November 30, 2017

SENT VIA EMAIL ONLY
phillip.mccarthy@legisalture.maine.gov

Task Force to Identify Special Education Cost Drivers
and Innovative Approaches to Services
c/o Phil McCarthy, Senior Legislative Analyst
Office of Policy & Legal Analysis
13 State House Station
Augusta, ME 04333-0013

Re: Additional information for the Task Force regarding inclusive education

Dear Task Force Members:

At a recent Task Force meeting, we understand there was a presentation by Dr. Kathryn Hawes, with subsequent discussion by the Task Force, regarding costs believed to be associated with inclusive educational practices. We are concerned that the Task Force may have incomplete information, especially with regard to the benefits of inclusive educational practices. And to the extent that the Task Force was led to believe that inclusive education is not supported by research, this was not accurate. As highlighted below, most research on inclusion demonstrates that there are positive academic and social benefits for students across disability categories.

Research on Inclusion, Employment, Important Outcomes

Research has shown that, compared to their counterparts in segregated special education settings, students with disabilities who are included in the general education classroom make greater academic gains overall and increase their academic performance related to standards based curriculum. Studies have found that when individuals with significant disabilities participate in inclusive programs they demonstrate improved academic achievement overall and learn increased communication, social, and employment skills. Research has also shown that inclusion in general education significantly correlates with improved post-school outcomes for students with significant disabilities in the areas of education, employment, and independent living. And generally, research has found when students are educated together all students, with and without disabilities, make greater academic and social gains.[1] We would encourage the task force to consider recommendations the require districts to collect and report outcomes data,

[1] For more information, see: *Inclusive Education Research & Practice*, Maryland Coalition for Inclusive Education (2010) available at: http://www.mcie.org/usermedia/application/6/inclusion_works_final.pdf. We have included a copy of this document with this letter. In addition, we are working to create a document outlining the impact of inclusive educational practices that will be released in February 2018. Much of this paragraph was taken from the initial work completed on that project. A working list of authorities that will be cited in that paper is also included with this letter.

especially critical post-school outcomes data like participation in competitive integrated employment.

If the Task Force would like additional information on the research related to inclusive educational practices or about innovative approaches to service delivery, please let us know. One resource to consider is SWIFT Schools, which is a national K-8 technical assistance center that helps education systems build capacity to provide academic and behavioral instruction and support for all students, including students with disabilities and those with the most extensive needs.[2] It appears that key components of the SWIFT Schools approach are in line with the recommendations made by Nathan Levenson, (such as increased integration of special education and general education resources and more strategic deployment of staff resources) who we understand will be presenting to the Task Force at its next meeting.

1:1 Aides

We also understand that there were concerns expressed to the Task Force about the use of 1:1 educational technicians to support inclusion, and specifically that there was discussion that the use of paraprofessionals to facilitate inclusion in the general education classroom might represent a more restrictive intervention than education in a segregated setting. While, as discussed below, there are significant concerns with the overuse of 1:1 paraprofessionals and educational technicians to support inclusion, it is not at all accurate to say that this is more restrictive than keeping a student segregated from their peers. The research supports close scrutiny of the use of paraprofessionals, but neither the law nor the research would support segregation of students as an appropriate alternative.

Researchers and practitioners have raised many concerns about the overreliance on 1:1 paraprofessional support to facilitate inclusion. These concerns include: the least qualified staff members have primary responsibility for meeting the needs of the most complex students; insufficient training for paraprofessionals and for teachers in the supervision of those paraprofessionals; excessive proximity may lead to dependence, impact peer relationships, increase stigmatization, and actually provoke the behaviors it is designed to prevent; and reduced teacher involvement with students with disabilities.[3] Several alternatives have been presented, including: reallocating resources to teaching staff; building the capacity of general education

---

[2] Information about this resource is included with this letter and can also be found at: http://www.swiftschools.org/ .

[3] See: Giangreco, Michael; Halvorsen, Ann; Doyle, Mary Beth; and Broer, Stephen, "Alternatives to Overreliance on Paraprofessionals in Inclusive Schools" Journal of Special Education leadership 17(2) (October 2004). This is available at: http://www.uvm.edu/~cdci/evolve/JSEL0417%282%2982-90.pdf and a copy is included with this letter.

staff; using paraprofessionals for clerical tasks and paperwork; lowering the caseloads for special educators; and using peer support models.[4]

If the Task Force would like additional information on the research related to the use of paraprofessionals or about innovative approaches to service delivery, please let us know. Dr. Giangreco, a professor at the University of Vermont, has done a lot of work related to this topic and would be an excellent resource for the Task Force or for any follow up work recommended by the Task Force.[5]

Least Restrictive Environment

Finally, as the Task Force completes its work and develops recommendations, it is important to keep in mind that there is a legal presumption for inclusive educational practices. The Individuals with Disabilities Education Act requires education in the least restrictive environment.[6] This means that, to the maximum extent appropriate, students with disabilities must be educated with non-disabled students in regular classrooms. Removal from the regular classroom should only occur "when education in regular classes *with the use of supplementary aids and services* cannot be achieved satisfactorily."[7] This requirement is consistent with the obligation of schools under the Americans with Disabilities Act to serve students in the "most integrated setting" appropriate to their needs.[8] In addition, other state and federal laws that prohibit discrimination on the basis of disability, such as Section 504 of the Rehabilitation Act and the Maine Human Rights Act, also apply to ensure that students are given accommodations, related services and other supports to ensure they can access their education in the most integrated settings appropriate to their needs.

We have heard some members of the task force and some testimony express concerns with some aspects of Maine's existing school funding formula. We would add that we are concerned that the existing funding formula incentivizes school districts to place students in regional public placements that may be more restrictive than a student needs.[9] While we understand that the state would like districts to consider efficiencies that could be gained from regionalized resources, we would suggest that the task force consider recommendations about how the funding formula

---

[4] *Id.* See also: Giangreco, Michael; Hoza, Betsy, "Are Paraprofessional Supports Helpful" Attention (August 2013), available at: http://www.uvm.edu/~cdci/archives/mgiangre/Attention_2013_20(4)_22-25.pdf and a copy is included with this letter.

[5] His contact information is available here: http://www.uvm.edu/~cdci/archives/mgiangre/

[6] 20 U.S.C. § 1412(a)(5)(A).

[7] Id. (emphasis added)

[8] 28 C.F.R. § 35.130(d); See also: *Olmstead v. L.C.*, 527 U.S. 581 (1999).

[9] 20-A M.R.S. 15681-A(2)(E) was recently amended to provide extra subsidy when cost for a student in regional public placement exceeds 2 times EPS, even as it provides extra subsidy for a student in his or her own home school only when cost exceeds 3 times EPS.

could incentivize districts to use regional resources (such as professional development, equipment rental, behavioral consultants, and itinerant providers of special services) without incentivizing the use of regional out-of-district placements.

As Dr. Hawes made clear in her presentation materials, the idea of inclusive education has its roots in the civil rights era. And equal access to public education for students with disabilities remains an important civil rights issue today. We thank the Task Force for allowing us to provide some additional information as you address these important issues.

Respectfully,

Alan Cobo-Lewis, Ph.D.
Director, Center for Community Inclusion and Disability Studies
Associate Professor of Psychology
University of Maine

Alan Kurtz, Ph.D.
Coordinator of Education and Autism
Center for Community Inclusion and Disability Studies

Kate MacLeod
Instructor of Special Education
University of Maine - Farmington

Atlee Reilly
Managing Attorney
Disability Rights Maine

Encl.

Inclusive Education Research & Practice

Xuan Bui, Carol Quirk, Selene Almazan, Michele Valenti

www.mcie.org

Maryland Coalition for **INCLUSIVE** EDUCATION

Inclusion Works!

Over 20 years of research has consistently demonstrated that the inclusion of students with disabilities in general education classrooms results in favorable outcomes. Positive outcomes have been shown for both students with high incidence disabilities (learning disabilities and other "mild" disabilities) and those with low incidence disabilities (intellectual, multiple, and "severe" disabilities). This body of research includes quantitative studies where the standard is replication as well as qualitative studies that aim for complete, detailed descriptions in order to answer 'how' questions.

Placement Matters: Studies investigating the effects of placement in general education classrooms reveal positive outcomes in the areas of IEP quality, time of engagement, and individualized supports. Significant increases in IEP quality on measures of age-appropriateness, functionality, and generalization were found when students moved into general education classes from special education settings even though the special educator remained the same (Hunt & Farron-Davis, 1992). Within the general education classroom, there was an increase in the amount of instruction on functional activities as well as basic academic skills such as literacy for students with severe disabilities (Hunt, Farron-Davis, Beckstead, Curtis, & Goetz, 1994). In addition, students were observed to be less engaged and often more alone in self-contained classrooms.

Placement in general education results in:

- **Improved IEP quality**
- **More student engagement**
- **Increase in instructional time**
- **Maintenance of individualized supports**

Similar student engagement outcomes were reported in a study involving nine elementary students with severe disabilities who were observed in both special and general education settings. General education classrooms delivered more instruction, provided a comparable amount of 1:1 instruction time, addressed content more, and used non-disabled peers more and adults less (Helmstetter, Curry, Brennan, & Sampson-Saul, 1998). Furthermore, comparisons of the two settings revealed a significant difference in non-instructional time. In self-contained classes, 58% of the time was classified as non-instructional versus 35% of the time in general education classes.

To answer the question of individualizing supports, McDonnell and colleagues compared the instructional contexts of students with low incidence disabilities and their typical peers in

general education settings. The students with severe disabilities were 13 times more likely than their peers without disabilities to receive instruction directed exclusively toward them during whole class activities, and were 23 times more likely to receive 1:1 instruction (McDonnell, Thorson, & McQuivey, 2000). This challenges the prevalent notion that students with disabilities cannot receive individualized supports in general education classrooms.

Outcomes for Students with Disabilities: Most research studies examining educational outcomes have found positive effects for inclusion. Baker and colleagues reviewed three meta-analyses that addressed the issue of the most effective setting for the education of students with disabilities. A small-to-moderate positive effect for inclusive placement was found in all three meta-analyses (Baker, Wang, & Walberg, 1994). More recently, Waldron, Cole, and Majd (2001) investigated the effects of inclusive programs for students with high incidence disabilities and their typical peers. This two-year study found that 41.7% of students with learning disabilities made progress in math in general education classes compared to 34% in traditional special education settings, without the presence of nondisabled peers. Gains in reading were comparable in both settings. When comparing progress with their typical peers, 43.3% of students with disabilities made comparable or greater progress in math in inclusive settings versus 35.9% in traditional settings. Similar academic gains were reported in a study examining the use of class-wide peer tutoring on the achievement of students with high incidence disabilities in inclusive classrooms. Significant increases in spelling, social studies and other academic indicators were observed (Pomerantz, Windell, & Smith, 1994).

For students with high incidence disabilities, a higher percentage of make academic progress in general education classes compared to students in traditional, resource settings.

Positive educational outcomes are not in the area of academics alone. The National Longitudinal Transition Study examined the outcomes of 11,000 students with a range of disabilities and found that more time spent in a general education classroom was positively correlated with:

a) fewer absences from school,
b) fewer referrals for disruptive behavior, and
c) better outcomes after high school in the areas of employment and independent living (Wagner, Newman, Cameto, & Levine, 2006).

Meta-analyses and comparative studies examining the educational outcomes of students with low incidence disabilities in inclusive versus segregated classrooms have found either no difference in outcomes or positive effects for inclusion (Hunt & Goetz, 1997). There is a body of empirical evidence that shows students with severe disabilities are able to acquire skills in a range of areas within inclusive classrooms. McGregor and Vogelsberg (1998) report that students demonstrate higher levels of social interaction with typical peers, social competence and communication skills improve (e.g., Hunt, Alwell, Farron-Davis & Goetz, 1996), and academic gains are made (McDonnell, Thorson, McQuivey, & Kiefer-O'Donnell, 1997). In

"No studies conducted since the late 1970's have shown an academic advantage for students with intellectual and other developmental disabilities educated in separate settings." (Falvey, 2004)

addition, Kliewer and Biklen (2001) found that inclusive learning environments facilitated the acquisition of literacy and adaptive skills as well as enhancing students' social relationships. In this domain of social outcomes, Fisher and Meyer (2002) conducted a two-year longitudinal study to examine social competence for 40 students with severe disabilities in inclusive and self-contained classrooms. Students in the inclusive settings had significantly higher mean scores on the ASC (Assessment of Social Competence) after a two-year period, and although students in self-contained classrooms made gains, they were not statistically significant. Falvey (2004) notes that "no studies conducted since the late 1970's have shown an academic advantage for students with intellectual and other developmental disabilities educated in separate settings."

Effect on typical peers: Concerns are often raised about the impact that students with disabilities, especially those with challenging behavior, have on the learning of typical students. Hollowood and colleagues investigated the degree to which the presence of students with severe disabilities affected the time allocated for instruction, the actual time used for instruction, and students' engaged time. Results indicated no differences across the three domains when comparing classrooms that included students with severe disabilities and classrooms without students with severe disabilities (Hollowood, Salisbury, Rainforth, & Palombaro, 1995). The finding that engaged time for typical learners is not negatively impacted by the presence of students with severe disabilities was also replicated in other studies (Peltier, 1997; Staub & Peck, 1995).

What is the impact on typical peers?

- **No difference in instructional time and student engagement**
- **Presence of students with disabilities results in greater number of typical students making reading and math progress compared to non-inclusive general education classes**

In the area of academic progress, Waldron, Cole, and Majd (2001) report that more students without disabilities made comparable or greater gains in math and reading when taught in inclusive settings versus traditional classrooms where no students with disabilities are included. This suggests that inclusive classrooms provide greater access to the general education curriculum that benefits all students. Further evidence for the positive effects of inclusion on students without disabilities is reported by McGregor and Vogelsberg (1998). They found:

- inclusion does not compromise general education students' outcomes,
- typical peers benefit from involvement and relationships with students who have disabilities in inclusive settings, and
- the presence of students with disabilities in general education classrooms leads to new learning opportunities for typical students.

Making Inclusion Work

Recognition that inclusion benefits both students with and without disabilities has led to research that seeks to define the necessary contexts, instructional practices, and curricular efforts that result in improved learner outcomes. Some of this research, especially for students with high incidence disabilities, is well documented and its effectiveness clearly established. For students with low incidence disabilities, the body of empirical evidence is smaller but favors inclusive settings with its use of strategies such as varied instructional arrangements and peer supports.

Peer Mediated Instruction & Intervention: The use of peer mediated instruction and intervention is often cited in the literature as one of the most effective strategies for inclusive classrooms. In several studies focused on students with mild disabilities, the use of peer-mediated strategies results in improved academic outcomes for ***all*** students including those considered at-risk academically (Sailor, 2002). In a review of the literature, Fisher, Shumaker, and Deshler (1995) reported significant increases in reading, spelling, math, social studies, and other academic indicators for studies investigating the use of class-wide peer tutoring models (CWPT) where students serve as tutors and tutees in acquiring basic academic skills and factual knowledge. Positive outcomes are accrued when training for tutors is emphasized and in some cases, results in large effect on student outcomes (Stenhoff & Lignugaris/Kraft, 2007). Increases for both elementary and high school aged students were noted.

Peer Tutoring Results in:

- **Academic gains for students with high incidence disabilities and students considered at-risk**
- **Increased engagement and academic responses for students with low incidence disabilities**

Specifically for students with moderate to severe disabilities, CWPT has also shown to result in increased levels of engagement and academic responses as well as academic gains. Dawson and colleagues investigated the effects of CWPT for students with intellectual disabilities and their typical peers in general education classrooms. Results showed increases in spelling accuracy as well as greater levels of engagement with typical peers and a decrease in competing behaviors when compared to teacher-led instruction (Dawson, Delquadri, Greenwood, Hamilton, Ledford, Mortweet, Reddy, Utley, & Walker, 1999). Similar outcomes were reported by McDonnell and colleagues in a study that focused on the use of CWPT along with a multi-element curriculum and accommodations for students with severe disabilities (McDonnell, Mathot-Buckner, Thorson, & Fister, 2001).

More recent studies modeled after CWPT investigated the use of Peer-Assisted Learning Strategies (PALS) as a method for improving academic outcomes for students with high incidence disabilities and struggling typical peers. Features of PALS include reciprocal tutoring

roles, opportunities to respond and experience success, structured activities, and supplemental practice of skills taught in the core curriculum. Fifteen years of pilot studies, component analyses, and large-scale experiments have shown improvement in the reading achievement of low, average, and high achieving students including those with high incidence disabilities (McMaster, Fuchs, & Fuchs, 2007). In the large-scale field studies involving second through sixth grade classrooms, effect sizes of .22 to .56 were reported when compared to classrooms using a traditional teacher led approach to reading. Furthermore, Fuchs and his colleagues report greater social acceptance for students with learning disabilities in classrooms using PALS presumably due to the greater level of reciprocal engagement of those settings (Fuchs, Fuchs, Mathes & Martinez, 2002).

In addition to the structured use of tutoring arrangements, the successful use of peers as supports in inclusive classrooms has also been documented for students with low incidence disabilities. In a study investigating the effects of peer delivered self-monitoring strategies on middle school students with significant disabilities, results showed an increase in percentages of occurrence across eleven identified academic survival skills for all students (Gilberts, Agran, Hughes & Wehmeyer, 2001). The role of peer training is a critical feature in the effective use of peer-mediated instruction. Two studies investigated the issue of contribution of peers to the generalization of social behaviors for elementary students with autism. In both studies, increases in social interaction with typical peers were noted with greater generalization of skills observed from groups with trained peers and less from groups with untrained or stranger peers (Kamps, Royer, Dugan, Kravits, Gonzalez-Lopez, Garcia, Carnazzo, Morrison, & Garrison Kane, 2002).

Peer support interventions that involve one or more peers without disabilities providing academic and social support to a student with disabilities indicate that:

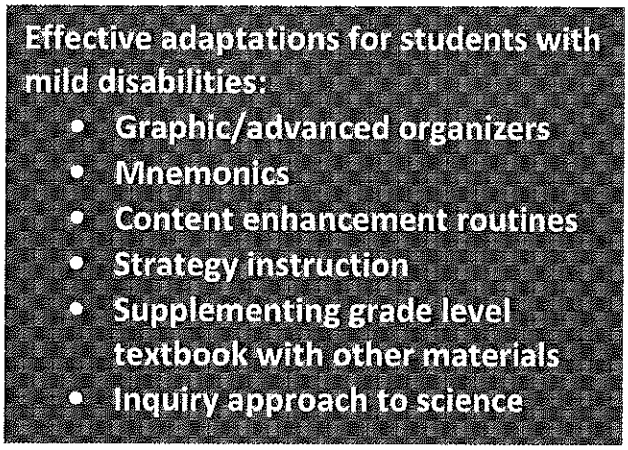
- **Typical peers have higher levels of engagement during support role**
- **Peers with severe disabilities spent more time engaged in activities aligned with the general curriculum**

Peer support interventions are also emerging as an effective alternative to traditional paraprofessional support models for students with low incidence disabilities (Carter, Cushing, Clark & Kennedy, 2005). Several descriptive studies have documented the disengagement of teachers when a one-on-one paraprofessional service delivery is used (Giangreco, Broer & Edelman 2001). Since the level of engagement and sense of ownership that general educators have with students with disabilities is a critical factor to success in inclusive classrooms, other support strategies must be explored. Cushing and Kennedy (1997) trained typical peers to adapt class activities, provide frequent feedback, and promote communication among other support strategies for three students with severe disabilities in general education classrooms. Results indicated that serving as a peer support resulted in higher levels of engagement for students without disabilities which is consistent with previous studies employing peer-mediated techniques. This challenges the assumption that having a typical peer support a student with a disability takes away from their participation in the classroom. In looking for optimal configurations, Carter and colleagues studied the effect

of using two peers in a support role for students with severe disabilities. Data from the investigation showed an increase in social interaction as well as an increase in the amount of time students with disabilities were engaged in activities aligned with the general curriculum (Carter, Cushing, Clark & Kennedy, 2005). In these peer support arrangements, the paraprofessional's role is broadened and shifts to providing guidance and support to the students serving as a peer support (Carter, Cushing & Kennedy, 2008).

Instructional & Curriculum Adaptations: Instructional and curriculum adaptations can be conceptualized in two categories. ***Routine*** adaptations include the use of varied grouping arrangements, materials, and goals while ***specialized*** adaptations are those made above and beyond routine ones that are in direct response to specific challenges faced by students (Fuchs & Fuchs, 1998). Weymer and colleagues use the term *curriculum augmentations* to refer to efforts to augment or expand the general education curriculum to provide additional skills or strategies that help students succeed (Wehmeyer, Lance, & Bashinski, 2002). Research on curriculum and instructional adaptations that support students with disabilities in general education classrooms is varied.

For students with learning disabilities, many studies describe instructional methods that extend the typical adaptations and help to promote progress in the core content areas for all students (including those without disabilities). These include graphic or advanced organizers, self-regulation strategies, semantic maps, mnemonics, chunking, questioning, and visualizing strategies (Baker, Gersten, & Scanlon, 2002). Swanson and Hoskyn (2001) also confirmed the use of advanced organizers as an effective strategy for positively influencing student performance. The use of content enhancement routines, a type of advanced organizer, was shown to have dramatic results for students with learning disabilities in general education classrooms where the average unit quiz grade increased by ten percentage points (Lenz, Schumaker, Deshler, Boudah, Vance, Kissam, Bulgren, & Roth, 1993).



In addition to these, strategy instruction (teaching students how to learn) has been shown to improve academic achievement across grade levels for both students with and without disabilities (Fisher, Shumaker, & Deshler, 1995). Other techniques that have resulted in improved learner outcomes in inclusive classrooms include the use of materials other than grade level textbooks in the area of social studies (Gersten, Baker, Smith-Johnson, Dimino, & Peterson, 2006) and employing an inquiry-based approach to science with a focus on varied ways of communicating learning (Pulincsar, Magnusson, Collins, & Cutter, 2001).

In contrast to the vast array of evidence for the effects of adaptations for students with learning disabilities, research has recently begun to emerge related to the implementation of curriculum accommodations and modifications for students with significant disabilities (Fisher & Frey, 2001). For example, there are few studies examining the use of strategies such as graphic organizers for students with severe disabilities in inclusive classrooms. In a review of the literature, Lee and colleagues found no studies applying techniques such as chunking and mnemonics while many studies examined self-directed learning strategies such as choice making. However, very few of those studies were conducted in academic content areas (Lee, Amos, Gragoudas, Lee, Shogren, & Theoharis, 2006).

Historically, the focus of research on instructional strategies for students with severe disabilities has been on "functional life skills" that were taught outside of the general education curriculum (Soukup, Wehmeyer, Bashinski, & Bovaird, 2007). Browder and Cooper-Duffy (2003) report that less than 10% of studies with students with severe disabilities focused on academics, with some research showing success in functional academics and access skills in general education environments. Clearly, the use of curriculum adaptations such as content specific modifications is necessary for the successful inclusion of students with severe disabilities. While there is ample descriptive literature of methods and examples for making adaptations for these students, there is limited empirical evidence to date (Fisher & Frey, 2001).

For students with severe disabilities:

- **Less than 10% of studies focused on academics**
- **Research on the implementation of adaptations is just emerging**
- **Current evidence shows limited use of accommodations and modifications for students with severe disabilities**
- **Presence of modifications increases academic responding and decreases competing behavior**

Some descriptive studies investigated how students with severe disabilities access the core curriculum in general education classrooms. Salisbury and colleagues found that modifying curriculum based on students' IEPs resulted in successful physical, social, and instructional inclusion of students with mild to severe disabilities in kindergarten through fourth grade (Salisbury, Mangino, Petrigala, Rainforth, Syryca, & Palombaro, 1994). More recently, Fisher and Frey (2001) describe the experience of three students (elementary, middle, and high) with significant disabilities and the supports/services necessary for them to access the core curriculum in general education classrooms. The prominent use of individualized, content specific modifications and accommodations were noted for all students. Examples of these individualized content specific modifications included reading picture books, having a picture communication symbol version of a textbook chapter, and unit vocabulary added to a student's speech output device.

Soukup and colleagues (2007) also examined the use of adaptations for students with severe disabilities in general education classrooms as well as the relationship between access to the general education curriculum and classroom variables. Researchers found that students with

severe disabilities worked on grade level standards in 60% of the intervals and worked on standards linked to any grade for 20% of the intervals. Curriculum adaptations (changes to content representation, presentation, or student engagement) were observed in 18% of the intervals with no observations of curriculum augmentations (learning-to-learn strategies). In terms of classroom variables, large and small group instructional arrangements were predictive of greater access to the general education curriculum. Soukup and her colleagues conclude that students receiving instruction in general education were significantly more likely to be working on activities linked to the general education standards, although they were doing so without the types of adaptations that research suggests is critical for making progress (Soukup, Wehmeyer, Bashinski, & Bovaird, 2007). Following up on this work, Lee, Wehmeyer, Soukup, and Palmer (2010) studied the impact of curriculum modifications on student and teacher behaviors. Researchers observed 45 students with a range of disabilities and found that the presence of curriculum modifications predicted increased student engagement and decreased competing behaviors that would disrupt learning. In addition, the presence of modifications also resulted in teachers engaging in fewer management behaviors.

Collaborative Practices: The inclusion of students with disabilities in general education classrooms necessitates collaboration between administrators, general educators, special educators, parents, and related service providers in order to deliver quality services to all students. In a survey to experts in the field of severe disabilities, Jackson and colleagues reported that collaboration was often cited as a foundation to the implementation of inclusive education (Jackson, Ryndak, & Billingsley, 2000). In many schools, collaboration takes the form of co-teaching where a general and special educator work together to deliver instruction to students with and without disabilities.

In a meta-synthesis of 32 qualitative studies, Scruggs, Mastropieri, and McDuffie (2007) found that teachers generally supported co-teaching but the instructional techniques employed did not necessarily reflect prevailing best practices in the literature. The predominant model of co-teaching was "one teach, one assist" even though this is not a highly recommended practice in that the special educator often plays a subordinate role. In addition, evidence-based practices such as peer mediated and strategy instruction were infrequently observed. Some quantitative studies do exist that document the efficacy of co-teaching. Murawski and Swanson (2001) conducted a meta-analysis of this research and found only six studies worthy of the report. Results from these studies indicated an overall effect size of .40 on academic achievement, social outcomes, attitudes, absences, and referrals. Findings from both the qualitative and quantitative

Research on co-teaching:

- **A few studies document moderate effect size for student outcomes**
- **Qualitative studies show predominance of "one teach, one assist" which is not considered highly recommended**
- **Infrequent observations of specialized adaptations**

investigations suggests that co-teaching currently falls short of realizing its potential for delivering quality services to students in general education classrooms.

Collaboration among teachers and related service providers is also a critical factor in implementing effective inclusive education. Soto and colleagues found that general educators who have regular opportunities to collaborate and consult with professional peers show evidence of increased instructional skills as well as decreased tendencies to make referrals to special education (Soto, Müller, Hunt, & Goetz, 2001). Two studies by Hunt and colleagues further document the effectiveness of collaboration as a strategy for improving student outcomes in inclusive settings. In both studies, researchers document the successful teaming of teachers, related service providers, and parents in implementing support plans for students with severe disabilities and typical peers considered academically at-risk. Teams met on a monthly basis to delineate specific instructional adaptations and support strategies for students. Consistent implementation of these plans resulted in increases in academic skills, engagement in class activities, interactions with peers, and student-initiated interactions for all students (Hunt, Doering, Hirose-hatae, Maier, & Goetz, 2001; Hunt, Soto, Maier, & Doering, 2003).

Room to Grow

Reframing Inclusion: As the language of inclusive education has evolved from mainstreaming to integration to inclusion, so too has the practice. Mainstreaming operated on the notion of readiness for general education while integration focused on the enhancement of students' social development. From a legislative, moral, and efficacy standpoint, the general education classroom is now the placement of choice for students with disabilities. These earlier descriptors of inclusion clearly framed it as a special education issue. In other words, it was about the separateness of special education versus belongingness with general education (Sailor, 2002).

Researchers and advocates of inclusion have placed a considerable amount of focus on meeting students' needs through individualized instruction and adaptations of the general education curriculum for students with disabilities (Spooner, Baker, Harris, Ahlgrim-Delzell, & Browder, 2007). Thus, special educators are typically responsible for retrofitting lessons (e.g., modifying the curriculum, providing intervention, teaching remedial skills) that have been designed by the general education teacher. So while general and special education may have a shared agenda, to a certain extent, the "separateness of special education" still exists.

Reframing inclusion using a larger universal design rubric may move the practice away from the "separateness of special education" to the "belongingness of general education."
-Sailor, 2002

Reframing the issue of inclusion by using the larger rubric of "universal design" may indeed move the practice so that it "belongs to general education."

The universal design concept assumes high standards for all students and serves as a "blueprint for creating flexible goals, methods, materials, and assessments that accommodate learner differences" (Rose, 2001). The underlying premise of universal design is that teachers should plan instructional supports during the beginning of lesson planning instead of modifying materials as an afterthought (Hitchcock, 2001). In applying this concept, the burden shifts from the individual to the curriculum and curriculum design. Reframing the issue of inclusion in this way takes a sustainable approach to instruction where diversity is considered the norm and should be anticipated in all aspects of instruction and learning.

Shaping Attitudes: "Inclusion is a philosophy that urges schools, neighborhoods, and communities to welcome and value everyone, regardless of differences. Central to the philosophy of inclusion are the beliefs that everyone belongs, diversity is valued, and we can all learn from each other" (Renzaglia, Karvonen, Drasgow & Stoxen, 2003). Holding such an attitude can greatly impact the participation of students with disabilities in inclusive classrooms. According to a study conducted by Robertson, Chamberlain, and Kasari (2003), when teachers have positive perceptions of their relationship with students with disabilities, the students' behavior problems were reported to be lower, and the students were more socially included with peers. Prater (2003) also identified teacher attitudes as one of several elements that are critical in promoting the success of students with disabilities in general education settings.

Survey of Principals:

- **Experience and exposure to special education concepts resulted in positive attitudes**
- **Principals holding a positive attitude were more likely to place students in less restrictive settings**

In addition to the role that teacher attitudes play in the success of inclusive classrooms, it is widely acknowledged that an inclusive school culture begins with the committed leadership of principals. Praisner (2003) examined principals' attitudes toward inclusion including their placement perceptions. Out of 408 principals surveyed, only one in five held positive attitudes toward inclusion. Factors that were associated with positive attitudes included experiences with students with disabilities and exposure to special education concepts. Furthermore, principals who had positive attitudes were more likely to place students in less restrictive settings. Clearly, teacher and administrator attitudes are critical factors that shape the experiences of students with disabilities. These findings hold particular implications for personnel supporting and providing technical assistance to teachers and staff. Efforts aimed at providing teachers and administrators with meaningful contact with people with disabilities as well as information on special education concepts makes a difference in the quality of students' educational programming.

REFERENCES

Baker, S., Gersten, R., & Scanlon, D. (2002). Procedural facilitators and cognitive strategies: Tools for unraveling the mysteries of comprehension and the writing process and for providing meaningful access to the general education curriculum. *Learning Disabilities: Research and Practice, 17,* 65-77.

Browder, D. M. & Cooper-Duffy, K. (2003). Evidence-based practices for students with severe disabilities and the requirement for accountability in "No child left behind". *Journal of Special Education, 37(3),* 157-163.

Carter, E. W., Cushing, L. S., Clark, N. M., Kennedy, C. H. (2005). Effects of peer support interventions on students' access to the general curriculum and social interactions. *Research and Practice for Persons with Severe Disabilities, 30,* 15-25.

Carter, E. W., Cushing, L. S., & Kennedy, C. H. (2008). Promoting rigor, relevance, and relationships through peer support interventions. *Tash Connections,* 20-23.

Cushing, L. S., & Kennedy, C. H. (1997). Academic effects of providing peer support in general education classrooms on students without disabilities. *Journal of Applied Behavior Analysis, 30,* 139-151.

Dawson,H., Delquadri,J., Greenwood, C., Hamilton, S., Ledford, D., Mortweet, S., Reddy, S., Utley, C., Walker,D. (1999). Class-wide Peer Tutoring: Teaching Students with Mild Retardation in Inclusive Classrooms. *The Council for Exceptional Children,* 524-536.

Fisher, D., & Frey, N. (2001). Access to the core curriculum: Critical ingredients for student success. *Remedial and Special Educatio,n* 22*(3),* 148-157.

Fisher, J. B., Shumaker, J. B., Deshler, D. D. (1995). Searching for validated inclusive practices: A review of literature. *Focus on Exceptional Children, 28(4),* 1-20.

Fuchs, L. S. & Fuchs, D. (1998). General educators' instructional adaptation for students with learning disabilities. *Learning Disability Quarterly, 21(1),* 23-33.

Fuchs, D., Fuchs, L. S., Mathes, P. G., & Martinez, E. (2002). Preliminary evidence on the social standing of students with learning disabilities in PALS and No-PALS classrooms. *Learning Disabilities Research and Practice, 15,* 85-91.

Gersten, R., Baker S. K., Smith-Johnson, J., Dimino, J., & Peterson, A. (2006). Eyes on the Prize: Teaching Complex Historical Content to Middle School Students with Learning Disabilities. *Exceptional Children, 72(3),* 264-280.

Giangreco, M. F., Broer, S. M., & Edelman, S. W. (2001). Teacher engagement with students with disabilities: Differences between paraprofessional service delivery models. *Journal of the Association for Persons with Severe Handicaps, 26(2),* 75-86.

Gilberts, G. H., Agran, M., Hughes, C., & Wehmeyer, M. (2001). The effects of peer delivered self-monitoring strategies on the participation of students with severe disabilities in general education classrooms. *Journal of the Association for Persons with Severe Disabilities,* 26*(1),* 25-36.

Hitchcock, C. (2001). Balanced instructional support and challenge in universally designed learning environments. *Journal of Special Education Technology, 16,* 23–30.

Hunt, P., & Farron-Davis, F. (1992). A preliminary investigation of IEP quality and content associated with placement in general education versus special education. *Journal of the Association for Persons with Severe Handicaps, 17*(4), 247-253.

Hunt, P., Farron-Davis, F. Beckstead, S., Curtis, D., & Goetz, L. (1994). Evaluating the effects of placement of students with severe disabilities in general education versus special education. *Journal of the Association for Persons with Severe Handicaps, 19(3),* 200-214.

Hunt, P., Doering, K., Hirose-hatae, A., Maier, J., & Goetz, L. (2001). Across-program collaborqtion to support students with and without disabilities in a general education classroom. *Journal of the Association for Persons with Severe Handicaps, 26(4),* 240-256.

Hunt, P., Soto, G., Maier, J., & Doering, K. (2003). Collaborative teaming to support students at risk and students with severe disabilities in general education classrooms. *Exceptional Children, 69(3),* 315-332.

Helmstetter, E., Curry, C.A., Brennan, M., & Sampson-Saul, M. (1998). Comparison of general and special education classrooms of students with severe disabilities. *Education and Training in Mental Retardation and Developmental Disabilities, 33,* 216-227

Jackson, L., Ryndak, D. L., & Billingsley, F. (2000). Useful practices in inclusive education: A preliminary view of what experts in moderate to severe disabilities are saying. *Journal of the Association for Persons with Severe Handicaps, 25,* 129-141.

Kamps, D., Royer, J., Dugan, E., Kravits, T., Gonzalez-Lopez, A., Garcia, J., Carnazzo, K., Morrison, L., & Garrison Kane, L. (2002). Peer training to facilitate social interaction for elementary students with autism and their peers. *Exceptional Children, 68(2),* 173-187.

Lee, S. H., Amos, B. A., Gragoudas, S., Lee, Y., Shogren, K. A., & Theoharis, R., (2006). Curriculum augmentation and adaptation strategies to promote access to the general curriculum for students with intellectual and developmental disabilities. *Education and Training in Developmental Disabilities, 41,* 199-212.

Lee, S. H., Wehmeyer, M. L., Soukup, J. H., & Palmer, S. B. (2010). Impact of curriculum modifications on access to the general education curriculum for students with disabilities. *Exceptional Children, 76(2),* 213-233.

Lenz, B. K., Schumaker, J. B., Deshler, D. D., Boudah, D. J., Vance, M. Kissam, B., Bulgren, J. A., & Roth, J. (1993). The unit planning routine: A guide for inclusive unit planning (Research Report). *Lawrence: University of Kansas Center for Research on Learning.*

McDonnell, J., Thorson, N., & McQuivey, C. (2000). Comparison of the instructional contexts of students with severe disabilities and their peers in general education classes. *Journal of the Association for Persons with Severe Handicaps, 25,* 54-58.

McMaster, K. L., Fuchs, D., & Fuchs, L. S. (2007). Promises and limitations of peer-assisted learning strategies in reading. *Learning Disabilities: A Contemporary Journal, 5(2),* 97-112.

Murawski, W. M., & Swanson, H. L. (2001). A meta-analysis of the co-teaching research: Where are the data? *Remedial and Special Education, 22,* 258-267.

Hunt, P., & Goetz, L. (1997). Research on inclusive education programs, practice and outcomes for students with severe disabilities. *Journal of Special Education, 31*(1), 3-29.

Baker, E. T., Wang, M. C., & Walberg, H. J. (1994). The effects of inclusion on learning. *Educational Leadership, 52(4),* 33-35.

McGregor, G., & Vogelsberg, R. T. (1998). *Inclusive schooling practices: Pedagogical and Research Foundations. A synthesis of the literature that informs best practices about inclusive schooling.* University of Montana, Rural Institute on Disabilities.

Hunt, P., Alwell, M., Farron-Davis, F., & Goetz, L. (1996). Creating socially supportive environments for fully included students who experience multiple disabilities. *Journal of the Association for Persons with Severe Handicaps, 21(2),* 53-71.

McDonnell, J., Thorson, N., McQuivey, C., & Kiefer-O'Donnell, R. (1997). Academic engaged time of students with low incidence disabilities in general education classes. *Mental Retardation, 35(1),* 18-26

McDonnell, J., Mathot-Buckner, C., Thorson, N., & Fister, S. (2001). Supporting the inclusion of student with moderate and severe disabilities in junior high school general education classes: The effects of class wide peer tutoring, multi-element curriculum and accommodations. *Education and Treatment of Children, 24*(2), 141-160.

Kliewer, C., & Biklen, D. (2001). "School's not really a place for reading:" A research synthesis of the literate lives of students with severe disabilities. *Journal of the Association for Persons with Severe Handicaps, 26*(1) 1-12.

Pomerants, D. J., Windell, I. J., & Smith, M. A. (1994). The effects of classwide peer tutoring and accommodations on the acquisition of content area knowledge by elementary students with learning disabilities. *LD Forum, 19(2),* 28-32.

Prater, M.A. (2003). She will succeed: Strategies for success in inclusive classrooms. *Teaching Exceptional Children, 35*(5), 58-64.

Praisner, C. L. (2003). Attitudes of elementary school principals toward the inclusion of students with disabilities. *Exceptional Children, 69*(2), 135-145.

Pulincsar, A. S., Magnusson, S. J., Collins, K. M., & Cutter, J. (2001). Making science accessible to all: Results of a design experiment in inclusive classrooms. *Learning Disability Quarterly, 24,* 15-32.

Renzaglia, A., Karvonen, M., Drasgow, E., & Stoxen, C.C. (2003). Promoting a lifetime of inclusion. *Focus on Autism and Other Developmental Disabilities, 18*(3), 140-149.

Robertson, K., Chamberlain, B., & Kasari, C. (2003). General education teachers' relationships with included students with autism. *Journal of Autism and Developmental Disorders, 33*(2), 123-130.

Rose, D. (2001). Universal design for learning. *Journal of Special Education Technology, 16,* 66–67.

Salisbury, C. L., Mangino, M., Petrigala, M., Rainforth, B., Syryca, S. & Palombaro, M. M. (1994). Promoting the instructional inclusion of young children with disabilities in the primary grades. *Journal of Early Intervention, 18*(3), 311-322.

Scruggs, T. E., Mastropieri, M. A., & McDuffie, K. A. (2007). Co-Teaching in Inclusive Classrooms: A Metasynthesis of Qualitative Research. *Exceptional Children, 73(4),* 392-416.

Soto, G., Müller, E., Hunt, P., & Goetz, L. (2001). Critical issues in the inclusion of students who use augmentative and alternative communication: An educational team perspective. *Augmentative and Alternative Communication, 17,* 62-72.

Spooner, F., Baker, J.N., Harris, A.A., Ahlgrim-Delzell, L., & Browder, D. (2007). Effects of training in universal design for learning on lesson plan development. *Remedial and Special Education, 28,* 108-116.

Stenhoff, D. M. & Lignugaris/Kraft, B. (2007). A review of the effects of peer tutoring on students with mild disabilities in secondary settings. *Exceptional Children, 74(1),* 8-30.

Swanson, H., & Hoskyn, M. (2001). Instructing adolescents with learning disabilities: A component and composite analysis. *Learning Disabilities Research and Practice, 16,* 109-119.

Waldron, N., Cole, C., & Majd, M. (2001). The academic progress of students across inclusive and traditional settings: A two year study Indiana inclusion study. Bloomington, IN: Indiana Institute on Disability & Community.

Wagner, M., Newman, L., Cameto, R., and Levine, P. (2006). The Academic Achievement and Functional Performance of Youth with Disabilities: A Report from the National Longitudinal Transition Study-2 (NLTS2). (NCSER 2006-3000). Menlo Park, CA: SRI International

Wehmeyer, M. L., lance, D., & Bashinski, S. (2002). Promoting access to the general curriculum for students with mental retardation: A multi-level model. *Education and Training in Mental Retardation and Developmental Disabilities, 37,* 223-234.

Falvey, Mary A. (Spring 2004) Toward realization of the least restrictive educational environments for severely handicapped students. *Research and Practice for Persons with Severe Disabilities, 29(1),* 9-10.

Hollowood, T. M., Salisbury, C. L., Rainforth, B., & Palombaro, M. M. (1995). Use of instructional time in classrooms serving students with and without severe disabilities. *Exceptional Children, 61*(3), 242-253.

Sailor, W. (2002). President's Commission on Excellence in Special Education: Research Agenda Task Force. Nashville, TN

Soukup, J. H., Wehmeyer, M. L., Bashinski, S. M., & Bovaird, J. (2007). Classroom variables and access to the general education curriculum for students with disabilities. *Exceptional Children, 74,* 101-120.

Staub, D. & Peck, C. A. (1995). What are the outcomes for non-disabled students? *Educational Leadership, 52,* 36-40.

Peltier, G. L. (1997). The effect of inclusion on non-disabled children: A review of the research. *Contemporary Education, 68,* 234-238.

References (DRAFT)
This is a working reference list for a document regarding inclusive education to be completed in February 2018.

Agran, M., Alper, S., & Wehmeyer, M. (2002). Access to the general education curriculum for students with significant disabilities. *Education and Training in Mental Retardation and Developmental Disabilities, 37*, 123-133.

Benz, M. R., Lindstrom, L., & Yovanoff, P. (2000). Improving graduation and employment outcomes of students with disabilities: Predictive factors and student perspectives. *Exceptional Children, 66*(4), 509-529.

Browder, D. M., Spooner, F., Ahlgrim-Delzell, L., Harris, A. A., & Wakemanxya, S. (2008). A meta-analysis on teaching mathematics to students with significant cognitive disabilities. *Exceptional children, 74*(4), 407-432.

Browder, D. M., Wakeman, S. Y., Spooner, F., Ahlgrim-Delzell, L., & Algozzinexya, B. (2006). Research on reading instruction for individuals with significant cognitive disabilities. *Exceptional children, 72*(4), 392-408.

Carr, M. N. (1993). A mother's thoughts on inclusion. *Journal of learning disabilities, 26*(9), 590-592.

Carter, E. W., & Hughes, C. (2005). Increasing social interaction among adolescents with intellectual disabilities and their general education peers: Effective interventions. *Research and Practice for Persons with Severe Disabilities, 30*(4), 179-193.

Causton-Theoharis, J., Cosier, M., Theoharis, G., & Orsati, F. (2011). Does self-contained special education deliver on its promises? A critical inquiry into research and practice. *Journal of Special Education Leadership, 24*(2), 61-78.

Causton-Theoharis, J., & Theoharis, G. (2008). Creating inclusive schools for all students. *School Administrator, 65*(8), 24-25.

Choi, J. H., Meisenheimer, J. M., McCart, A. B., & Sailor, W. (2017). Improving learning for all students through equity-based inclusive reform practices: effectiveness of a fully integrated schoolwide model on student reading and math achievement. *Remedial and Special Education, 38*(1), 28-41.

Cimera, R. E. (2010). National cost efficiency of supported employees with intellectual disabilities: 2002 to 2007. *American Journal on Intellectual and Developmental Disabilities, 115*(1), 19-29.

Copeland, S. R., & Cosbey, J. (2009). Making progress in the general education curriculum: Rethinking effective instructional practices. *Research and Practice for Persons with Severe Disabilities, 33*(4), 214-227.

Cosier, M. (2010) *Exploring the relationship between inclusive education and achievement: New perspectives*. Syracuse University: Proquest Dissertations.

Cosier, M. Causton-Theoharis, J. & Theoharis, G. (2013) Do inclusive placements matter? The relationship between time in general education and achievement for students with disabilities.

References (DRAFT)
This is a working reference list for a document regarding inclusive education to be completed in February 2018.

Dessemontet, R. S., & Bless, G. (2013). The impact of including children with intellectual disability in general education classrooms on the academic achievement of their low-, average-, and high-achieving peers. *Journal of Intellectual & Developmental Disability, 38*(1), 23-30. doi:10.3109/13668250.2012.757589

Dessemontet, R. S., Bless, G., & Morin, D. (2012). Effects of inclusion on the academic achievement and adaptive behaviour of children with intellectual disabilities. *Journal of Intellectual Disability Research, 56*(6), 579-587. doi:10.1111/j.1365-2788.2011.01497.x

Dessemontet, R. S., Bless, G., & Morin, D. (2011). Effect of inclusion on the academic achievement and adaptive behaviour of children with intellectual disabilities. *Journal of Intellectual Disability Research, 56*(6), 579-587.

Donovan, M. S., & Cross, C. T. (2002). Minority students in special and gifted education, committee on minority representation in special education. *Washington, DC: National Academy of Education.*

Doré, R., Dion, É., Wagner, S., & Brunet, J. P. (2002). High school inclusion of adolescents with mental retardation: A multiple case study. Education and Training in Mental Retardation and Developmental Disabilities, 253-261.

Fisher, M., & Meyer, L. H. (2002). Development and social competence after two years for students enrolled in inclusive and self-contained educational programs. *Research and Practice for Persons with Severe Disabilities, 27*(3), 165-174.

Fisher, D., Sax, C., Rodifer, K., & Pumpian, I. (1999). Teachers' Perspectives of Curriculum and Climate Changes. *Journal for a just and Caring Education, 5*(3), 256-68.

Fisher, M., & Pleasants, S. L. (2012). Roles, responsibilities, and concerns of paraeducators: Findings from a statewide survey. *Remedial and Special Education, 33*(5), 287-297.

Foreman, P., Arthur-Kelly, M., Pascoe, S., & King, B. S. (2004). Evaluating the educational experiences of students with profound and multiple disabilities in inclusive and segregated classroom settings: An Australian perspective. *Research and Practice for Persons with Severe Disabilities, 29*(3), 183-193.

Freeman, S. F., & Alkin, M. C. (2000). Academic and social attainments of children with mental retardation in general education and special education settings. *Remedial and Special Education, 21*(1), 3-26.

Fuchs, D., Fuchs, L. S., & Fernstrom, P. (1993). A conservative approach to special education reform: Mainstreaming through transenvironmental programming and curriculum-based measurement. *American Educational Research Journal, 30*(1), 149-177.

Giangreco, M.F., & Broer S.M. (2005) Questionable utilization of paraprofessionals in inclusive schools: Are we addressing symptoms or causes? *Focus on Autism and Other Developmental Disabilities, 20*(1), 10-26.

Grosenick, J. K., George, N. L., George, M. P., & Lewis, T. J. (1991). Public school services for behaviorally disordered students: Program practices in the 1980s. Behavioral Disorders, 16(2), 87-96.

References (DRAFT)
This is a working reference list for a document regarding inclusive education to be completed in February 2018.

Gruner Gandhi, A. (2007). Context Matters: Exploring relations between inclusion and reading achievement of students without disabilities. *International Journal of Disability, Development and Education, 54*(1), 91-112. doi:10.1080/10349120601149797

Haber, M. G., Mazzotti, V. L., Mustian, A. L., Rowe, D. A., Bartholomew, A. L., Test, D. W., & Fowler, C. H. (2015). What works, when, for whom, & with whom: A meta-analytic review of predictors of postsecondary success for students with disabilities. Review of Educational Research., Advance online publication. doi:10.3102/0034654315583135

Harry, B., & Klingner, J. (2014). *Why are so many minority students in special education?*. Teachers College Press.

Heller, K. A., Holtzman, W. H., & Messick, S. (1982). *Placing children in special education: Equity through valid educational practices*. National Research Council.

Helmstetter, E., Curry, C.A., Brennan, M., & Sampson-Saul, M. (1998). Comparison of general and special education classrooms of students with severe disabilities. Education and Training in Mental Retardation and Developmental Disabilities, 33, 216-227

Hughes, C., Cosgriff, J. C., Agran, M., & Washington, B. H. (2013). Student self-determination: A preliminary investigation of the role of participation in inclusive settings. *Education and Training in Autism and Developmental Disabilities*, 3-17.

Hunt, P., Staub, D., Alwell, M., & Goetz, L. (1994). Achievement by all students within the context of cooperative learning groups. Journal of the Association for Persons with Severe Handicaps, 19, 290-301.

Hunt, P., Farron-Davis, F., Beckstead, S., Curtis, D., & Goetz, L. (1994). Evaluating the effects of placement of students with severe disabilities in general education versus special classes. *Journal of the Association for Persons with severe Handicaps, 19*(3), 200-214.

Individuals with Disabilities Education Improvement Act, 20 USC § 1400 (2004).

Jackson, L. B., Ryndak, D. L., & Wehmeyer, M. L. (2008). The dynamic relationship between context, curriculum, and student learning: A case for inclusive education as a research-based practice. *Research and Practice for Persons with Severe Disabilities, 34*(1), 175-195.

Kauffman, J. M., McGee, K., & Brigham, M. (2004). Enabling or disabling? Observations on changes in special education. *Phi Delta Kappan, 85*(8), 613-620.

Kurth, J., & Mastergeorge, A. M. (2010). Individual education plan goals and services for adolescents with autism: Impact of age and educational setting. *The Journal of Special Education, 44*(3), 146-160

Losen, D. J., & Orfield, G. (2002). *Racial inequity in special education*. Harvard Education Publishing Group, 8 Story Street, 5th Floor, Cambridge, MA 02138.

Lovett, H. (1996). *Learning to listen: Positive approaches to people with difficult behavior.* Baltimore: Paul H. Brookes Publishing Co.

References (DRAFT)
This is a working reference list for a document regarding inclusive education to be completed in February 2018.

Maloney, J. (1995). A Call for Placement Options. *Educational Leadership, 52*(4), 25.
MacMillan, D. L., Gresham, F. M., & Forness, S. R. (1996). Full inclusion: An empirical perspective. *Behavioral Disorders, 21*(2), 145-159.

McDonnell, J., Johnson, J. W., Polychronis, S., & Risen, T. (2002). Effects of embedded instruction on students with moderate disabilities enrolled in general education classes. *Education and Training in Mental Retardation and Developmental Disabilities*, 363-377.

McDonnell, J., Thorson, N., Disher, S., Mathot-Buckner, C., & Mendel, J., & Ray, L. (2003). The achievement of students with developmental disabilities and their peers without disabilities in inclusive settings: An exploratory study. Education and Treatment of Children, 26(3), 224-236.

McLeskey, J., & Waldron, N. L. (2002). School change and inclusive schools: Lessons learned from practice. Phi Delta Kappan, 84(1), 65-72.

National Research Council (2002). *Minority students in special and gifted education.* Washington, DC: National Academy Press.

Odom, S. L., Deklyen, M., & Jenkins, J. R. (1984). Integrating handicapped and nonhandicapped preschoolers: Developmental impact on nonhandicapped children. Exceptional Children, 51, 41-48.
Peterson, J. M., & Hittie, M. M. (2003). *Inclusive teaching: Creating effective schools for all learners.* San Francisco: Allyn & Bacon.

Quirk, C., Ryndak, D. L., & Taub, D. (2017). Research and Evidence-Based Practices to Promote Membership and Learning in General Education for Students With Extensive Support Needs. *Inclusion, 5*(2), 94-109. doi:10.1352/2326-6988-5.2.94

Rea, P. J., McLaughlin, V. L., & Walther-Thomas, C. (2002). Outcomes for students with leaming disabilities in inclusive and pullout programs. Exceptional Children 68(2), 203-222.

Rock, E. E., Rosenberg, M. S., & Carran, D. T. (1994). Variables affecting the reintegration rate of students with serious emotional disturbance. *Exceptional Children, 61*(3), 254-268.

Robinson, C., & Babo, G. g. (2014). The Influence of Inclusion on the Academic Performance of General Education Students on the New Jersey Assessment of Skills and Knowledge in Grades 6, 7, and 8. *AASA Journal Of Scholarship & Practice, 11*(3), 16-33.

Rojewski, J. W., Lee, I. H., & Gregg, N. (2015). Causal effects of inclusion on postsecondary education outcomes of individuals with high-incidence disabilities. *Journal of Disability Policy Studies, 25*, 210-219. doi:10.177/1044207313505648

Ruijs, N. M., & Peetsma, T. T. D. (2009). Effects of inclusion on students with and without special educational needs reviewed. *Educational Research Review, 4*(2), 67-79. doi:https://doi.org/10.1016/j.edurev.2009.02.002

References (DRAFT)
This is a working reference list for a document regarding inclusive education to be completed in February 2018.

Ryndak, D., Jackson, L. B., & White, J. M. (2013). Involvement and Progress in the General Curriculum for Students With Extensive Support Needs: K–12 Inclusive-Education Research and Implications for the Future. *Inclusion, 1*(1), 28-49. doi:10.1352/2326-6988-1.1.028

Salend, S. J., & Duhaney, L. M. G. (1999). The impact of inclusion on students with and without disabilities and their educators. Remedial and special education, 20(2), 114-126.

Scruggs, T. E., & Mastropieri, M. A. (1994). Successful mainstreaming in elementary science classes: A qualitative study of three reputational cases. American Educational Research Journal, 31, 785-811.

Shogren, K. A., Gross, J. M., Forber-Pratt, A. J., Francis, G. L., Satter, A. L., Blue-Banning, M., & Hill, C. (2015). The perspectives of students with and without disabilities on inclusive schools. Research and Practice for Persons with Severe Disabilities, 1540796915583493.

Staub, D., & Peck, C. A. (1995). What Are the Outcomes for Nondisabled Students?. Educational leadership, 52(4), 36-40.

Stokes, T. F., & Baer, D. M. (1977). An implicit technology of generalization. Journal of applied behavior analysis, 10(2), 349-367.

Strully, J., & Strully, C. (1992). The struggle toward inclusion and the fulfillment of friendship. *Natural supports in school, at work, and in the community for people with severe disabilities*, pp. 165-178.

Test, D. W., Fowler, C. H., Richter, S. M., White, J., Mazzotti, V., Walker, A. R., . . . Kortering, L. (2009). Evidence-based practices in secondary transition. *Career Development for Exceptional Individuals, 32*(2), 115-128. doi:10.1177/0885728809336859

Test, D. W., Mazzotti, V. L., Mustian, A. L., Fowler, C. H., Kortering, L., & Kohler, P. (2009). Evidence-based secondary transition predictors for improving postschool outcomes for students with disabilities. *Career Development for Exceptional Individuals, 32*(3), 160-181. doi:10.1177/0885728809346960

Theoharis, G., & Causton-Theoharis, J. (2010). Include, belong, learn. Educational Leadership 68(2), p. 1-6.

Waldron, N., & McLeskey, J. (1998). The effects of an inclusive school program on students with mild and severe learning disabilities. *Exceptional Children, 64*(2), 395-405.

Walker, H. M., Calkins, C., Wehmeyer, M. L., Walker, L., Bacon, A., Palmer, S. B., Jesien, G. S., Nygren, M. S., Gotto, G. S., Abery, B. H., & Johnson, D. R. (2011) 'A social-ecological approach to promote self-determination', in Exceptionality, 19, 6-18.

Wehmeyer, M. L., & Metzler, C. A. (1995). How Self-Determined Are People With Mental Retardation? The National Consumer Survey (" Accepted by Louis Rowitz"). *Mental Retardation, 33*(2), 111

Alternatives to Overreliance on Paraprofessionals in Inclusive Schools

Michael F. Giangreco, Ph.D.
University of Vermont

Ann T. Halvorsen, Ph.D.
California State University at Hayward

Mary Beth Doyle, Ph.D.
St. Michael's College, Colchester, VT

Stephen M. Broer, Psy.D.
Northwest Counseling & Support Services, Inc., St. Albans, VT

- **Though the utilization of special education paraprofessionals has increased, contemporary literature and research highlight a series of concerns about the field's continuing reliance on this approach.**
- **This article presents a three-component administrative model for effective utilization of paraprofessionals that includes paraprofessional supports, decision-making, and alternatives.**
- **The bulk of the article provides composite descriptions about seven alternatives to overreliance on paraprofessionals based on reports from school personnel who have implemented these alternatives.**
- **School leaders are encouraged to explore alternatives to overreliance on paraprofessionals as a way to improve their special education service delivery to meet the educational needs of students with a full range of disabilities within the context of general education classrooms.**

Alternatives to Overreliance on Paraprofessionals in Inclusive Schools

A key challenge facing both principals and special education administrators is designing and implementing special education service delivery models that meet the educational needs of students with a full range of disabilities within the context of general education classrooms. Nationally, as more students with low incidence disabilities (e.g., autism, severe behavior disorders, intellectual impairments, multiple disabilities) receive their education in general education classrooms, one of the most common service delivery responses has been to hire and assign more paraprofessionals. This has contributed to the burgeoning numbers of paraprofessionals in American schools and corresponding costs. Simultaneously, the wisdom of proliferating a service delivery model that is highly dependent on paraprofessionals for the successful inclusion of students with disabilities has been questioned conceptually (Brown, Farrington, Ziegler, Knight, & Ross, 1999; Giangreco & Broer, 2003b; Mueller 2002) and a variety of concerns have been illustrated in the research literature (Downing, Ryndak, & Clark, 2000; Giangreco, Broer, & Edelman, 2001; Giangreco, Edelman, Luiselli, & MacFarland, 1997; Hemmingsson, Borell, & Gustavsson, 2003; Marks, Shrader & Levine, 1999; Wallace, Shin, Bartholomay & Stahl, 2001). These concerns include:

- The least qualified group of staff members, paraprofessionals, sometimes have primary or extensive responsibilities for teaching students with the most complex learning characteristics.
- Special education paraprofessionals remain untrained or under-trained for their roles, which at times are questionable (e.g., making curricular decisions, planning lessons, designing adaptations, serving as a liaison with families).
- Similarly, many teachers and special educators remain untrained or under-trained to direct and supervise paraprofessionals; some remain hesitant to undertake this role.
- Inappropriate utilization or excessive proximity of paraprofessionals has been linked to inadvertent detrimental effects (e.g., dependence, interference with peer interactions, insular relationships, stigmatization, provocation of behavior problems).
- Assignment of individual paraprofessionals has been linked to lower levels of teacher

involvement with students who have disabilities, a key factor for successful inclusion in general education classrooms.

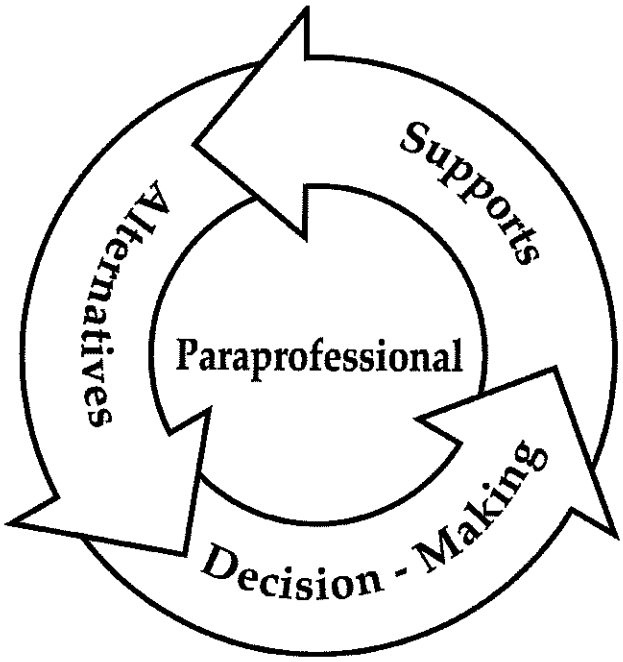
- Shifting responsibilities to paraprofessionals may temporarily relieve certain types of pressures on general and special educators that delay attention to needed changes in schools such as: (a) improving classroom teacher ownership of students with disabilities; (b) addressing special educator working conditions (e.g., caseload, paperwork); or (c) building capacity within general education to design curriculum and instruction for mixed-ability groups that include students with disabilities.

Administrators are faced with addressing these points of concern while simultaneously: (a) acknowledging the valuable work of paraprofessionals as respected members of the school community, (b) utilizing existing paraprofessional resources effectively, (c) ensuring that future decisions about the use of paraprofessionals are appropriate and judicious, and (d) exploring alternatives so that schools are not limited to relying on paraprofessionals as the exclusive or primary mechanism for supporting the educational needs of students with disabilities in general education classes. This article addresses these challenges by first briefly presenting a three-component model for the effective utilization of paraprofessionals to assist in providing special education under the direction of qualified professionals. Second, the focus of the text is on one of the three components of the model, *alternatives* to overreliance on paraprofessionals, because it has been afforded minimal attention in the professional literature and is uniquely important to administrators who are in a position to effect systemic change.

Three-Component Administrative Model for Effective Utilization of Paraprofessionals

As depicted in Figure 1, paraprofessional *supports* represent one of three interrelated components that form a sound administrative foundation for ensuring the appropriate utilization of paraprofessionals in inclusive schools. Though important, *supports* designed to clarify and strengthen the work of paraprofessionals (e.g., role clarification, hiring, orientation, training, supervision) are not the focus of this article because a large volume of contemporary literature and research is presently available on this topic (Doyle, 2002; French, 2003; Gerlach, 2001; Ghere, York-Barr, & Sommerness, 2002; Giangreco & Doyle, 2002; Giangreco, Edelman, & Broer, 2003; Giangreco, Edelman, Broer, & Doyle, 2001; Minondo, Meyer, & Xin, 2001; Morgan & Ashbaker, 2001; Pickett & Gerlach, 2003; Riggs & Mueller, 2001; Wallace, Shin, Bartholomay, & Stahl, 2001).

Figure 1: Three-component administrative model for effective utilization of paraprofessionals.



Reprinted with permission, 2003 © Michael F. Giangreco

A second component, *decision making*, refers to making decisions about the need for paraprofessional supports. Professional literature pertaining to *decision-making* guidelines and processes about the utilization of paraprofessionals is scant. It consists of a small set of conceptual articles (Freshi, 1999; Giangreco, Broer & Edelman, 1999), one programmatic description of a school-based decision-making process (Mueller & Murphy, 2001), and no research data. Though this topic is in dire need of attention, more process options along with an initial set of descriptive and evaluation research studies are

required prior to making generalizations that extend beyond the existing published literature.

The third component, *alternatives*, refers to a variety of actions school leaders can encourage to involve paraprofessionals, general and special educators, parents, and students with and without disabilities, in ways that reduce unnecessary utilization and potential overuse of paraprofessionals. These actions are designed to reduce the problematic, though unintended, effects of excessive or unnecessary paraprofessional utilization. It is our contention that students with disabilities are best served when schools attend to all three components, by: (a) providing appropriate supports for their existing paraprofessionals (e.g., respect, role clarification, orientation, training, supervision); (b) establishing logical and equitable *decision-making* practices for the assignment and utilization of paraprofessionals; and (c) selecting individually appropriate *alternatives* designed to increase student access to instruction from qualified teachers and special educators, facilitate development of peer interactions, and promote self-determination in inclusive classrooms.

Selected Alternatives

The following descriptions of seven alternatives to overreliance on paraprofessionals are composites based primarily on the self-reports of individuals in inclusive schools across the country. They include a subset of possibilities we consider among those most readily able to be implemented in schools. Additional possibilities (e.g., co-teaching, creative use of dual-certified general/special educators, differentiated teacher roles/positions) also hold promise as alternatives, though likely require more extensive planning to enact than the suggestions presented in this article.

The professional literature offers virtually no student outcome or related data on the impact of these or other alternatives to overreliance on paraprofessionals. Given the paucity of available information, having descriptions based on first-hand experiences of school-based professionals and parents is an appropriate starting point for administrators to consider as this important area of study emerges. The reader is cautioned that applicability of the ideas presented in this document will vary based on local factors (e.g., collective bargaining agreements, state regulations, policies, special education funding).

Alternative #1: Resource Reallocation—Trading Paraprofessional Positions for Special Educators

Designed as a cost-neutral reallocation of resources, some schools have chosen to shift existing funds from the hiring of paraprofessionals to the hiring of special educators. The number of paraprofessional positions that equal one special educator will, of course, vary depending on a variety of compensation factors; typically three to four paraprofessional positions equals one special educator position. For sake of example, if it costs $50,000 for salary and fringe benefits to hire one special educator, it might require the resources currently directed toward four paraprofessional positions at $12,500 per year, based on 30 hours per week at $9.00/hour with some benefits. The number of paraprofessional positions might be closer to three if the paraprofessionals are paid more, or if early career teachers are hired.

Designed as a cost-neutral reallocation of resources, some schools have chosen to shift existing funds from the hiring of paraprofessionals to the hiring of special educators.

Schools that reallocated resources in this manner increased the number of highly qualified faculty without increasing costs and improved working conditions for special educators by reducing their caseload size. Lower caseload size can have a series of positive ripple effects, such as: (a) correspondingly less paperwork; (b) fewer paraprofessionals to supervise; (c) more instructional contact time between special educators and students with disabilities; (d) more opportunities for special educators and teachers to collaborate within the classroom; and (e) opportunities to narrow the range of grade levels special educators are asked to support (e.g., assigned to one or two grade levels). Such effects can contribute to job satisfaction and retention of faculty. Retention of faculty also saves time and money spent on hiring and orientation.

A potential challenge of this alternative can be an insufficient supply of certified and qualified special educators, especially in regions with acute shortages. Additionally, some paraprofessionals report anxiety

when resource reallocation is considered, fearing job losses. Job loss can be avoided in cases where the extent of proposed resource reallocation is less than the projected turnover rate for paraprofessionals—though remaining paraprofessionals may be reassigned to different schools or classrooms, or have their roles redefined (e.g., assigned as classroom paraprofessional rather than individual). Classroom teachers may be concerned that common scenarios (e.g., behavioral incidents) will disrupt special educators' scheduled times to work in the classroom. Since such unexpected scenarios will undoubtedly occur, relying on other alternatives, in combination, can reduce this concern.

Alternative #2: Increasing Ownership of General Educators and Building Their Capacity

In order for students with disabilities to be successfully included in general education classes, it is vital that the classroom teacher play a substantive role. In part, this means establishing teacher attitudes that are welcoming toward the inclusion of students with disabilities and building professional capacity to support the educational needs of mixed-ability groups, which include students with disabilities.

In order for students with disabilities to be successfully included in general education classes, it is vital that the classroom teacher play a substantive role.

In schools committed to greater levels of ownership and teacher capacity, leadership teams of general and special education administrators began by establishing an expectation that classroom teachers should be directly involved in teaching students with disabilities in their classes. It wasn't enough to be a "host" and have the paraprofessional function as the primary teacher. This notion was embedded in hiring practices, staff development, and supervision until it became part of the culture. Teachers weren't expected to go it alone; collaborative teams were formed with other teachers, special educators, related services providers, and families to encourage mutual support and learning. In addition, the teachers were provided with ongoing staff development in critical areas (e.g., literacy, positive behavior supports, inclusive education). One of the most common areas of staff development focused on teachers' abilities to differentiate curriculum and instruction for mixed-ability groups.

Increased ownership and capacity-building are designed to: (a) increase the amount and quality of instructional time students with disabilities receive from classroom teachers; (b) encourage more integrated delivery of special education services; (c) decrease reliance on paraprofessionals; (d) encourage utilization of classroom paraprofessionals to support *all* students; and (e) facilitate membership of students with disabilities in the classroom. Though it is not unusual for schools to establish collaborative teams or pursue ongoing staff development, what was unique in these examples was that the administrative leadership teams specifically initiated capacity-building for the general education teachers, at least in part, to address the burgeoning numbers of paraprofessionals in their school system. More broadly, the effort was made to ensure that the general education system had sufficient capacity so that students would avoid unnecessary referrals for special education. Some schools reported a decrease in the percent of students labeled "disabled," which they attributed, in part, to bolstering their schoolwide educational support system for all students.

Alternative #3: Transitional Paraprofessional Pool

One strategy with potential for dealing with both anticipated and unanticipated events that require short-term paraprofessional support is to establish a pool of trained paraprofessionals that can be centrally deployed by a principal or special education administrator as floaters. This group of paraprofessionals would be recruited, hired, assigned, and trained under the direction of a qualified professional (e.g., special educator, teacher, related services provider) for time-limited roles supporting students and classrooms with specific needs where paraprofessional support has been determined to be appropriate and necessary by the IEP team. For example, a student transitioning to high school might receive support in getting from class to class following a schedule. This support would be systematically faded and replaced by an individualized combination of newly learned student skills and natural supports (e.g., walking

between classes with peers). Similarly, the introduction of a new augmentative communication system or a positive behavioral support plan might require consistent, intensive, initial support on a time-limited basis as determined by individual student progress. Pooled paraprofessional resources provide administrative flexibility, encourage student independence, and establish an expectation among professionals and families that the assignment of a paraprofessional doesn't mean it is, or should be, permanent.

The school or district size, characteristics and needs of the student population, and requests for paraprofessional support will help determine the number of paraprofessionals in the pool. Establishing a protocol and procedures for requesting pooled paraprofessional resources is essential for judicious use. Any such procedures will more likely be effective if a cross-stakeholder group (e.g., principals, general and special educators, paraprofessionals, parents) assists in their development.

Additionally, pooled paraprofessionals can be utilized as substitutes for absent paraprofessionals and be called upon to fill in when a special educator is pulled away to deal with unusual situations or other unanticipated problems (e.g., behavior incident). The variety and breadth of activities of pooled paraprofessionals may mean that this group needs to include some of the most skilled paraprofessionals whose personal characteristics allow them to quickly adjust and contribute in new situations. During periods of lower demand, pooled paraprofessionals can be utilized to free up other paraprofessionals for training or be utilized for other valued-added purposes (e.g., assisting with special projects).

Alternative #4: Clerical/Paperwork Paraprofessional

In an effort to alleviate some of the paperwork burden on special educators, an existing paraprofessional position can be re-conceptualized from working with students to doing logistical and clerical tasks that were being done by special educators. Examples include: (a) sending notifications to families; (b) scheduling IEP and team meetings; (c) making scheduling contacts with related services providers; (d) maintaining student databases; (e) maintaining student files; (g) tracking important dates (e.g., triennial reviews, IEP dates); and (h) general clerical work (e.g., photocopying, laminating, ordering supplies). The paperwork paraprofessional can also be available to help out in classes if the position is defined in that way. Like any of the listed alternatives, the extent of implementation varies; in one school the paperwork paraprofessional is a full-time position, whereas in another 10 hours a week is sufficient.

In an effort to alleviate some of the paperwork burden on special educators, an existing paraprofessional position can be re-conceptualized from working with students to doing logistical and clerical tasks that were being done by special educators.

Shifting appropriate clerical and paperwork responsibilities from special educators to paraprofessionals may be part of a package of alternatives to re-establish the role of the special educator as a professional who works directly with students who have disabilities. It can improve working conditions for special educators and raise their morale by reallocating their paperwork responsibilities and creating more time for teaching. In some school districts, the role of the special educator has become almost exclusively that of case manager and supervisor of paraprofessionals. Many special educators express dissatisfaction with this role because their professional passion is to work with students, not push paper. Administratively, having a paperwork paraprofessional can save time by centralizing the organization of required paperwork and contributing to state and federal compliance.

Alternative #5: Lowering Caseloads of Special Educators

In an era when general education is concerned about reducing class size, it is ironic that many special educators have caseloads of students with disabilities that nearly match and sometimes exceed the number of students without disabilities that classroom teachers are expected to teach. Special educators often work across a range of grade levels and subject matter that typically would not be expected of general educators. In addition to students on IEPs, many special educators have an additional caseload of students on 504 Plans or those considered "at risk."

When we take into account the increased numbers of adults a special educator collaborates with to address student needs, is it any wonder that so many special educators are leaving the field?

The main component of this alternative is simple and straightforward: to limit the caseload size of special educators so they can actually work with students and colleagues. In the schools that reported this alternative they purposely limited the caseloads of special educators to 10 or under and attempted to minimize the number of grade levels and individual teachers with whom the special educator interacted. Lowering caseloads was designed to: (a) increase instructional time between special educators and students with disabilities; (b) increase time for collaboration with teachers, related services providers, and families; (c) increase time available to provide sufficient training and supervision to paraprofessionals; and (d) increase the likelihood of special educators remaining in the field.

Alternative #6: Peer Support Strategies

Peer supports have a solid record in the literature and include of variety of examples (Snell & Janney, 2000), though few existing peer support models have been developed specifically to address overreliance on paraprofessionals. Schools can start by examining roles that paraprofessionals currently play that might be appropriately carried out by peers, keeping in mind that some of the same problems that exist with paraprofessionals can exist with peers (e.g., over-dependence); so merely changing one set of people for another is not sufficient. Plans must be made to ensure the quality of natural supports; here are two.

Schools can start by examining roles that paraprofessionals currently play that might be appropriately carried out by peers, keeping in mind that some of the same problems that exist with paraprofessionals can exist with peers...

An approach used in one high school as an alternative to traditional study hall, was a "Learning Lab." It was offered as a schoolwide support where any student, with or without disabilities, who needs extra support can get individual or group tutoring from an adult or peer. Although this approach was not initiated to address paraprofessional issues, it is presented because it can. The Lab, which is general education staffed and funded, is centrally located and equipped with current technology in an effort to make it a desirable and valued place for students and faculty. Students attend during study halls, before and after school, or at other agreed-upon times.

An important aspect of the Lab is that it supports the academic success of students across a range of abilities. For example, the Lab can support a student having difficulty with basic literacy or computation, as well as a group of advanced calculus students working through a particularly challenging problem, or others preparing for SAT exams. By ensuring service to a heterogeneous group of students, it can offer some students constructive models of academic behavior by peers while avoiding a common problem of "Learning Labs," namely stigmatization associated with serving only students at risk or with disabilities. Additionally, the Lab can serve as an important support for early career teachers.

Running this type of Learning Lab is not without its challenges. It can be difficult keeping up with the demand for the services. There are logistical and managerial challenges associated with scheduling peer tutors. Senior privileges (e.g., permission to be off campus when not in class) decrease the availability of tutors. Some peers can be overly helpful, create dependencies, or be "too bossy," so ongoing adult supervision is necessary. Peers can be underused or find it challenging to deal with situations where paraprofessionals are unwilling to relinquish a sufficient level of involvement or control.

A second alternative is a peer-to-peer support system that pairs a student with a disability with a classmate who does not have a disability. In some secondary programs, peers are eligible to receive course or community service credit. For example, in one school this was an elective course for seventh- and eighth-grade students. Often paired peers are the same age; sometimes they are cross-age (e.g., high school students assisting middle school students). In another case, the use of peer supports in combination with the rotating use of paraprofessionals was utilized explicitly to address overreliance on paraprofessionals.

Support peers receive systematic orientation and ongoing adult monitoring and support. They assist their classmates who have disabilities in social and

academic ways. This approach is designed to provide reciprocal benefits to students with disabilities and their peers without disabilities. Students with disabilities benefit from peer modeling, relationship building, and academic support as well as expanded opportunities to socialize, communicate, and demonstrate learning competencies. Peer supports can assist students with disabilities to feel accepted and build confidence. Peer support programs can also create and extend "hidden safety supports" in the schools. They can be a positive force to counteract bullying and, in general, encourage students to look out for each other. Peers without disabilities benefit in the areas of empathy, respect for diversity, responsibility, leadership, communication, and development of valued relationships with students who previously may have been outside their circle of friends. Through tutoring, students without disabilities often deepen or extend their own academic development because the act of teaching requires them to function on different and higher levels of understanding with the subject matter.

Peers without disabilities benefit in the areas of empathy, respect for diversity, responsibility, leadership, communication, and development of valued relationships with students who previously may have been outside their circle of friends.

Other benefits of peer supports are well known. Peers tend to be less intrusive and stigmatizing in general education settings. Some general education teachers find it easier and are more comfortable directing the activities of students rather than those of another adult (e.g., paraprofessional). Having peer, rather than paraprofessional, support can increase teacher involvement with students who have disabilities. Sometimes students with disabilities will do things with peers that they won't do for an adult. Peers are a good source of information on "what's cool" and what's not; they also often come up with creative and useful ideas.

Alternative #7: Involving Students With Disabilities in Making Decisions About Their Own Supports

Though self-determination is well established in the professional literature as a vital practice, we have not identified any real life examples where schools have systematically included students with disabilities in contributing to decisions about their own supports, specifically whether they need or want paraprofessional supports, when, how, or from whom. Our experiences, particularly with teenagers and young adults who have had paraprofessional supports, lead us to believe that there are a variety of factors and issues important to at least some students with disabilities, that simply are not adequately taken into account when consumers are not integrally involved in the decision-making. Some of these considerations include the impact of age, gender, proximity, chronological age-appropriateness, choice-making, and levels of control/freedom. Though presently we have little of practical significance to offer under this alternative, we have included it because we hope it will spur school personnel to explore ways to include their students in decision-making about their paraprofessional supports.

Conclusion

It is unlikely that any single alternative will be sufficient to affect substantial change. Therefore, consider enacting an individually determined package of alternatives, in combination with attention to the two other major components (i.e., supports, decision making) of the three-component administrative model for effective utilization of paraprofessionals. A school self-assessment and planning process, currently undergoing field-testing in 26 schools in six states (Giangreco & Broer, 2003a), can assist your selections.

When considering whether to act on the information in this article, keep in mind that some people perceive local factors mentioned earlier in this article (e.g., collective bargaining agreements, state regulations, policies, special education funding), as insurmountable barriers to innovation and quality education. It is likely that school personnel will encounter elements of these factors or other barriers that seemingly make it more difficult for schools to pursue sound educational practices. The

good news is that all attitudes, practices, collective bargaining agreements, regulations, policies, funding approaches, or other perceived barriers are subject to change.

As schools or districts identify alternatives that they believe would be beneficial, we encourage them to move forward. Avoid the temptation to say too quickly, *"We can't do that because it's against the regulations"* or *"We can't do that because it won't be reimbursed as a special education cost by our state."* By their very nature, laws like the IDEA have a great deal of flexibility built into them. Similarly, IEP teams formed to address the needs of students with disabilities can be very influential in affecting change, especially when you consider that states and school districts are not allowed to make policies or rules that interfere with the IEP team's individual decision-making authority. Administrative, principle-based leadership can assist professionals and families working together to make the best use of whatever flexibility currently is available within our systems. By deferring judgment, sticking to ethical principles, adhering to the guiding values embedded in our laws, and doing what we think is appropriate for students, each of us has the potential to affect some real change in our schools and communities. If we don't do it, who will?

References

Brown, L., Farrington, K., Ziegler, M., Knight, T., & Ross, C. (1999). Fewer paraeducators and more teachers and therapists in educational programs for students with significant disabilities. *Journal of the Association for Persons with Severe Handicaps, 24,* 249–252.

Downing, J., Ryndak, D., & Clark, D. (2000). Paraeducators in inclusive classrooms. *Remedial and Special Education, 21,* 171–181.

Doyle, M.B. (2002). *The paraeducators guide to the inclusive classroom: Working as a team* (2nd ed.). Baltimore: Paul H. Brookes.

French, N.K. (2003). *Managing paraeducators in your school: How to hire, train, and supervise non-certified staff.* Thousand Oaks, CA: Corwin Press.

Freschi, D.F. (1999). Guidelines for working with one-to-one aides. *Teaching Exceptional Children, 31*(4), 42–47.

Gerlach, K. (2001). *Let's team up! A checklist for paraeducators, teachers, and principals.* Washington, DC: National Education Association.

Ghere, G., York-Barr, J, & Sommerness, J. (2002). *Supporting students with disabilities in inclusive schools: A curriculum for job-embedded paraprofessional development.* Minneapolis, MN: Institute on Community Education, University of Minnesota.

Giangreco, M.F., & Broer, S.M. (2003a). *Guidelines for selecting alternatives to overreliance on paraprofessionals.* Burlington, VT: University of Vermont, Center on Disability and Community Inclusion. Online: http://www.uvm.edu/~cdci/evolve/gsa.html

Giangreco, M.F., & Broer, S.M. (March/April 2003b). The paraprofessional conundrum: Why we need alternative support strategies. *TASH Connections Newsletter, 29* (3/4), 22–23.

Giangreco, M. F., Broer, S. M., & Edelman, S. W. (1999). The tip of the iceberg: Determining whether paraeducator support is needed for students with disabilities in general education settings. *Journal of the Association for Persons with Severe Handicaps, 24,* 280–290.

Giangreco, M.F., Broer, S.M., & Edelman, S.W. (2001). Teacher engagement with students with disabilities: Differences between paraprofessional service delivery models. *Journal of the Association for Persons with Severe Handicaps, 26,* 75–86.

Giangreco, M.F., & Doyle, M.B. (2002). Students with disabilities and paraprofessional supports: Benefits, balance, and band-aids. *Focus on Exceptional Children, 34* (7), 1–12.

Giangreco, M.F., Edelman, S.W., & Broer, S.M. (2003). Schoolwide planning to improve paraeducator supports. *Exceptional Children, 70,* 63–79.

Giangreco, M.F., Edelman, S.W., Broer, S.M., & Doyle, M.B. (2001). Paraprofessional support of students with disabilities: Literature from the past decade. *Exceptional Children, 68,* 45–63.

Giangreco, M.F., Edelman, S., Luiselli, T.E., & MacFarland, S.Z.C. (1997). Helping or hovering? Effects of instructional assistant proximity on students with disabilities. *Exceptional Children, 64,* 7–18.

Halvorsen, A.T. (2004). Inclusive schools: To deliver on the promise, we must deliver site-based services. Hayward, CA: California State University at Hayward, Department of Educational Psychology, CLEAR Project, Model Demonstration Project (H324M000104-01). Manuscript submitted for publication.

Hemmingsson, H., Borell, L., & Gustavsson, A. (2003). Participation in school: School assistants creating opportunities and obstacles for pupils with disabilities. *Occupational Therapy Journal of Research, 23*(3), 88–98.

Marks, S.U., Schrader, C., & Levine, M. (1999). Paraeducator experiences in inclusive settings: Helping, hovering, or holding their own? *Exceptional Children, 65,* 315–328.

Minondo, S., Meyer, L., & Xin, J. (2001). The roles and responsibilities of teaching assistants in inclusive education: What's appropriate? *Journal of the Association for Persons with Severe Handicaps, 26,* 114–119.

Morgan, J., & Ashbaker, B.Y. (2001). *A teacher's guide to working with paraeducators and other classroom aides.* Alexandria, VA: Association for Supervision and Curriculum Development.

Mueller, P.H. (2002). The paraeducator paradox. *Exceptional Parent Magazine, 32*(9), 64–67.

Mueller, P.H., & Murphy, F.V. (2001). Determining when a student requires paraeducator support. *Teaching Exceptional Children, 33*(6), 22–27.

Pickett, A.L., & Gerlach, K. (2003). *Supervising paraeducators in school settings: A team approach* (2nd ed.). Austin, TX: Pro-Ed.

Riggs, C. G., & Mueller, P.H. (2001). Employment and utilization of paraeducators in inclusive settings. *Journal of Special Education, 35,* 54–62.

Snell, M.E., & Janney, R. (2000). *Teachers' guides to inclusive practices: Social relationships and peer support.* Baltimore: Paul H. Brookes.

Wallace, T., Shin, J., Bartholomay, T., & Stahl, B. (2001). Knowledge and skills for teachers supervising the work of paraprofessionals. *Exceptional Children, 67,* 520–533.

About the Authors

Michael F. Giangreco, Ph.D., is a research professor at the Center on Disability and Community Inclusion, University of Vermont, 208 Colchester Ave., Mann Hall 301A, Burlington, VT 05405-1757. E-mail: Michael.Giangreco@uvm.edu.

Ann T. Halvorsen, Ph.D., is an associate professor in the Department of Educational Psychology, AE 303, California State University Hayward, 25800 Carlos Bee Blvd., Hayward, CA 94542. E-mail: ahalvors@csuhayward.edu.

Mary Beth Doyle, Ph.D., is an associate professor at St. Michael's College, One Winnoski Park, Colchester, VT 05439. E-mail: mdoyle@smcvt.edu.

Stephen M. Broer, Psy.D., is Director of Behavioral Health at Northwest Counseling & Support Services, Inc., 107 Fisher Pond Rd., St. Albans, VT 05478. E-mail: sbroer@ncssinc.org.

Acknowledgments

Support for the preparation of this article was provided by the United States Department of Education, Office of Special Education Programs, under the funding category Model Demonstration Projects for Children and Youth with Disabilities, CFDA 84.324M (H324M020007), awarded to the Center on Disability and Community Inclusion at the University of Vermont and CLEAR Project (H234M000104) awarded to the Department of Educational Psychology at California State University, Hayward. The contents of this paper reflect the ideas and positions of the authors and do not necessarily reflect the ideas or positions of the U.S. Department of Education; therefore, no official endorsement should be inferred.

We extend our thanks to the following individuals who contributed perspectives or examples from their schools: Mark Andrews, Brad Baxendell, Carol Berrigan, Rebecca Bond, Martha Bothfeld, Maria Camorongan, Liz Castagnera, Bob Cluckey, Donarae Cook, Dennis Dahlman, Leanne Desjardins, Janice Fialka, Jami Finn, Joanne Godek, Tiffany Kendall, Pat Knipstein, Dot Kuerth, Linda Lee, Kristen Lombardo, Mary Mastin, Dan Osborn, Erin Ruddy, Cindy Sawchuck, Fran Williams, Dave Zawadzki, and Maureen Ziegler.

Are Paraprofessional Supports Helpful?

by Michael F. Giangreco, PhD
and Betsy Hoza, PhD

IN SHEL SILVERSTEIN'S WHIMSICAL COLLECTION, *Where the Sidewalk Ends*, the final stanza of his poem *Helping* reminds us, "Some kind of help is the kind of help that helping's all about, and some kind of help is the kind of help we all can do without." When students with ADHD are placed in regular classrooms a common question that arises is whether a paraprofessional should be assigned. Yet less frequently do we ask whether paraprofessional supports actually help.

WHAT'S WRONG WITH THIS PICTURE?

Undoubtedly, when paraprofessional support is offered it is with benevolent intentions. Many of us know of hardworking paraprofessionals whom we consider worth their weight in gold, and conventional wisdom suggests providing more individual adult support should be a positive action. Yet research documents that providing such support, especially the assignment of a one-to-one paraprofessional, is fraught with a host of inadvertent detrimental effects, several of which are outlined in Table 1. Although current research on the use and impact of paraprofessionals includes some students with ADHD, existing studies are not focused exclusively on this group; so the information included here crosses special-needs categories.

Teacher versus paraprofessional instruction

Despite good intentions, the assignment of a paraprofessional may represent a mismatch between student need and the nature of the support. The professional literature on paraprofessional utilization has not offered a logical, conceptual, or theoretical argument for assigning the least qualified personnel, namely paraprofessionals, to provide a substantial amount of academic or social support to students with the most complex learning profiles; yet nationally we continue to do so with increasing frequency. For example, if a student with ADHD is having difficulty in math, it doesn't make sense to provide extra support from a paraprofessional who may not be skilled in math. Rather, additional instruction with a highly qualified

Table 1. Inadvertent detrimental effects associated with excessive paraprofessional proximity

CATEGORY OF EFFECT	DESCRIPTION
Separation from classmates	A student with a disability and paraprofessional are seated in the back or side of the room, physically separated from the class.
Unnecessary dependence	A student with a disability is hesitant to participate without paraprofessional direction, prompting, or cueing.
Interference with peer interaction	Paraprofessionals can create physical or symbolic barriers interfering with interactions between a student with disabilities and classmates.
Insular relationship	A student with a disability and paraprofessional do most everything together, to the exclusion of others (e.g., peers).
Feelings of stigmatization	A student with a disability expresses embarrassment/discomfort about having a paraprofessional because it makes him/her standout in negative ways.
Limited access to competent instruction	Paraprofessionals are not always skilled in providing instruction. Some do the work for the students they support in an effort to keep up; this is a sign that instruction has not been adequately adapted.
Interference with teacher engagement	Teachers tend to be less involved when a student with a disability has a one-to-one paraprofessional because individual attention is already available to the student
Loss of personal control	When paraprofessionals do too much for the students with disabilities they may not exercise choices that are typical of other students
Feelings of persecution	Some students report that because they are constantly being watched by adults, their behavior is scrutinized differently; minor infractions that might not be noticed or addressed when done by other students result in consequences for them.
Provocation of problem behaviors	Some students with disabilities express their dislike of paraprofessional support by displaying undesirable behaviors (e.g., running away, foul language, aggression).
Risk of being bullied	Some students are teased or bullied because they are assigned a paraprofessional.

ADAPTED FROM: GIANGRECO, M. F., YUAN, S., MCKENZIE, B., CAMERON, P., & FIALKA, J. (2005). "BE CAREFUL WHAT YOU WISH FOR...": FIVE REASONS TO BE CONCERNED ABOUT THE ASSIGNMENT OF INDIVIDUAL PARAPROFESSIONALS. TEACHING EXCEPTIONAL CHILDREN, 37(5), 28-34.

teacher, special educator, or math specialist may better match the need.

Researchers from the Institute of Education at the University of London recently reported on a large-scale, longitudinal study called the DISS Project (Deployment and Impact of Support Staff). Much to their surprise, they found primarily negative relationships between the assignment of paraprofessionals and the academic achievement of students, including those with special needs, in math, English, and science. In other words, students who received additional academic support from paraprofessionals generally performed worse than those who did not, even when students' special needs were accounted for in their analyses.

Based on recording and analyzing the behaviors of teachers and paraprofessionals instructing students, the researchers were able to provide an explanation for their somewhat counterintuitive findings. They noted substantial quality differences between instruction provided by teachers versus paraprofessionals.

Teachers' interactions with students were more likely to promote linguistic and cognitive engagement because they linked current tasks to students' prior knowledge, spent more time explaining concepts, and provided appropriate feedback. Conversely, paraprofessional interactions with students tended to be more focused on task completion, often without ensuring that learning and understanding had occurred. Paraprofessional interactions with students were further compromised because they were more likely to offer inaccurate or confusing explanations, unnecessarily prompt students, and supply answers. In other words, paraprofessionals should not be expected to function interchangeably as if they were teachers or special educators.

These UK researchers also replicated a variety of findings consistent with US-based research:

- Paraprofessionals were asked to undertake roles for which they were underqualified or inadequately prepared.
- When paraprofessionals were assigned to students who have special educational needs, classroom teachers tended to be less engaged with those students.
- Teachers were inadequately prepared to supervise paraprofessionals.
- Planning time between teachers and paraprofessionals was inadequate.
- Paraprofessionals inappropriately became the primary instructors of some students with disabilities.

A small amount of research indicates that paraprofessionals can be trained to implement academic and social interventions under specific conditions.

- Instruction provided by paraprofessionals should be supplemental, not primary or exclusive.
- Paraprofessionals should work from plans developed by teachers or special educators based on evidence-based approaches. This ensures that paraprofessionals are not put in the inappropriate position of

making curricular or instructional decisions.

- Paraprofessionals should be trained to properly implement these teacher-developed plans.
- Paraprofessionals should be trained to constructively manage and respond to challenging student behaviors that might arise during instruction.
- Paraprofessionals should receive ongoing monitoring and supervision from qualified professionals—not be left to fend for themselves (as they too often are).

The problem is that these logical conditions for the successful use of paraprofessionals are not the rule, more typically they are the exception. For decades the US literature has repeatedly reported three persistent problems related to paraprofessional utilization: lack of role clarity, inadequate training, and insufficient supervision. Standard approaches to these problems have not always yielded desired outcomes.

Role clarification efforts have sometimes resulted in paraprofessionals being inappropriately assigned tasks that are more properly the responsibility of teachers and special educators (for example, planning, adapting, primary instruction, communication with families). Contemporary role clarification efforts acknowledge that schools can consider appropriate roles for paraprofessionals only after the roles of teachers and special educators have first been appropriately established.

Others have fallen prey to the training trap. This occurs when paraprofessionals receive virtually any, even a scant, amount or level of training, and then professionals unadvisedly relinquish ever more instructional responsibility for students with disabilities to them based on the questionable reasoning, "Now they are trained!"

Table 2. Alternatives to overreliance on paraprofessionals	
CATEGORY OF ALTERNATIVES	BRIEF DESCRIPTION OF ALTERNATIVES
Resource Reallocation	Trading in paraprofessional positions to hire additional special education teachers provides increased access to more highly qualified personnel.
Co-teaching	Teachers and special educators work together in the same classroom. To maintain a naturally occurring number of students special needs, it may be necessary to share a special educator across three or four classes.
Building Capacity of Teachers	Teacher capacity can be built in a variety of areas (e.g., expectations of teacher engagement with students with disabilities, differentiated instruction, universal design, response to instruction, positive behavior supports, assistive technology, information about current evidence-based practices).
Paperwork Paraprofessionals	Paraprofessionals may be assigned clerical paperwork duties that free time for special educators to collaborate with teachers and work directly with students.
Improving Working Conditions for Special Educators and Classroom Teachers	Special educator conditions can be improved by reducing caseload size, the grade range covered, and the number teachers with whom special educators interact. Explore changes in class size, increase availability of special educator and related supports, schedule coordinated meeting times, and provide access to adapted materials, to improve conditions for teachers.
Peer Supports	Encourage peer support strategies that provide natural ways to support students with disabilities and may also benefit students without disabilities.
Self-Determination	Teach self-determination skills and provide opportunities for students with disabilities to have a voice in determining their own supports.
Paraprofessional Pools	Establishing a small pool of skilled paraprofessionals (or one floating position for a small school) allows for their temporary assignments to address specific, short-term needs.
Fading Plans	Developing a plan to fade paraprofessional support as much as possible can lead to greater student independence and more natural supports.
Dually Certified Teachers	Hire teachers who are certified in both general and special education to provide enhanced personnel capacity for all students

ADAPTED FROM: GIANGRECO, M. F., YUAN, S., MCKENZIE, B., CAMERON, P., & FIALKA, J. (2005). "BE CAREFUL WHAT YOU WISH FOR...": FIVE REASONS TO BE CONCERNED ABOUT THE ASSIGNMENT OF INDIVIDUAL PARAPROFESSIONALS. TEACHING EXCEPTIONAL CHILDREN, 37(5), 28-34.

Providing appropriate supports

Many busy teachers and special educators report finding paraprofessionals helpful; what remains questionable is whether paraprofessionals are the most appropriate support to help students. In too many schools paraprofessionals have become the primary mechanism for supporting students with disabilities in the classroom, rather than one among an array of potential supports that are more deliberately matched to meet students' needs.

By shifting some of the responsibility for students from teachers to paraprofessionals, schools may experience a false sense of accomplishment that a service delivery challenge has been solved. Even though some pressure on teachers may have been relieved, inadvertently this relief too often delays attention to addressing the real root problems in regular and special education service delivery. Project EVOLVE and Project EVOLVE Plus at the University of Vermont's Center on Disability & Community Inclusion have been addressing these issues by exploring alternatives to overreliance on paraprofessionals (see Table 2) and researching practices designed to develop coherent models of inclusive special education service delivery.

So, as an educational team member considering potential supports for students with a variety of special educational needs, be careful not to jump too quickly to adding a paraprofessional as a solution. Yes, clarify their roles, train them better, and provide adequate supervision—but don't expect these steps to solve the problems—for they are necessary but not sufficient.

While assigning a paraprofessional might provide temporary relief, more often than not the perceived need for a paraprofessional is merely a symptom of more foundational issues in how general and special education services are provided. The team needs to examine its school and classroom level practices and consider alternatives to overreliance on paraprofessionals that are individually suited to each school, classroom, and student.

Be wary of decision-making models that promise to help your team decide if paraprofessional support is needed. Often these tools focus too extensively, often exclusively, on the characteristics and behaviors of the student who has special needs and less so, sometimes not at all, on the characteristics of the school, classroom, curriculum, instruction, and home-school collaboration. It is often adjustments in these aspects of schooling that can help students with ADHD, and a wider range of students with special educational needs, succeed in regular classes. Ultimately educational teams need to make sure they have worked together to provide the kind of help that helping is all about!

Michael F. Giangreco, PhD, *is a professor in the Department of Education at the University of Vermont. He specializes in various aspects of inclusive education for students with disabilities.* **Betsy Hoza, PhD**, *is a professor in the Department of Psychology at the University Vermont. Her work focuses on social, behavioral and academic interventions and outcomes for children with Attention-Deficit/Hyperactivity Disorder (ADHD).*

SWiFT Introduction

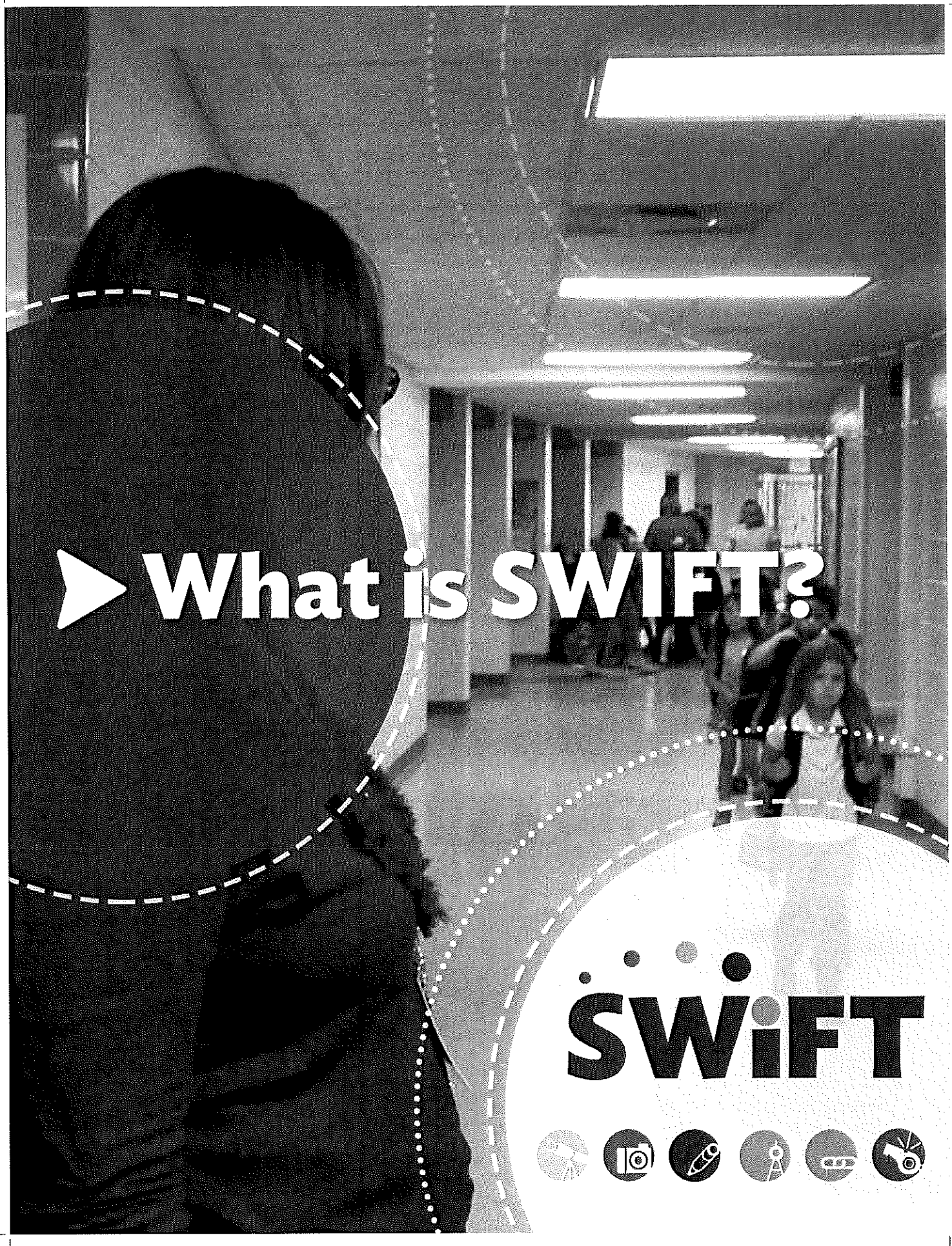
SWiFT

schoolwide integrated framework for transformation

www.swiftschools.org

IDEAS that Work

Table of Contents


What is SWIFT?
SWiFT

What is SWIFT?

SWIFT is a national K-8 technical assistance center that helps whole education systems build capacity to provide academic and behavioral instruction and support for all students, including students with disabilities and those with the most extensive needs.

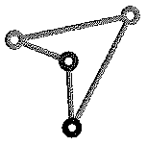
SWIFT Mission

SWIFT's mission is to transform fragmented systems into fully integrated organizations that deliver effective academic and behavioral instruction and extra-curricular activities to all students in the school community. SWIFT is committed to equity-based inclusion, where every child is valued and given the supports he or she needs to succeed.

SWIFT Framework

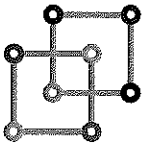
Domains and features are the building blocks of the SWIFT framework. Research shows it takes administrative leadership, a multi-tiered system of support, family and community partnerships, an integrated educational framework, and inclusive policies and practices to effectively meet the needs of ALL students.

DOMAINS & FEATURES

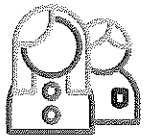


Administrative
Leadership

Multi-tiered
System of Support



Integrated
Educational Framework



Family & Community
Engagement

Inclusive Policy
Structure & Practice

Strong & Engaged Site Leadership	Inclusive Academic Instruction	Fully Integrated Organizational Structure	Trusting Family Partnerships	Strong LEA/ School Relationship
Strong Educator Support System	Inclusive Behavior Instruction	Strong & Positive School Culture	Trusting Community Partnerships	LEA Policy Framework

Administrative Leadership

Strong and actively engaged administrative leadership involves a commitment to improving teaching and learning and a system that empowers educators and school personnel. The two features of this domain are:

Strong and Engaged Site Leadership

Strong and Engaged Site Leadership is the foundation for implementing, transforming, and sustaining systems throughout a school. The principal and leadership team empower educators and families to contribute to core school decisions to improve teaching and learning.

Strong Educator Support System

A Strong Educator Support System provides the structures that enable educators to constantly improve their practices. Instructional supports may include professional learning, instructional coaching and supportive, useful evaluation with a focus on building knowledge and skills.

Multi-Tiered System of Support

A multi-tiered system of support is a continuum of research-based, system-wide practices of data-based decision making used to meet the academic and behavior needs of all students. The two features of this domain are:

Inclusive Academic Instruction

Inclusive Academic Instruction utilizes schoolwide approaches to promote student learning and high achievement for all students. Schools use multi-tiered instructional strategies, differentiation, Universal Design for Learning, and flexible grouping to support of instruction all students, including those with the most extensive support needs. Academic and behavior supports are integrated within one multi-tiered system of support.

Inclusive Behavior Instruction

Inclusive Behavior Instruction is a proactive approach to teaching social and behavior skills. Schoolwide interventions identify instructional priorities using multiple sources of data, prevent behavior challenges, and provide social and behavior supports. Academic and behavior supports are integrated within one multi-tiered system of support.

Integrated Educational Framework

An integrated educational framework encompasses all students, personnel, and stakeholders within a positive school culture and ensures full access for all students to participate in all school-related activities. The two features of this domain are:

Fully Integrated Organizational Structure

A Fully Integrated Organizational Structure means full participation in the general education curriculum for all students. All students participate in the general education curriculum instruction and activities of their grade level peers, and schools embrace ways to redefine roles of paraeducators and teaching assistants to support all students.

Strong and Positive School Culture

A Strong and Positive School Culture creates an atmosphere in which everyone feels that they belong. Particularly, students have equal access to extracurricular learning activities with appropriate supports, and school personnel share responsibilities to educate all students.

Family & Community Engagement

Families, community members, and schools form a partnership in which each benefits from and supports the others. The two features of this domain are:

Trusting Family Partnerships

Trusting Family Partnerships contribute to positive student outcomes when family members and

school staff have respectful, mutually beneficial relationships with shared responsibility for student learning; family members have options for meaningful involvement in their children's education and in the life of the school; and the school responds to family interests and involvement in a culturally responsive manner.

Trusting Community Partnerships

Trusting Community Partnerships contribute to positive student outcomes when schools work collaboratively with community members, agencies, organizations, businesses, and industries around common goals. Community representatives directly participate in school leadership, and schools enhance community resources.

Inclusive Policy Structure & Practice

Inclusive policy structure and practice includes a supportive, reciprocal partnership between the school and its district or local educational agency. The two features of this domain are:

Strong LEA/School Relationship

A local educational agency (LEA) partners with the school to promote a shared vision and foster inclusive teaching and learning. Strong LEA / School Relationships use policy to formally organize and integrate initiatives and programs, address and remove barriers to success, and address ways to more effectively use resources.

LEA Policy Framework

The LEA Policy Framework means that the district or local educational agency (LEA) has a formal structure to continually evaluate and rewrite policy in support of quality practices. The LEA uses information from schools to support and ensure staff members receive training on relevant research and/or research-based practices.


I Love the Look of Words
Research Support For SWIFT

Benefits of Inclusive Education

SWIFT Center provides technical assistance to schools, districts, and states to implement and sustain an inclusive educational framework that enables all students to receive maximum educational benefits. The point of public education is giving students a foundation of learning that will help them build a career later in life. Thirty years of research shows us that when all students are learning together (including those with the most extensive needs) AND are given the appropriate instruction and supports, ALL students can participate, learn, and excel within grade-level general education curriculum, build meaningful social relationships, achieve positive behavioral outcomes, and graduate from high school, college and beyond.

Here are the findings from several research studies that demonstrate benefits of inclusive education.

Students without disabilities made significantly greater progress in reading and math when served in inclusive settings (Cole, Waldron, & Majd, 2004).

Students who provided peer supports for students with disabilities in general education classrooms demonstrated positive academic outcomes, such as increased academic achievement, assignment completion, and classroom participation (Cushing & Kennedy, 1997).

No significant difference was found in the academic achievement of students without disabilities when served in classrooms with or without inclusion (Ruijs, Van der Veen, & Peetsma, 2010; Sermier Dessemontet & Bless, 2013).

In a meta-analysis of research, Kalambouka, Farrell, and Dyson (2007) found 81% of the outcomes reported showed that including students with disabilities in general education resulted in either positive or neutral effects for students without disabilities.

Time spent engaged in the general education curriculum is strongly and positively correlated with math and reading achievement for students with disabilities (Cosier, Causton-Theoharis, & Theoharis, 2013; Cole et al., 2004).

Students with intellectual disabilities that were fully included in general education classrooms made more progress in literacy skills when compared to students served in special schools (Dessemontet, Bless, & Morin, 2012).

Students with autism in inclusive settings scored significantly higher on academic achievement tests when compared to students with autism in self-contained settings (Kurth & Mastergeorge, 2010).

Research Support of SWIFT

Domains and Features

The specific features that are common to successful inclusive education can be summarized as: administrative leadership, a multi-tiered system of support, integrated educational framework, family and community partnerships, and inclusive policy structure and practices. Here are findings from some of the studies that support these individual features of inclusive education.

Administrative Leadership:

Strong and Engaged Site Leadership

Strong and engaged site leadership is a key component for developing and sustaining inclusive school practices (Ainscow & Sandhill, 2010; Waldron & McLeskey, 2010).

Strong Educator Support System
The principal plays an essential role in developing inclusive programs at schools. When conducting a case study of a principal at an effective inclusive school, Hoppey and McLeskey (2010) identified the following characteristics of the principal's role: caring for and investing in teachers, providing opportunities for distributed leadership, and protecting teachers from the pressures of high-stakes account-ability.

Multi-Tiered System of Support (MTSS):

Inclusive Academic Instruction

An MTSS framework should be used to guide instruction, by using effective general education strategies with all students and increasing the level of support for some students based on needs identified through screening and progress monitoring (Copeland & Cosbey, 2008; Sailor, 2009a, 2009b).

Inclusive Behavior Instruction

Implementing School-wide Positive Behavioral Interventions and Supports resulted in decreases in office discipline referrals, suspensions, and disruptive behaviors and increases in pro-social behavior (Bradshaw, Mitchell, & Leaf, 2010; Sailor, Wolf, Choi, & Roger, 2009; Sailor, Zuna, Choi et al., 2006).

Integrated Educational Framework:

Fully Integrated Organizational Structure

Fully integrated organizational structures allow all students who need additional supports to benefit from resources that otherwise would be available only to segregated populations of students (Sailor, 2009a).

Strong and Positive School Culture

"Schools have cultures, and research from educational anthropologists (i.e., Ogbu, 1982, 1985) has shown repeatedly that the culture of schools is a strong influence on academic achievement" (Sailor, 2009a, p. 250).

Family & Community Engagement:

Trusting Family Partnerships

Student achievement in the elementary grades (Goddard, Tschannen-Moran, & Hoy, 2001), middle school grades (Sweetland & Hoy, 2000), and high school grades (Hoy & Tarter, 1997) is likely to be higher in schools in which trusting partnerships exist than in schools in which partnerships and trust do not abound.

Trusting Community Partnerships

"Research indicates that when a collective group of school, family, and community stakeholders work together, achievement gaps decrease" (Bryan & Henry, 2012, p. 408).

Inclusive Policy Structure and Practice:

Strong LEA/School Relationship

A strong and supportive relationship between individual schools and their districts is critical for sustainable school reform. (McLaughlin & Talbert, 2003).

LEA Policy Framework

A policy framework must exist at the school, district, state, and federal levels that is fully aligned with inclusive reform initiatives and removes barriers to successful implementation (Kozleski & Smith, 2009).

References:

Ainscow, M., & Sandhill, A. (2010). Developing inclusive education systems: the role of organisational cultures and leadership. *International Journal of Inclusive Education,* 14(4), 401-416.

Bradshaw, C. P., Mitchell, M. M., & Leaf, P. J. (2010). Examining the effects of schoolwide positive behavioral interventions and supports on student outcomes: Results from a randomized controlled effectiveness trial in elementary schools. *Journal of Positive Behavior Interventions, 12*(3), 133-148.

Bryan, J., & Henry, L. (2012). A model for building school-family-community partnerships: Principles and process. *Journal of Counseling and Development, 90*(4), 408-420.

Cole, C. M., Waldron, N., & Majd, M. (2004). Academic progress of students across inclusive and traditional settings. *Journal Information, 42*(2), 136-144.

Copeland, S. R., & Cosbey, J. (2008). Making progress in the general curriculum: Rethinking effective instructional practices. *Research and Practice for Persons with Severe Disabilities, 33*(4), 214-227.

Cosier, M., Causton-Theoharis, J., & Theoharis, G. (2013). Does access matter? time in general education and achievement for students with disabilities. *Remedial and Special Education, 34*(6), 323-332.

Cushing, L. S., & Kennedy, C. H. (1997). Academic effects of providing peer support in general education classrooms on students without disabilities. *Journal of Applied Behavior Analysis, 30*(1), 139-151.

Dessemontet, R. S., Bless, G., & Morin, D. (2012). Effects of inclusion on the academic achievement and adaptive behaviour of children with intellectual disabilities. *Journal of Intellectual Disability Research, 56*(6), 579-587.

Goddard, R. D., Tschannen-Moran, M., & Hoy, W. K. (2001). A multilevel examination of the distribution and effects of teacher trust in students and parents in urban elementary schools. *The Elementary School Journal, 102*(1), 3-17.

Hoy, W. K., & Tarter, C. J. (1997). *The road to open and healthy schools: A handbook for change.* Thousand Oaks, CA: Corwin Press.

Hoppey, D., & McLeskey, J. (2010). A case study of principal leadership in an effective inclusive school. *The Journal of Special Education, 46*(4), 245-256.

Kalambouka, A., Farrell, P., & Dyson, A. (2007). The impact of placing pupils with special educational needs in mainstream schools on the achievement of their peers. *Educational Research, 49*(4), 365-382.

Kozleski, E. B., & Smith, A. (2009). The complexities of systems change in creating equity for students with disabilities in urban schools. *Urban Education, 44*(4), 427-451.

Kurth, J. A., & Mastergeorge, A. M. (2010). Academic and cognitive profiles of students with autism: Implications for classroom practice and placement. *International Journal of Special Education, 25*(2), 8-14.

McLaughlin, M., & Talbert, J. (2003). *Reforming districts: How districts support school reform.* Seattle: Center for the Study of Teaching and Policy.

Ruijs, N. M., Van der Veen, I., & Peetsma, T. T. (2010). Inclusive education and students without special educational needs. *Educational Research, 52*(4), 351-390.

Sailor, W. (2009a). Access to the general curriculum: Systems change or tinker some more? *Research and Practice for Persons with Severe Disabilities, 33*(4), 249-257.

Sailor, W. (2009b). *Making RTI work: How smart schools are reforming education through school-wide response-to-intervention.* San Francisco: Jossey-Bass.

Sailor, W., Wolf, N., Choi, H., & Roger, B. (2009). Sustaining positive behavior support in a context of comprehensive school reform. In W. Sailor, G. Dunlap, G. Sugai & R. Horner (Eds.), *Handbook of Positive Behavior Support.* New York: Springer.

Sailor, W., Zuna, N., Choi, J.H., Thomas, J., McCart, A., & Roger, B. (2006). Anchoring schoolwide positive behavior support in structural school reform. Research and Practice for Persons with Severe Disabilities, 31(1), 18-30.

Sermier Dessemontet, R., & Bless, G. (2013). The impact of including children with intellectual disability in general education classrooms on the academic achievement of their low-, average-, and high-achieving peers. *Journal of Intellectual and Developmental Disability, 38*(1), 23-30.

Sweetland, S. R., & Hoy, W. K. (2000). School characteristics and educational outcomes: Toward an organizational model of student achievement in middle schools. *Educational Administration Quarterly, 36*(5), 703-729.

Waldron, N. L., & McLeskey, J. (2010). Establishing a collaborative school culture through comprehensive school reform. *Journal of Educational and Psychological Consultation, 20*(1), 58-74.

SWIFT Technical Assistance

Technical Assistance Process

SWIFT's role is to provide differentiated technical assistance (TA) to partner states and their participating districts and schools. SWIFT TA uses a set of six evidence-based practices for building inclusive education; but every district and school partnering with SWIFT has its own starting point and travels its own path for creating and sustaining fully inclusive and equitable schools. Therefore, TA providers and TA recipients work collaboratively in teams to identify the actions and resources needed to achieve desired outcomes. SWIFT TA Teams include school transformation teams, district implementation teams, and state leadership and implementation teams. These teams work together to support transformation across the whole education system.

The six TA practices are Visioning, Data Snapshots, Priority and Practice Planning, Resource Mapping and Matching, Transformation Teaming, and Coaching and Facilitation.

Visioning

What is our community's shared vision of excellence and equity for all students?

SWIFT TA acknowledges and builds on already existing school, district and community strengths. Through the Visioning practice, each community is engaged to understand and acknowledge that they have resources from which to draw, and that they are resilient, resourceful, and seek out opportunities to learn (Pulla, 2012; Shaked, 2014). SWIFT TA Visioning begins with partner conversations about current priorities and exploration of future direction. Jointly moving toward a shared vision of a highly effective school for all students offers each community an opportunity to partner with SWIFT in a way that is deeply relevant and culturally responsive. This shared vision creates a shared ownership and clear direction for the transformation process.

Data Snapshots

What is right, useful, successful, uniquely good or alive that we can build upon to achieve our vision?

SWIFT emphasizes the use of data to help schools and districts identify their priorities for change and make decisions about the

TA support that is needed. Data Snapshots draw together multiple sources of data to inform decisions about the differentiated nature and content of the TA to be provided. At a school, these sources include: student outcome data, student placement data, SWIFT-Fidelity of Implementation Tool, SWIFT-Feature Integrity Assessment, and Drivers of Implementation Best Practice Assessment. The School Data Snapshot practice prompts meaningful conversation about the current state of the school and leads to decisions about targets for change in relation to each school's vision of its own implementation of the SWIFT Domains and Features.

District and state implementation teams also engage in Data Snapshots to inform decisions about their roles in transforming

schools as well as the nature and content of SWIFT TA support. The data sources at these levels include summaries of School Data Snapshots from all SWIFT schools in a district, and or all SWIFT districts in a state. Further, District and State Capacity Assessments help these partners identify their strengths and opportunities to implement innovations and interventions that are systemic, can be sustained over time, and scaled up to additional schools and districts. District and State Data Snapshots support analysis and discussion about the content and process of transformation, and mapping priorities to available resources.

Priority And Practice Planning

How will we harness our will and capacity to carry out our vision?

Implementation of new systems, structures, and practices occurs over time and in stages that overlap and are revisited as necessary (AIHub, 2013). The State Implementation & Scaling-up of Evidence-based Practices (SISEP) Center states that readiness to engage in evidence-based practices and systems change is critical to overall implementation success and sustainability (Fixsen, Blase, Horner, Sims, & Sugai, 2013b; Fixsen, Naoom, Blase, Friedman, & Wallace, 2005). To achieve readiness, SWIFT TA initially engages partners in a foundation setting stage, the first of several active implementation stages. Visioning and Data Snapshots practices contribute this stage as schools and districts work through a Priority and Practice Planning process. Each partners' exploration and self-assessment in relation to each SWIFT Feature continues until data from a number of sources indicate their readiness to move ahead to another stage of the work.

Resource Mapping And Matching

How can we amplify what already works?

Consistent with strengths-and data-based evidences is the notion of resource leveraging, that is, the practice of applying current resources in new ways to achieve better outcomes. As a capacity-enhancing approach, SWIFT and their partner schools, districts, and states move through a process of "mapping" and "matching" available resources to achieve their visions for excellent and equitable education for all students. Existing in-district, in-state and national resources are identified and mapped to SWIFT features. Then these resources are matched to specific school/district priorities. Next, the process involves locating and applying additional layers of resources where needed to deepen knowledge or fill existing gaps. This practice allows for schools/districts to re-think the traditional approach of "seek and pay TA."

Transformation Teaming

How will we engage with each other and the whole system to move our schools and districts through transformation?

As a means of building capacity with a wider reach than a single teacher, classroom, or school, SWIFT TA expects districts to share the on-site responsibility for implementation that in other TA models would be filled solely by an external "expert." Thus, rather early a TA partnership, SWIFT asks its partners to establish Transformation Teaming structures. A school team includes the Principal, a school "Coach", and representatives of general and specialized educators, support staff, family, and community members. A school Coach refers to a school staff member who, along with the Principal, assumes

a role of providing site-based support for SWIFT implementation. Districts and state educational agencies form Implementation Teams that represent stakeholders and systems that support school transformation. As a part of the district and state commitment to SWIFT, staff are designated as Coordinators who are the primary interfaces with the SWIFT TA providers, who are referred to as Facilitators. Districts and states also form Leadership Teams that provide leadership and support for their Implementation Teams. These various transformation teams carry out the previously described Visioning, Data Snapshots, Priority and Practice Planning and Resource Mapping and Matching.

Coaching And Facilitation

How will we expand our capacity to lead transformation? How will we prepare the next generation of transformation leaders?

The Coaching and Facilitation practice develops organizational and personnel capacity via sustained and purposeful contact among SWIFT TA Facilitators and partner Coordinators as well as district and state teams. As district and state Coordinators and principals learn and build up their capacity to lead transformation, SWIFT Facilitators move into coaching roles, observing and providing feedback. Eventually, this coaching model builds capacity within the system to implement and adapt without reliance on an external TA provider.

References:

AI Hub. (2013). *The active implementation network.* Retrieved from http://implementation.fpg.unc.edu/

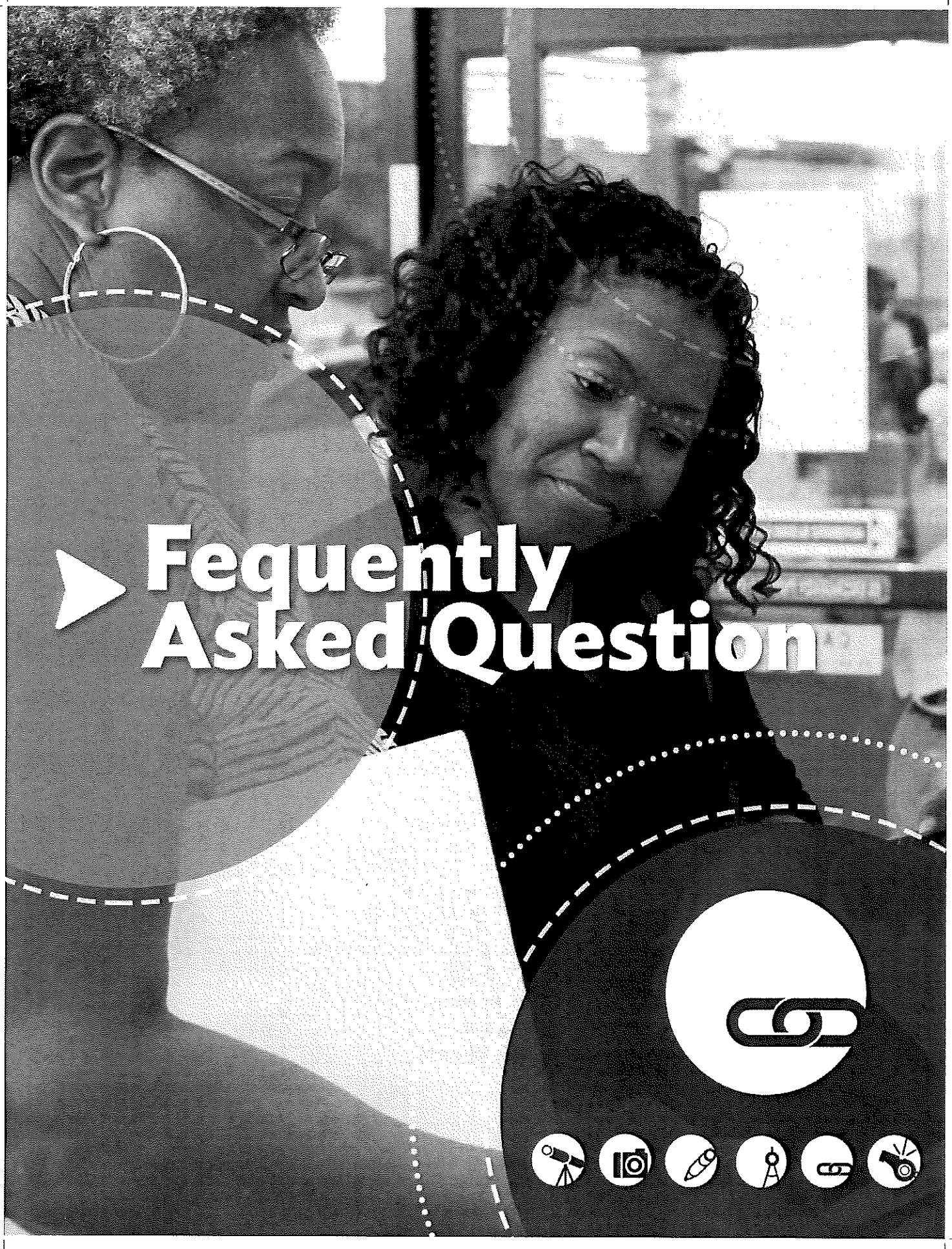
Fixsen, D., Blase, K., Horner, R., Sims, B., Sugai, G. (2013). *Scaling up brief: Readiness for change,* 3.

Chapel Hill: University of North Carolina.

Fixsen, D., Naoom, S., Blase, K., Friedman, R., & Wallace, F. (2005). *Implementation research: A synthesis of the literature.* Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network (FMHI Publication #231).

Pulla, V. (2012). What are strengths based practices all about? In V. Pulla, L. Chenoweth, A. Francis & S. Bakaj (Eds.), Papers in *Strengths Based Practice*. New Delhi, India: Allied Publishers.

Shaked, D. (2014). *Strength-based lean six sigma: Building positive and engaging business improvement.* Philadelphia, PA: Kogan Page Limited.


Fequently
Asked Question

SWIFT Frequently Asked Questions

What can educators do to move forward inclusive education?

SWIFT Field Guide is a resource you can use with your school staff to support inclusive practices. Try using the Discussion Guides, Introductory Presentations, and Steps to Get You Started as thinking prompts for your leadership team or faculty meetings. Guide.swiftschools.org

What can families do to help their neighborhood schools to embrace inclusion?

Check out our Families and Community link and Join the Conversation on our website. We have several ideas and would love to hear about your experiences. www.swiftschools.org

What does SWIFT in action look like?

SWIFT-In-60 videos are a great way to see inclusion in action.

Check out our partner school and district websites.

Review the newsletter archives and read about partner school inclusive education activities.

"Like" SWIFT Schools on Facebook and Twitter and access daily reports of inclusive education in action.

Can SWIFT advise us about our current plan to make our school more inclusive?

SWIFT-FIA is a free, downloadable resource you can use to self-assess your school's inclusive educational practices and consider action steps for change and the SWIFT Field Guide provides Discussion Guides, Introductory Presentations, and Steps to Get You Started along with links to helpful resources.

How can my school or district become a SWIFT partner?

SWIFT Center currently works with whole educational systems, which includes state, district, and school leaders, along with family and community members, in five selected states. Write to leaders in your district and state to let them know about your interest in SWIFT for your neighborhood school.

SWIFT Contact

Have a question or want to get involved?
Drop us a line and let us know how we can work together.

Email: swift@ku.edu
Online: www.swiftschools.org
Phone: 785.864.6844
Address: 1315 Wakarusa Lawrence, KS 66049

/SwiftSchools
/SwiftSchools
@SWIFTSchools
/theswiftcenter

SWIFT Center produced this document under the U.S. Department of Education, Office of Special Education Programs Grant No. H326Y120005. OSEP Project Officers Grace Zamora Durán and Tina Diamond served as the project officers. The views expressed herein do not necessarily represent the positions or policies of the U.S. Department of Education. No official endorsement by the U.S. Department of Education of any product, commodity, service or enterprise mentioned in this publication is intended or should be inferred. This product is public domain. Authorization to reproduce it in whole or in part is granted. While permission to reprint this publication is not necessary, please cite as: SWIFT Center. (2016). SWIFT Introduction. Lawrence, KS: Author.