Assessment and Planning in K-12 Schools: A Social-Ecological Approach

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Abstract

The Support Needs Assessment and Problem-Solving (SNAP) process is intended to assist educational teams in identifying and implementing supports for children with intellectual disability and related developmental disabilities (ID/DD) in K-12 schools. Each phase of the SNAP process is described, including identification of high priority support needs based on information derived from the Supports Intensity Scale–Children's Version (SIS-C). Two case studies of school teams using the SNAP process to identify and implement supports that enhanced opportunities for learning and participation of children in inclusive settings are presented. The importance of understanding children with ID/DD by their support needs and implications for team planning in K-12 schools are discussed.

 Key Words: *Support Needs Assessment and Planning; intellectual disability; autism; special education*

"What is your philosophy of education?" College students in teacher preparation programs have been writing essays in response to this question for many years. One of the authors of this article actually had a school principal ask this question, verbatim, at a job interview. It is the rare teacher candidate who can provide an eloquent answer upon first being asked. However, most educators will acknowledge the value in thoughtfully considering how to respond. Responding to this question forces one to reflect on the primary purpose for teaching, learning, and schooling. Educators who neglect to reflect on what they are trying to accomplish run the risk of engaging in activities that may not be directed toward any particular result, and would be wise to heed the words of the great New York Yankee catcher, Yogi Berra, who said, "If you don't know where you are going, you will end up someplace else" (Goodreads, 2014).

Philosophies of education differ. Some believe the primary job of teachers is to ensure their students learn facts and acquire information about specific content areas. This philosophy would seem to underlie today's practice of regularly administering standardized achievement tests.

However, others argue that teachers should focus efforts on developing their students' critical thinking skills, and critics point out that most standardized tests are not good measures of such skills (see Reese, 2013). Many contend that education should be a means to promote social justice (see Ayers, Hunt, & Quinn, 1998), while still others contend that schools should be preparing students for specific and productive roles in adult society (see Conley, 2002). These four examples of "teaching philosophies" only scratch the surface of potential purposes for teachers and schools, and they are not mutually exclusive. It is likely that most educators would agree that schools have many legitimate purposes. However, differences in teaching philosophy often come down to differences in belief regarding the relative priority that various goals merit at different stages of a child's education.

Values, professional preparation, and years of experience in the classroom are among the factors influencing an educator's teaching philosophy. There would surely be near universal agreement, however, that *effective teaching results in students acquiring new and enhanced skills*. To the vast majority of educators and the general public, it

is self-evident that students should possess additional skills following instruction that they did not have prior to instruction. Whether the new skills be academic (e.g., third-graders read better in January after a semester of reading instruction than they did at the start of the school year), social (e.g., the classroom behavior of the 7th-grade class improved after classroom management procedures were implemented), or motor (senior high school students run a mile faster after completing a personal fitness class), the extent to which students display new or enhanced skills is foundational to any evaluation of instructional quality.

It is logically impossible to target new skills for instruction without first identifying areas of limitations. Documenting student learning and student growth requires evidence that specific learning deficits have been eradicated. Moreover, learning deficits are inexhaustible. Old learning deficits are replaced by new learning deficits because learning is sequential. The development of every new competency brings forth another learning frontier (i.e., a new learning deficit to address). Children at the end of second grade are not expected to have completely mastered all arithmetic computations (i.e., addition, subtraction, multiplication, division). Therefore, a typically developing child who has not completely mastered arithmetic computations at the conclusion of second grade is hardly unusual, and the child's lack of mastery would not be considered a learning deficit in a norm-referenced sense. However, any lack of mastery in any subject is a learning deficit in a criterion-referenced sense. Even the very rare, precocious child who can successfully solve algebraic equations problems in second grade has a "math deficit" as long as there is something new (e.g., Calculus) the child has not yet learned.

Social-Ecological Understanding of ID/DD in Children and Adults

Norm-Referenced and Criterion-Referenced Deficits

Understanding what is meant by *deficits* is important because in recent years there has been much attention paid to understanding people with intellectual disability by their support needs instead of their deficits. The social-ecological approach to understanding people with disabilities has been advocated by the World Health Organi-

zation (2001) and the American Association for Intellectual and Developmental Disabilities (Schalock et al., 2010). Thompson (2013) captured the essence of understanding intellectual disability through a social-ecological lens when he wrote:

> Intellectual disability is best understood in terms of the fit between personal competency and the demands of community environments. Understanding people this way focuses professional efforts on modifying the context by either changing the environment, such as is accomplished through universal design, or introducing personalized supports. One important type of support is teaching new skills. (p. 516)

Deficits, or limitations, or "areas to target for growth"–whatever terminology one chooses to use–whether norm referenced or criterion referenced, are not denied or dismissed by proponents of understanding disability conditions through a social-ecological lens. However, the response of those taking a social-ecological perspective is not to fix the person by eradicating the deficits, but rather to provide supports that address the manifestations of those deficits. Namely, the mismatch (or the discrepancy) between what the person is able to do and what the environment requires for meaningful participation. From a social-ecological perspective, the purpose of supports is to empower a person to participate more fully in the same settings and activities that the general population accesses and values. Teaching new skills is one type of support. However, it bears repeating that supports are *not* intended to fix the person; rather, the purpose of supports is to fix the person-environment mismatch.

Support Needs Assessments for Adults

The importance of a social-ecological approach to understanding and supporting people with intellectual and developmental disabilities (ID/DD) has received far more attention in professional literature and in professional practice focusing on adults compared to the professional literature focusing on children and special education. There are several plausible reasons why this has been the case. First, there have been several assessment tools introduced over the past 10–15 years to evaluate the support needs of adults with intellectual disability. These include the North Carolina Support Needs Assessment Profile (NC-SNAP;

Hennike, Myers, Realon, & Thompson, 2006), the Instrument for Classification and Assessment of Support Needs (I-CAN; Riches, Parmenter, Llewellyn, Hinmarsh, & Chan, 2009), the Service Needs Assessment Profile (Guscia, Harries, Kirby, Nettelbeck, & Taplin, 2005) and the Supports Intensity Scale–Adult version (SIS-A; Thompson et al., 2004). Progress in any field is often related to advances in measuring key constructs of interest. The availability of valid and reliable measures of support needs has possibly served to stimulate interest in understanding adults with ID/DD by their needs for extra support (i.e., understanding people through a social-ecological lens). Until the Thompson et al. (2014) article in this volume, however, there have not been any psychometric findings published in regard to support needs assessment scales developed specifically for use with children.

Laws and Funding

A second possible reason why the social-ecological approach to understanding individuals with ID/DD has gained more traction in the adult ID/DD professional literature and practice may be due to differences in the laws and funding streams related to schools and adult services. Although laws differ internationally, public policy in the United States is starkly different for children and adults. The last major revision of the federal special education law, the Individuals With Disabilities Education Act (IDEA), was in 2006. Like its predecessors, a cornerstone of the IDEA is the provision of a free and appropriate public education (FAPE) for every child qualifying for special education services. Thus, there is a legal mandate to provide special education and related services at public expense. State and local public education systems are required to fund any service that is identified in a child's individualized educational program (IEP). If a service and associated cost is identified in the IEP, public school districts must pay for the service, even if providing the service necessitates drawing funds from other areas of education.

In contrast, federal law does not mandate services to adults with ID/DD. Adults with ID/DD may be eligible to receive adult services and financial resources, but they are not necessarily entitled to either. Many adults are placed on waiting lists for services because there is insufficient funding in state budgets to serve all individuals who require services (Braddock et al., 2013). A discussion of the intricacies of funding streams for adults with ID/DD is well beyond the scope of this article. It is sufficient to note, however, that there are some adults and their families who negotiate individual budgets with state agencies, others who receive services through adult provider organizations that bill states for the services that are rendered, and some people, still, who are served through state-operated institutions (see Hoff, 2001). Although the diverse funding streams are confusing and the large number of adults on waiting lists for services (Braddock et al., 2013) is truly shameful, the reality of having multiple avenues for funding has resulted in great flexibility in the way resources are allocated and spent at the adult level (in some cases). Unlike school-based services that are funded if specified on the IEP, adult services that address an individual's unique needs and circumstances are, at times, funded through processes that provide people with considerable flexibility. These situations in which such flexibility exists have promoted more thoughtful consideration of different intensities of support needs and, therefore, have encouraged a social-ecological understanding of adults with ID/DD in a manner that is rarely found in schools.

Planning Processes

In our view, however, the biggest factor in more widespread engagement in a social-ecological understanding of ID/DD among those concerned primarily with adults compared to those concerned primarily with children is the focus and nature of team planning activities. Although adult service provider organizations and adult services differ greatly across the United States, and across the world for that matter, and even differ greatly within the same community, there is relatively widespread consensus that best practices in adult services are characterized by person-centered planning activities whereby team members focus energy on ways in which to support people with ID/DD that promote a high quality of life. In the adult world of ID/DD, most professionals have no difficulty understanding that supports are a means to an end. Supports provide avenues to reach desired personal outcomes and include actions such as environmental modifications, physical assistance from another person, assistive technology, and teaching new skills.

In schools, however, there is a different tradition. The planning document used by school teams is the IEP. By law, the IEP must include

annual goals (i.e., what the child will learn) and how progress on those goals will be measured. The tradition is to state goals behaviorally (i.e., operationally define exactly what is going to be learned) and focus resources, both financial and human, toward ensuring the outcomes associated with each goal are achieved. Although support to *achieve goals* can certainly be related to support needed to address the mismatch between a child's competency in the school setting and the environmental demands of the school, a focus on achieving relatively narrow goals can also distract planning team members from addressing the person-environment fit that lies at the heart of the social-ecological understanding of disability. For example, a focus on reaching a reading goal may lead to a series of reasonable academic interventions. However, if a planning team is not careful, it may also direct attention away from the supports a child needs to fully participate in classroom activities. In such a scenario, without proper supports available in the general education classroom, the reading instruction that occurs during class time may be of very limited value to a student. Consider the case of a student who lacks prerequisite vocabulary to access the content of a chapter book. Unless support, such as picture cues, is provided, participation in the general education classroom may ultimately have an undesirable effect on the student's reading achievement. This could occur if the student feels alienated from the classroom reading instruction and, therefore, does not develop an interest in reading and finds reading instruction in the general education classroom to be irrelevant.

Although the achievement focus of the IEP may be an obstacle to understanding children with ID/DD from a social-ecological perspective, there are certainly other aspects of the IEP process that would appear to encourage social-ecological perspectives of children. For instance, IDEA calls for special education, related services, and supplementary aids and services to be provided, including program modifications or supports for school staff. The IEP team members should consider supports that address any person-environment mismatches. Also, the law requires that the IEP include an explanation of the extent (if any) to which a child will not participate with children without disabilities in the regular classroom. Such an explanation should document that the IEP team (a) carefully considered "in-class" supports that would enable a child to

remain in a classroom and profit from instruction and (b) provided a rationale for deeming such supports to be unsatisfactory such that removing the child from the general education setting is justified. Finally, the law requires identifying any assistive technology (AT) devices and services a child needs. The AT devices are tools that enable better performance and, therefore, are a unique class of supports.

Working With Schools

Whatever the reasons might be, it is clear that most school IEP teams need to be encouraged to consider children with whom they work through a social-ecological lens so that personalized supports can be identified and put into place. For the past several months, we have consulted with classroom teams of children with ID/DD in two different parts of the United States. These consultations continued as of April 2014, when this article was going to print. One team was based in an elementary school in a rural setting in a Midwestern state. The other was based in a large city in the Northeastern portion of the United States.

The classroom teams were comprised of children's case managers, special education teachers, general education teachers, support services staff, and paraprofessionals. Although parents and students were certainly aware of the project and provided input by way of the school staff, we focused our consultation efforts on the team of educators who worked directly with the children during the school day. In each setting, our consultation activities followed a structured process, which we named the Support Needs Assessment and Problem-Solving (SNAP) process (see Figure 1).

The SNAP process is characterized by the following activities: (a) observing target children with ID/DD in school settings to become familiar with classroom routines and build rapport with classroom teams; (b) administrating the Supports Intensity Scale–Children's Version (SIS-C; Thompson et al., 2013) to provide a measure of the children's support needs across all life domains; (c) engaging classroom teams in a review of SIS-C results and a problem-solving process to improve supports for target children (see Table 1 for the questions guiding this process), (d) providing professional development and guidance to classroom teams as new support plan strategies
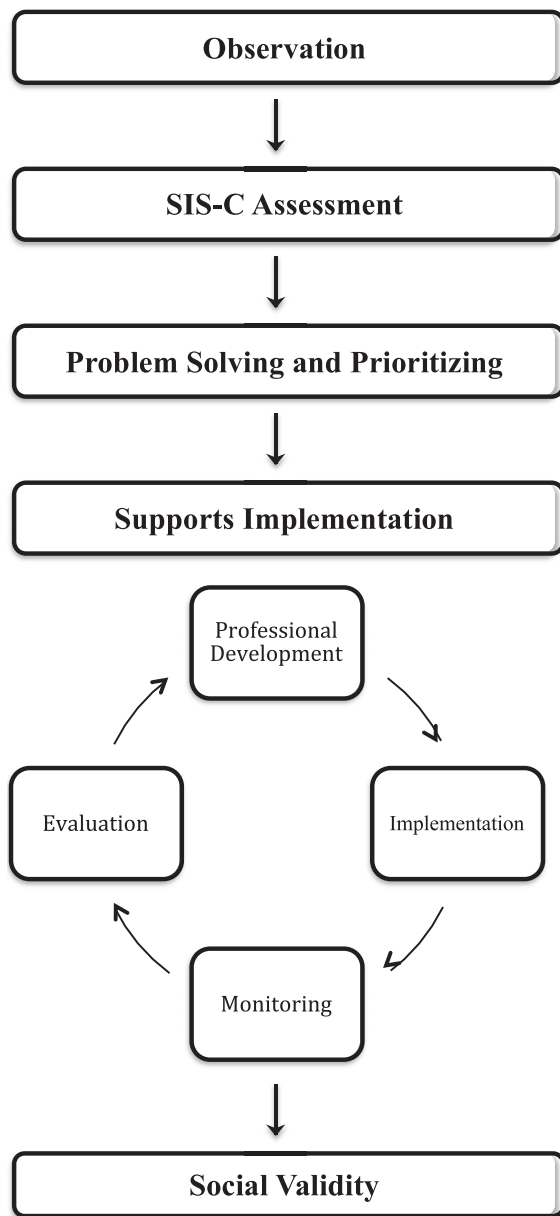
Observation

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SIS-C Assessment

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Problem Solving and Prioritizing

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Supports Implementation

Professional Development

Implementation

Monitoring

Evaluation

↓

Social Validity

Figure 1. SNAP consultation process.

are implemented, and, finally, (e) interviewing classroom teams to assess the social validity of the SNAP process after professional development and guidance are faded. Our application of the SNAP process to both classroom teams is described in greater detail in the following sections.

Rural Midwest

Observation. Jason and Neil were both 5-year-old White males attending an elementary school in a rural district in a Midwestern state.

Student enrollment at their elementary school was 398 (81% White, 19% other ethnicities). Both children showed evidence of intellectual disability, and both were diagnosed on the autism spectrum. Jason and Neil had a limited communication repertoire of repetitive phrases (e.g., "I say no," "Need help," "Uh huh.") and primarily relied on these repetitive phrases, unintelligible vocalizations, and challenging behavior to communicate. Although the Picture Exchange Communication System (PECS; Bondy & Frost, 1993, 1994) had been introduced to both children at the beginning of the school year, their use of this communication system was quite limited. Both children socially engaged with classroom team members through nonvocal behavior (e.g., touching teacher's cheek, smiling at adults, sharing artwork with teacher). However, social interactions with peers were observed less often; Neil and Jason had not developed friendships with or attachments to peers and rarely initiated or responded to peer interactions. Each child had specialized interests including alphabet letters, music, small toys, and trinkets (Jason); and print activities (e.g., naming letters in story books and on a word wall, counting and naming numbers on class number line), art-based activities, and buttons (Neil). Both Jason and Neil displayed challenging behaviors that were of concern to school staff and their parents. Jason's behaviors were less severe and included grabbing adults and pushing his lower abdominal area, both of which were considered by the classroom team to be distracting (low priority) and performed to access sensory input. Neil's behaviors, on the other hand, were considered more severe (high priority) and included nonparticipation, loud vocalizations, spitting, aggression, and elopement. Classroom teams hypothesized that these behaviors were performed to escape an undesired activity, gain access to a desired activity, and/or receive adult attention.

Jason and Neil received instruction alongside their typically developing peers in the general education kindergarten classroom and other inclusive settings for what the school team identified as "specials" (e.g., art, music, physical education), snack time, and centers; they spent the remainder of their day in a cross-categorical special education classroom that included a heterogeneous mix of students (i.e., various disabilities, diverse support needs, differing skill levels). A paraprofessional accompanied the children to the general education classroom and typically provided extensive

Table 1
Classroom Team Discussion and Problem-Solving Guide for Review of Support Needs

	Question
1	What portions of the child's school day do you feel he/she has the greatest level of participation/engagement with activities associated with the General Education Curriculum? Why?
2	What portions of the child's school day do you feel he/she has the least level of participation/engagement with activities associated with the General Education Curriculum? What are some of the key obstacles and/or barriers?
3	Are there ways to support the child that are being used in #1 (above) that could be applied to #2 (above)?
4	Are there certain activities or times of the day that you feel the child is "undersupported"? These are times and activities where the child could participate more fully and be more engaged if additional support was provided.
5	Are there certain activities or times of the day that you feel the child is "oversupported" or perhaps is receiving the wrong kinds of support? These are times when the support—although well-meaning—is perhaps getting in the way of a child fully participating.
6	Look over the results of the SIS-C. Can you identify 3 things that you feel most helped you better understand the child by his or her support needs? These can either be things that you had not considered before, new things you learned, or things of which you were aware but the scale reinforced their importance.
7	Which of the "evidence-based" strategies provided in the summary appears to be the most promising? In what activities would you see this being implemented?
8	Are there other types of support strategies that are not listed that you feel should be considered for implementation? If so, please describe and suggest the activities you see them being implemented.
9	As a part of this project, we would like for every educational team to identify 1 to 3 support priorities for implementation during the next 4 to 6 weeks. We are available to assist in any way, through consultation, material preparation—whatever you'd like, we are at your service! Can you identify 1–3 priorities?
10	Do you have any questions?

support across all activities. When in the general education classroom, Jason and Neil completed work in relatively close proximity to their typically developing peers. Their work, however, was individualized and, therefore, their participation was more "parallel" than interactive. Unlike their peers who were assigned to a particular center activity and later rotated to different centers during the class session and throughout the week, Jason and Neil selected a preferred center activity and individually engaged in the activity under the supervision of a paraprofessional. Observations revealed that Jason tended to play with a dinosaur set or dollhouse during center activities. During this time, interaction with peers was minimal and the educators who were present (i.e., paraprofessional, general education teacher) did little to facilitate engagement. Neil typically selected

drawing activities during center activities. He occasionally engaged his peers to share his artwork and these interactions were brief, but positive.

When in the cross-categorical classroom, Jason and Neil spent most of their time in small groups receiving instruction in academic skill areas (e.g., beginning reading, math). They also spent some time each day completing work system tasks within an area of the classroom separated by dividers; the format of such tasks was similar to that of the "structured teaching" Training and Education or Autistic and Related Communication Handicapped Children (TEACCH) approach (see Mesibov, Shea, & Scholper, 2004). Other activities with students in the cross-categorical special education classroom included a group story time, recess, and adaptive physical education.

SIS-C assessment. After conducting several initial observations, we administered the SIS-C and met with the classroom team to discuss the results and to learn of their concerns and ideas for additional supports each child may have needed. A summary of results from two subscales of the SIS-C that focus on school learning and school participation are shown in Table 2. However, it should be noted that we reviewed the entire SIS-C assessment and considered findings across all subscales. High priority support need areas and potential support plan strategies were discussed with the educators. As Table 2 illustrates, Neil required frequent and intrusive assistance (e.g., physical prompting) from classroom team members to complete academic tasks and participate during instructional sessions. Jason's results showed somewhat less intense support needs, but he still required considerable assistance.

As we discussed the assessment of the support needs of the two children, the school team reiterated their commitment to ensuring that Neil and Jason had inclusive educational opportunities. There was consensus among the educators (and also among the children's parents) that Jason and Neil's behavior, communication, and lack of basal academic skills were barriers to their ability to profit from additional instruction in the general education classroom, but that, with better supports, the children's participation and learning could increase. Everyone was in agreement that identifying the appropriate supports and developing an effective plan with good contextual fit would take time, and that sustained effort and patience would be needed. The educators, and we as consultants, expressed enthusiasm in moving into the next phase of the SNAP process: problem solving and prioritizing.

Problem solving and prioritizing. Systematic instruction, a well-established instructional approach, was identified as a viable strategy to teach various academic skills within the classroom setting. Systematic instruction is based on the principles of applied behavior analysis and is characterized by teaching that involves the application of prompting and feedback procedures. Research findings support its effectiveness in teaching various skills, including academic skills, to learners with more significant disabilities within various instructional arrangements (e.g., Head, Collins, Schuster, & Ault, 2011; Rao & Mallow; 2009). Because most classroom team members had not received formal training in the

area of systematic instruction, we determined that it would be important to first introduce systematic instruction to classroom team members through a workshop training session during which classroom team members would have the opportunity to engage in role-playing and various active responding activities. Following this workshop, classroom team members' implementation of systematic instructional strategies with the target children was monitored and feedback was provided as necessary.

During our meeting with the classroom team, it became evident that team members were concerned with Neil and Jason's support needs in the area of social and communication skills. To address these concerns, we suggested that team members incorporate two supports into their daily routine: (a) affection-based (i.e., group friendship-based) activities to promote social competence and group membership when in the general education classroom (see Frea, Craig-Unkefer, Odom, & Johnson, 1999; McEvoy et al., 1988) and (b) functional communication systems to provide a socially appropriate and effective way to communicate with various communication partners, including typically developing peers. Both target children typically engaged in solitary or parallel play or engagement during center-based activities, snack time, recess, and morning activities within the general education classroom, resulting in physical separation from their peers without disabilities and limited opportunities to socially interact with peers. We felt that by introducing affection-based activities involving teacher-led activities such as facilitation of social greetings among peers and instruction on socially appropriate behavior (Cerros, 2009), Neil and Jason's experience within the general education classroom would positively influence the development of social skills and reciprocal friendships and classroom membership.

In addition, both target children had significant communication support needs but did not consistently use PECS, which had been introduced at the beginning of the school year. Furthermore, other modes of communication (e.g., rote phrases, challenging behaviors, and unintelligible vocalizations) typically were not effective in terms of conveying meaningful messages to communication partners. The classroom team and consultants were concerned with the children's (a) lack of access to PECS, as PECS books were often left in the classroom while the

Table 2

Summary of SIS-C Results for Neil for Items Included on Subscale C (School Participation) and Subscale D (School Learning)

Item	Type of Support	Frequency	Daily Support Time	Item Score
Being included in general education classrooms.	2 – verbal/gestural prompting	2 – frequently	2 – 30 minutes to less than 2 hours	6
Participating in activities in common school areas (e.g., playground, hallways, cafeteria).	2 – verbal/gestural prompting	2 – frequently	2 – 30 minutes to less than 2 hours	6
Participating in co-curricular activities.	2 – verbal/gestural prompting	2 – frequently	1 – less than 30 minutes	5
Getting to school (includes transportation).	1 – monitoring	4 – always	1 – less than 30 minutes	6
Moving around within the school and transitioning between activities.	2 – verbal/gestural prompting	4 – always	2 – 30 minutes to less than 2 hours	8
Participating in large-scale test taking activities required by state education systems.	2 – verbal/gestural prompting	4 – always	2 – 30 minutes to less than 2 hours	8
Following classroom and school rules.	4 – full physical support	2 – frequently	2 – 30 minutes to less than 2 hours	8
Keeping track of personal belongings at school	2 – verbal/gestural prompting	3 – very frequently	1 – less than 30 minutes	6
Keeping track of schedule at school.	2 – verbal/gestural prompting	3 – very frequently	1 – less than 30 minutes	6
Accessing grade-level curriculum content.	3 – partial physical assistance	3 – very frequently	3 – 2 hours to less than 4 hours	9
Learning academic tasks.	3 – partial physical assistance	4 – always	3 – 2 hours to less than 4 hours	10
Learning and using metacognitive strategies.	3 – partial physical assistance	4 – always	3 – 2 hours to less than 4 hours	10
Completing academic tasks (e.g., time, quality, neatness, organizational skills).	2 – verbal/gestural prompting	4 – always	3 – 2 hours to less than 4 hours	9
Learning how to use and using problem solving and self-regulation strategies in the classroom.	4 – full physical support	4 – always	4 – 4 hours or more	12
Participating in classroom-level evaluations, such as tests.	2 – verbal/gestural prompting	2 – frequently	1 – less than 30 minutes	5
Accessing the health and physical education curricula.	4 – full physical support	3 – very frequently	1 – less than 30 minutes	8
Completing homework assignments.	2 – verbal/gestural prompting	2 – frequently	1 – less than 30 minutes	5

children traveled to other school settings; and (b) the infrequent, inconsistent instruction on its use. As such, we suggested that the target children's current skill level in using PECS be assessed, followed by training of classroom team members in using the principles of applied verbal behavior, an extension of applied behavior analysis, as prescribed by Bondy and Frost (1993, 1994), to promote language development and PECS use and potentially increase Neil and Jason's social interactions with peers in the general education setting.

We identified a third high priority support need area and corresponding support plan strategies for Neil. The classroom team reported that Neil engaged in challenging behaviors that significantly interfered with learning and social opportunities. Such behaviors ranged from distracting (e.g., repetitive, self-stimulatory behavior) to high-priority destructive behaviors (e.g., aggression, elopement). The team decided that an individualized behavior intervention plan (BIP) was needed to address these challenging behaviors, as the behavior management strategies that were in place (e.g., redirection, removal from group, verbal reminder of behavioral expectations) were not yielding desirable improvements in behavior. Initially, we conducted a functional behavior assessment (FBA) to identify the environmental conditions under which the challenging behaviors occurred. The FBA process included a functional assessment interview (FAI; O'Neill et al., 1997) with classroom team members and functional assessment observation (FAO; O'Neill et al., 1997) of Neil during problematic classroom activities. Next, we developed a multicomponent individualized BIP comprised of behavioral intervention strategies that corresponded with the results of the FAI and FAO. We provided a workshop training session to familiarize classroom team members with the BIP strategies and conducted coaching sessions to support classroom team members' implementation of these strategies.

Implementing supports. The next phase of the SNAP process requires classroom team members and consultants to introduce targeted high-priority supports into the child's environment. It should be noted that we are in the midst of this particular phase as of April 2014. As illustrated in Figure 1, the implementation phase is comprised of four elements: (a) professional development, (b) implementation of support strategies by classroom teams, (c) monitoring of implementation, and (d) evaluation of support effectiveness. Initially, we provided training to familiarize classroom teams with the procedures necessary to implement targeted support strategies. In the case of Neil's individualized BIP support, we conducted a brief 2-hour workshop during which classroom team members became familiar with FBA via a consultant-delivered presentation and practiced implementing the proposed BIP strategies. Next, we introduced the support into the child's environment. We typically modeled implementation of the support prior to classroom team implementation by working directly with the child in his natural classroom environment. For example, we modeled how to implement each BIP strategy with Neil during identified problematic activities and routines. Once the responsibility of implementation was transferred from the consultants to classroom team members, we closely monitored fidelity of implementation and provided feedback and booster training sessions based on our observations. Finally, consultant assistance was gradually faded as classroom teams' implementation fidelity improved. At this point, we evaluated the outcomes of support strategies. For Neil, we analyzed behavioral data that reflected improvement in appropriate behavior and reductions in challenging behavior.

Assessing social validity. The final phase of the SNAP process involves interviewing classroom teams to assess the social validity of the SNAP process after consultant-delivered assistance has been faded. As Kennedy (2005) explained, evaluative procedures in addition to, but different from, quantitative analyses (e.g., analyzing graphed student data) are needed to assess the effects of interventions or processes on a range of consumers such as teachers, paraprofessionals, related school personnel, and so on; this can be achieved through assessment of social validity. Social validity is characterized by subjective evaluation of the acceptability, utility, and efficacy of interventions or processes that have been introduced within educational and other applied settings (Kennedy, 2005). We developed questionnaires comprised of several items with Likert scale response options and one open-ended item to assess the social validity of both (a) the SNAP process (see Table 3) and (b) the supports that were put into place as a result of the SNAP problem-solving process.

Table 3

Questionnaire for Educators to Investigate Social Validity of the SNAP Process

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1.   The SNAP process helped me plan for my student's support needs.

   Strongly Agree   *Agree*   *Neutral*   *Disagree*   *Strongly Disagree*

Comment:

2.   The SIS-C assessment helped me to better understand my student's support needs.

   Strongly Agree   *Agree*   *Neutral*   *Disagree*   *Strongly Disagree*

Comment:

3.   The "Overview of the Day" worksheet helped me to better understand my student's support needs.

   Strongly Agree   *Agree*   *Neutral*   *Disagree*   *Strongly Disagree*

Comment:

4.   The suggestions for supports that were identified from the "best professional practice" literature were useful.

   Strongly Agree   *Agree*   *Neutral*   *Disagree*   *Strongly Disagree*

Comment:

5.   Identifying 1 to 3 priorities for enhancing supports was useful.

   Strongly Agree   *Agree*   *Neutral*   *Disagree*   *Strongly Disagree*

Comment:

6.   The time and energy I invested in the SNAP process was worth the benefits gained by my student.

   Strongly Agree   *Agree*   *Neutral*   *Disagree*   *Strongly Disagree*

Comment:

7.   Finally, what suggestions do you have for the consultants in terms of working with school teams in the future?

Assessment and Planning in Schools

Urban Northeast

Observation. Darien was a 17-year-old Black student attending a high school of 4,030 students in an urban school district in the Northeastern United States. The student population of the high school was diverse (30% White, 27% Asian, 23% Black, 19% Hispanic, 1% Native American); a sizable proportion of students attended the school because of its emphasis on the performing arts.

Darien was identified as having a moderate intellectual disability and adaptive behavior level, as well as autism. He read on a first-grade level and was able to perform simple one-step mathematical operations. Darien typically greeted students and adults that he knew, smiling and often asking how they were, although his conversation typically did not expand beyond a greeting or specialized topics (e.g., Looney Tunes or female classmates). He attended an inclusion program for students with moderate to severe disabilities in which he was enrolled in five general education classes (e.g., World History, Math, English). Darien attended these classes with two other young men from his program and a paraprofessional. During class, Darien typically sat close to the paraprofessional and special education classmates, often smiling while looking around the class until directed by the paraprofessional to complete an assignment. In addition, he attended one period per day in the special education resource class where he worked on his general education class assignments with the paraprofessional and fellow students. Darien ate lunch in the general education school cafeteria, typically at a table with only classmates with disabilities. After eating, Darien occasionally moved to other tables when he saw typically developing students he knew from his classes.

SIS-C assessment. Darien's special education teacher, a second special education teacher, and the paraprofessional completed the SIS-C to identify supports that could be introduced into Darien's environment to increase his inclusion and active participation in his general education classes. We analyzed the SIS-C results with the educators to identify potential areas of support needs. Next, the two special education teachers and the paraprofessional met with us as a planning team to prioritize Darien's support needs and develop a plan to introduce recommended changes.

Problem solving and prioritizing. First, the planning team identified travelling around the community as a high priority support need for Darien. Specifically, he was dependent on a paraprofessional to escort him to a school bus to travel to and from school, whereas public transportation in the form of subways and buses were readily available and would have been helpful to Darien when he exited high school. Second, the team decided that, when feasible, paraprofessional assistance should be minimized in Darien's general education classes and replaced, to the maximum extent possible, with peer support. The team reasoned that doing so would integrate Darien more as an equal class member, reduce the stigma of an adult assistant, and expand Darien's conversational repertoire to more age-appropriate and varied topics. It was decided to introduce this shift in classes that were more hands-on and interactive, making it easier for classmates to step in as unobtrusively as possible as peer helpers.

Implementing supports. To provide support for community travel, the team decided to enroll Darien in a travel-training program available through the special education department of the local school district. This program was designed to teach students with disabilities the skills to independently take public transportation to and from school or worksites. Darien began working with the program on a weekly basis to familiarize himself with local subway and bus routes in order to independently travel to and from school and to problem solve how to ask for help if routes changed.

To increase peer support and interaction, we identified lab sessions in Marine Biology class as being particularly conducive to peer support because of their frequent interactive group activities. Indeed, the paraprofessional reported during a team meeting that she was able to pull away entirely across the room while a group of typically developing classmates included Darien, on their own initiative, as they dissected a fish, giving Darien turns in helping to make critical cuts in the dissection process. Additional opportunities to supplant the paraprofessional with peer support were identified across other classes, such as Basic Art and during interactive sessions in World History (debates) and English (readers' theater). The planning team continued to meet on a biweekly basis to evaluate Darien's progress and the inclusiveness of opportunities that were available to him.

Social validity. Team members reported that the supports planning was helpful in prioritizing

areas in which support could be provided to increase Darien's inclusion in everyday activities in school and the community. The team is continuing to monitor Darien's progress and to lessen or strengthen supports as needed. As Darien's support needs change as he acquires new skills, the team will continue to prioritize new areas of need and introduce appropriate supports. For example, because Darien will be exiting high school within the next school year, the team is beginning to focus on recreational supports to promote Darien's opportunities for social interaction outside the classroom environment.

Moving Forward

At the beginning of this article we asked, "What is your philosophy of education?" We believe that these case studies provide useful insights, especially for special educators, to answer this question. Although education may have varied purposes, when understanding disability conditions through a social-ecological lens, it is clear that the purpose of special education should be to address the mismatch between a child and the school settings and activities in which the child learns. The mismatch can be addressed through providing individualized supports. Individualized supports should (a) enhance the capacity of the learner to fully participate in classroom and schools activities and settings and/or (b) enhance the capacity of the school/classroom to include diverse learners in settings and activities. For most children with IEPs, supports addressing both of these functions are needed. Also, many supports can accomplish both; that is, to change the capacity of the learner and the capacity of the environment to include the learner.

Consider the case studies of the two children in elementary school. The BIP strategies that were developed based on the results of an FBA were intended to improve the behavior of Neil, but also were designed to change the behavior of the adults in the classroom. It is important to stress that the adults were not doing anything wrong with Neil before the BIP strategies were put into place. If we, as consultants, had come in with the attitude that we needed to "fix" the adults, we would have undoubtedly been asked to leave rather quickly. Our goal was *not* to fix the children, nor fix the adults, peers, or the administration–we weren't trying to fix anyone! Rather, our efforts were intended to assist educators in a problem-solving process to reduce the mismatch between the children's behavior and the demands of the school environment. Instead of "fixing the adults and children," we wanted to work with the adults in determining how the capacity of the environment could be enhanced to better address the children's behavior. The goal was for the adults to more effectively teach–and the children to more effectively learn–more useful, alternative behaviors that would result in the children's schooling becoming more positive and meaningful.

The affection-based activities were intended to promote positive, reciprocal interactions between the children with disabilities and their typically developing peers. Therefore, this support also served a dual function of changing the capacity of the children with IEPs as well as the capacity of the environment. Specifically, it was an effort to improve the capacity of typically developing children to interact with the two children with disabilities in the elementary setting. Unlike the behavioral interventions mentioned above, whereby challenging behaviors were pinpointed and antecedents and consequences were systematically manipulated to bring about behavioral change, this support strategy was based on research showing that improved social interactions, responses, and reciprocal interactions were likely after affection-based activities were introduced. Again, the intention was to improve the child-environment fit, not to fix the children.

The same principle applies to the functional communication intervention (i.e., renewing PECS training) and the introduction of systematic instruction. Although these are considered classic instructional interventions in that the goal is to improve the students' skill levels, both interventions required making changes to the environment in terms of educator actions and classroom materials. For instance, providing opportunities to practice new communication skills across environments is an essential aspect of any effort to establish a functional communication system (see Schwartz, Garfinkle, & Bauer, 1998). To that end, PECS materials need to be available in every setting within the school.

In the case of Darien, the travel training supports had to be provided outside the high school setting. For community-based instruction to be effective, it must be provided in natural environments as students with ID/DD do not typically learn community skills incidentally and

such skills do not generalize when taught in artificial settings (Test & Spooner, 2005). Once again, the important point to take away is that this support was put into place to reduce the discrepancy between what Darien was able to do (i.e., transport himself around the community) and what the community environment demanded (i.e., locate transportation stop, use pass card to enter transportation station, identify what train to board, protect self from exploitation when in a crowd). In terms of the Marine Biology class, the new peer supports that were introduced provide an example of a support strategy focused solely on increasing the capacity of the classroom setting to enable a child with a disability to participate more fully. Sometimes, a simple solution is the best solution.

Janney and Snell (2011) were correct when they observed, "Indeed many–if not most–schools are on a developmental trajectory toward the implementation of inclusive practices" (p. 225). The field of special education has moved well beyond any notion that the physical placement of students with ID/DD in inclusive grade-level classrooms is sufficient based on socialization opportunities or vague benefits associated with exposure to the general education curriculum. Students with ID/DD should receive special education services and supports that result in their education being every bit as meaningful and as challenging as the education offered to typically developing children. There are many excellent resources available to educators in regard to promoting inclusive education in K-12 schools (e.g., Jorgensen, McSheehan, & Sonnenmeier, 2010) and educating children with ID/DD (e.g., Snell & Brown, 2011), and a review of such practices is well beyond the purpose of this article. Our contribution to the discourse on inclusive education and special education is to emphasize the importance of shifting our understanding of children with ID/DD away from their deficits, and toward their support needs. According to Thompson et al. (2009), personalized supports should be conceptualized "as the bridge between 'what is' (i.e., a state of incongruence due to a mismatch between personal competency and environmental demands) and 'what can be' (a life with meaningful activities and positive personal outcomes)" (p. 136). We believe the future of special education belongs to those who are skilled at "building

bridges" by identifying and arranging meaningful systems of support.

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