1970). Special education as developmental capital. *Exceptional Children, 37*, 229–237. doi: 10.1177/001440297003700306
- Giangreco, M. F., Suter, J. C., & Hurley, S. M. (2013). Revisiting personnel utilization in inclusion-oriented schools. *The Journal of Special Education, 47*, 121–132. doi:10.1177/0022466911419015
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory*. Chicago, IL: Aldine.
- Hammond, H., & Ingalls, L. (2003). Teacher's attitudes toward inclusion: Survey results from elementary teachers in three southwestern rural school districts. *Rural Special Education Quarterly, 22*, 24–30.
- Individuals With Disabilities Education Improvement Act, 20 U.S.C. § 1400 (2004).
- Kavale, K. A., & Forness, S. R. (2000). History, rhetoric, and reality: Analysis of the inclusion debate. *Remedial and Special Education, 21*, 279–276. doi:10.1177/074193250002100505
- Krueger, R. A., & Casey, M. A. (2015). *Focus groups: A practical guide for applied research* (5th ed.). Thousand Oaks, CA: Sage.
- Kurth, J. A., Miller, A. L., Towes, S. G., Thompson, J. R., Cortés, M., Dahal, M. H., . . . Wangare, F. (2018). Inclusive education: Perspectives on implementation and practice from international experts. *Intellectual and Developmental Disabilities, 56*, 471–485. doi: 10.1352/1934-9556-56.6.471
- Lakin, K. C., & Stancliffe, R. J. (2007). Residential supports for persons with intellectual and developmental disabilities. *Mental Retardation and Developmental Disabilities Research Reviews, 13*, 151–159. doi: 10.1002/mrdd.20148
- Lincoln, Y.S., & Guba, E. G. (1985). Establishing trustworthiness. In Y. S. Lincoln & E. G. Guba (Eds.), *Naturalistic inquiry* (pp. 289–332). Newbury Park, CA: Sage.
- Matzen, K., Ryndak, D., & Nakao, T. (2010). Middle school teams increasing access to general education for students with significant disabilities: Issues encountered and observations across contexts. *Remedial and Special Education, 31*, 287–304. doi: 10.1177/0741932508327457
- McDonnell, J., & Hunt, P. (2014). Inclusive education and meaningful school outcomes. In M. Agran, F. Brown, C. Hughes, C. Quirk, & D. Ryndak (Eds.), *Equity and full participation for individuals with severe disabilities: A vision for the future* (pp. 155–176). Baltimore, MD: Paul H. Brookes.
- National Council on Disability. (2018). *IDEA Series: The segregation of students with disabilities*. Washington, DC: Author. Retrieved from https://ncd.gov/sites/default/files/NCD_Segregation-SWD_508.pdf
- National Center on Educational Statistics. (n.d.). *Digest of educational statistics*. Washington, DC: Author. Retrieved from https://nces.ed.gov/programs/digest/d17/tables/dt17_209.10.asp?current=yes
- Roach, A., & Elliott, S. (2006). The influence of access to general education curriculum on alternate assessment performance of students with significant cognitive disabilities. *Educational Evaluation and Policy Analysis, 28*, 181–194. <https://doi.org/10.3102/01623737028002181>
- Spooner, F., Saunders, A., Root, J., & Brosh, C. (2017). Promoting access to common core mathematics for students with severe disabilities through mathematical problem solving. *Research and Practice for Persons with Severe Disabilities*. Advance online publication. doi:10.1177/1540796917697119
- Taylor, S. J. (1998). Caught in the continuum: A critical analysis of the principle of least restrictive environment. *Research and Practice for Persons with Severe Disabilities, 13*, 41–53. <https://doi.org/10.2511/rpsd.29.4.218>
- Thompson, J. R., Bradley, V., Buntinx, W. H. E., Schalock, R. L., Shogran, K. A., Snell, M. E., . . . Yeager, M. H. (2009). Conceptualizing supports and the support needs of people with intellectual disability. *Intellectual and Developmental Disabilities, 47*, 135–146. doi:10.1352/1934-9556-47.2.135

- Thompson, J. R., Walker, V. L., Shogren, K. A., & Wehmeyer, M. L. (2018). Expanding inclusive educational opportunities for students with significant cognitive disabilities through personalized supports. *Intellectual and Developmental Disabilities, 56*, 396–411. doi:10.1352/1934-9556.56.6.396
- Thompson, J. R., Wehmeyer, M. L., Hughes, C., Shogren, K. A., Little, T. D., Copeland, S. R., . . . Tassé, M. J. (2016). *Supports Intensity Scale—Children’s version: User’s Manual*. Washington, DC: American Association on Intellectual and Developmental Disabilities.
- U.S. Department of Education. (2018). *Individuals with Disabilities Education Act: To assure a free appropriate public education of all children with disabilities: 40th annual report to Congress on the implementation of the Individuals with Disabilities Education Act*. Washington, DC: Author. Retrieved from <https://www2.ed.gov/about/reports/annual/osep/2018/parts-b-c/40th-arc-for-idea.pdf>
- Vaughn, S., Schumm, J. S., & Sinagub, J. M. (1996). *Focus group interviews in education and psychology*. Thousand Oaks, CA: Sage.
- Wagner, M., Newman, L., Cameto, R., Levine, P., & Garza, N. (2006). *An overview of findings from Wave 2 of the National Longitudinal Transition Study-2 (NLTS2)*. (NCSER 2006-3004). Menlo Park, CA: SRI International. Retrieved from www.nlts2.org/reports/2006_08/nlts2_report_2006_08_complete.pdf
- Wehmeyer, M. L., Buntinx, W. H. E., Lachapelle, Y., Luckasson, R. A., Schalock, R. L., Verdugo, M. A. . . . Yeager, M. H. (2008). The intellectual disability construct and its relation to human functioning. *Intellectual and Developmental Disabilities, 46*, 311–318. doi:10.1352/2008.46:311–318
- Wehmeyer, M. L., Lattin, D. L., Lapp-Rincker, G., & Agran, M. (2003). Access to the general curriculum of middle school students with mental retardation: An observational study. *Remedial and Special Education, 24*, 262–272. doi: 10.177/07419325030240050201
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