Promoting Access to the General Curriculum Using Peer Support Strategies

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Promoting access to the general curriculum for students with disabilities has emerged as a central theme of recent legislative and policy initiatives. Ensuring that students with severe disabilities benefit fully from the myriad learning and social opportunities available through the general curriculum remains an important challenge, particularly at the secondary level. We discuss peer support interventions, a form of peer-mediated intervention, as an effective approach for engaging youth with severe disabilities more meaningfully in the general curriculum, as well as promoting academic success for classmates serving as peer supports. We describe the core elements of these interventions, review research pertaining to the academic and social benefits available to participating students, and discuss factors that may account for the effectiveness and social acceptability of this intervention approach.

DESCRIPTORS: general education curriculum, inclusive education, peer support

Over the past decade, a fundamental shift has occurred in educational expectations for students with disabilities. Schools are being called upon to provide students with disabilities with meaningful access to the same challenging and relevant curriculum established for students without disabilities (Browder et al., 2004; Wehmeyer, Sands, Knowlton, & Kozleski, 2002). Spurred by legislative and policy initiatives (e.g., Individuals With Disabilities Education Act, 1997, 2004; No Child Left Behind Act, 2001; President's Commission on Excellence in Special Education, 2002), this evolution in service delivery is challenging educators to think differently about both where students with disabilities spend their school day and the focus of their educational programming. Although instructional goals for students with disabilities must be individually determined, the general education curriculum now assumes a more prominent role as the context for addressing those goals. Indeed, schools are now held accountable for ensuring that students with disabilities demonstrate adequate progress toward standards that are directly aligned with the general curriculum. These high expectations for what students with disabilities can and should accomplish are intended to improve educational outcomes for every child.

Students with severe disabilities—typically served under the special education categories of mental retardation, autism, multiple disabilities, and deaf-blindness—are not exempt from these expectations. Although unable to participate in statewide assessments even with substantial accommodations, these students must participate in alternate assessments designed to evaluate their progress within the general curriculum. These initiatives articulate a clear message that students with severe disabilities should not only participate more fully in general education classes, but they must also receive the supports, instruction, and opportunities needed to meaningfully access the general curriculum.

However, at the secondary level meeting these expectations remain a considerable challenge. Middle and high school classrooms are often characterized by increasingly complex curricular content, faster instructional pacing, and raised expectations for student performance. For example, secondary general education teachers rely extensively on didactic instruction and independent seatwork (Wagner, Newman, Cameto, Levine, & Marder, 2003), instructional arrangements that require sustained, passive engagement and provide few interactive opportunities. The peer culture also changes substantially during adolescence, as peer relationships assume a more prominent role in the lives of youth. Peer interactions increase in complexity, take place within dynamic peer systems, move beyond the immediate purview of adults, and often develop beyond the school day (Brown, 2004). It is clear that without well-designed support strategies, students with severe disabilities may be physically integrated but not socially integrated among their peers without disabilities.

With the general curriculum now serving as the primary focal point for instructional planning and support delivery, effective strategies are needed for ensuring that students with severe disabilities can access the myriad

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learning and social opportunities available within general education. The most commonly used approach for including youth with severe disabilities within the general curriculum involves the assignment of individual paraprofessional supports. Although paraprofessionals can play a critical role in supporting students' access to the general curriculum, research suggests that an exclusive reliance on adult-delivered, one-on-one supports may inadvertently hinder students from participating in all of the academic, social, and other learning opportunities that comprise the general curriculum (e.g., Gerber, Finn, Achilles, Boyd-Zaharias, 2001; Giangreco, Broer, & Edelman, 2001; Hemmingsson, Borell, & Gustavsson, 2003). Increasingly, researchers and practitioners are calling for new support models that enable students with severe disabilities to access fully and demonstrate progress within the general curriculum (Cushing, Clark, Carter, & Kennedy, 2003; Giangreco, Halvorsen, Doyle, & Broer, 2004).

Peer-mediated approaches have long been utilized to improve the learning outcomes and social interactions of students with and without disabilities, especially students with high incidence disabilities. Peer-mediated approaches, which are also referred to as peer-mediated interventions and peer-mediated strategies, utilize other students as the primary instructional interventionist. As students with severe disabilities increasingly are spending more of their school day in general education classes alongside their classmates without disabilities, peermediated strategies are being recognized as an especially promising vehicle for promoting full participation and success in school. Indeed, the involvement of peers without disabilities increasingly is a core element in many intervention packages used to support students with severe disabilities within inclusive secondary classrooms (e.g., Downing, 2005; Gilberts, Agran, Hughes, & Wehmeyer, 2001; Kennedy, Cushing, & Itkonen, 1997; Kennedy & Itkonen, 1994; Kennedy, Shukla, & Fryxell, 1997; McDonnell, Mathot-Buckner, Thorson, & Fister, 2001). In this paper, we describe how one specific type of peer-mediated intervention—peer supports—can be utilized to support meaningful general curriculum participation. First, we will describe the peer support interventions, and then we will explore the research that supports their use in general education settings. Finally, we will discuss future directions for research on peer support interventions and practical applications of this approach.

Peer Support Interventions

Peer support interventions were developed to offer an effective, practical approach for assisting students with severe disabilities to access the general curriculum and develop meaningful peer relationships. Peer support interventions have the expressed goal of increasing both access to the general education curriculum and facilitating social interactions in general education settings that might not otherwise occur in these contexts (Kennedy & Itkonen, 1994). These interventions involve one or more classmates without disabilities providing academic and social support to a student with severe disabilities. These classmates then take a direct role in accessing the general curriculum under the supervision of one or more adults. As with other peermediated strategies, peer support interventions comprise a structured approach to involving classmates directly in the delivery of educational and social supports. However, the involvement of smaller number of peers to provide individualized support is one element that differentiates peer support arrangements from classwide interventions such as cooperative learning, peer-assisted learning, student tutoring teams, and reciprocal peer tutoring (Goldstein, Kaczmarek, & English, 2002; Maheady, Harper, & Mallette, 2001). Peer support interventions—as defined in the research literature consist of the following core intervention components: student selection, peer training, peer-delivered support, and adult monitoring.

Selecting Students

Peer support interventions are intended for students with severe disabilities who require additional assistance to fully participate academically and socially in general education. Educators begin by identifying one or two peers from within the same classroom to provide this support. Although various recruitment strategies can be employed (e.g., teacher-extended invitations to specific students, peer volunteers, general announcements), teachers should weigh several factors when identifying potential peer supports, including the preferences, educational goals, and individual support needs of students with severe disabilities; the activities in which students will engage; peer interest; and the educational needs of potential peer supports. Students who agree to work together are then moved within the classroom so that they are sitting next to each other and remain in close proximity during instructional activities (Kennedy, 2004).

Training Peers

Helping peers to support their classmates with severe disabilities consists of several steps. Peers are provided with a rationale for their involvement in delivering support to their classmates, an overview of their teachers' expectations related to this role, and information about how their classmates communicate, interact with their environment, and learn most effectively. Peers are then shown basic strategies for supporting their classmates with disabilities by (a) adapting class activities to facilitate their participation; (b) contributing to the attainment of IEP goals; (c) supporting behavior intervention plans, when appropriate; (d) providing frequent, positive feedback; (e) modeling age-appropriate and contextually relevant communication skills; and (f)

facilitating interactions with other students in the class. This training does not incorporate general awareness activities, as is typical of peer-mediated interventions implemented at the elementary and preschool levels. Rather, information and support strategies are tailored based on the individualized needs of the student with disabilities whom the peers will be assisting. Initial training may occur over two to four class periods, depending on anticipated classroom activities, the support needs of students with disabilities, and characteristics of peer supports.

Peer-Delivered Support

The support strategies just mentioned are modeled by a paraprofessional or special educator as students with and without severe disabilities work together. Initially, curricular and instructional adaptations are made by these adults, with some input and involvement from peer supports. As peers evidence greater confidence in their new role and demonstrate their capacity to deliver appropriate support, active adult involvement is systematically faded. Students with severe disabilities do not lose access to individualized supports; they simply begin receiving those supports from someone else (Shukla, Kennedy, & Cushing, 1998). Thus, peers assume a primary support role which may include paraphrasing lectures, clarifying instructions, asking comprehension questions, modifying class materials, offering choices, reviewing work, and supporting partial participation in activities.

Adult Monitoring

While providing support to their classmates, peers receive ongoing monitoring, periodic feedback, and any necessary assistance from paraprofessionals, special education teachers, and/or general education teachers. These educators continue to ensure that adaptations, assistance, and interactions are appropriate and educationally relevant. As students accrue experience working together, educators continue to offer feedback to students every 10 to 15 min and at the end of each class period. Thus, paraprofessionals shift from an exclusively one-on-one role to a broader, but more peripheral, support role in which they monitor students with disabilities and their peers, provide help and feedback as needed, and assist other students within the classroom (Cushing et al., 2003).

Intervention Outcomes

Over the past decade, research exploring the utility of peer support interventions as a viable education strategy for increasing access to the general curriculum and promoting peer interaction has accrued steadily. The general curriculum certainly refers to the instructional content delivered to students that is derived from and reflects state and local content standards. But it also

includes the social opportunities and other learning experiences during and through which students interact together. In the following section, we review findings describing the academic and social outcomes associated with peer support interventions. We also discuss the extent to which these interventions comprise socially acceptable support strategies.

Academic Outcomes

The general curriculum offers opportunities for students with severe disabilities to receive instruction in rigorous, relevant content. These content standards outline the skills, knowledge, and experiences that all students should attain. However, ensuring that students with severe disabilities access and demonstrate progress within this curriculum remains a challenge for many secondary educators. Even when physically present within classrooms where the general curriculum is being taught, students with severe disabilities may not be actively engaged in the same learning opportunities as their classmates (Wehmeyer, Lattin, Lapp-Rincker, & Agran, 2003). Disengagement may occur on two levels. First, when supported exclusively by paraprofessionals, students may be completing instructional activities largely disconnected from those of their classmates without disabilities. Second, when working independently without any consistent, direct support, students may remain unengaged altogether.

Peer support strategies, however, have been shown to either maintain or enhance students' academic engagement within the general curriculum. Defined in studies as attending to ongoing classroom activities or engaging in work-related assignments, academic engagement reflects the extent to which students are participating in instructional content and learning activities that are closely aligned with those delivered to other students in the classroom, with or without adaptations. Shukla et al. (1998) and Shukla, Kennedy, and Cushing (1999) conducted two studies examining the impact of peer support interventions on the academic engagement of middle school students with severe disabilities enrolled in core academic, related arts, or vocational classes. Initially, a paraprofessional or special educator provided direct support to each of the students-delivering systematic instruction, adapting activities, and implementing behavior support strategies while sitting directly next to the students. Peer support strategies were then systematically introduced for each student and evaluated experimentally. Across half of the peer support arrangements, students with severe disabilities showed substantially higher levels of active engagement relative to receiving support exclusively from paraprofessionals or special educators. The remaining students displayed comparable levels of engagement irrespective of the support model. Furthermore, Carter, Cushing, Clark, and Kennedy (2005) demonstrated that middle and high school students with severe disabilities maintained high

levels of engagement in instructional activities that were aligned with the general curriculum when working with one or two peer supports in core academic classrooms. These findings challenge the prevailing view that paraprofessionals are always necessary as direct, one-on-one support to students enrolled in inclusive classrooms. Moreover, they offer evidence that peer support interventions may enable educators to differentiate instruction within their classrooms and increase all students' access to challenging content.

Educators, administrators, and parents sometimes raise concerns about the possible detrimental impact of peer support interventions on the academic performance of participating students without disabilities. Research suggests, however, that peers are not hampered academically by their support role and actually may improve their academic performance when assuming responsibility for assisting their classmates with disabilities. Cushing and Kennedy (1997) evaluated the effects of serving as a peer support on the academic engagement of three middle school students without disabilities, each of whom had been identified by teachers as struggling academically (i.e., below modal classroom grade levels). Prior to working with their classmates with moderate to severe disabilities, the students participated in the same teacherdirected instructional formats as the rest of the class (i.e., whole class instruction, independent seatwork). The academic engagement of the students increased substantially when peer support arrangements were systematically introduced, including the overall percentage of time that students were academically engaged in ongoing instruction, homework assignment completion, and classroom participation. Shukla et al. (1998, 1999) replicated these findings, documenting similar engagement patterns for students who struggled academically. For students who already evidenced high levels of academic engagement while working alone, no changes in engagement levels were apparent when they assumed their support role. Although these studies collectively suggest that peer support strategies offer potential benefits for all participating students, they appear to be especially promising for students judged to be at-risk for course or school failure.

Several factors may account for improvements in academic outcomes. The involvement of one or more classmates—when coupled with the ongoing monitoring and feedback of a paraprofessional—increases the amount of individualized instruction, response opportunities, corrective feedback, and immediate reinforcement that students with severe disabilities receive (Maheady et al., 2001; Utley & Mortweet, 1997). For example, a review by Sutherland and Wehby (2001) discussed the association between increasing students' opportunities to respond and higher levels of engagement and academic achievement. The presence of peer supports also increases the number of people monitoring curricular adaptations and ensuring the relevance of activities and materials to ongoing classroom instruc-

tion. Peer supports readily recognize when a student's instructional activities are not aligned with their own and are adept at identifying appropriate adaptations. Finally, peers are expected to provide academic supports (e.g., modifying the general curriculum) and using appropriate learning strategies to teach their classmate (e.g., time delay as a prompting procedure).

For students serving as peer supports, improved academic performance may be attributable to multiple factors. Increased contact with educators and paraprofessionals appears to be one influential variable (Shukla et al., 1998). For low-achieving students in particular. serving as a peer support may provide them with a denser schedule of adult feedback and behavior-specific praise relative to what they receive when working alone. Such adult contact also provides peers with access to instructional assistance and may introduce additional reinforcement contingencies for improved engagement. The academic support strategies demonstrated by educators during initial peer support training, as well as the opportunity to practice those strategies through teaching them to others, may also promote increased engagement and learning. Students more readily acquire academic content when they must explain it to others and are responsible for ensuring another's learning. To convey accurate information to their classmate, adapt class activities, and facilitate participation, peers must attend closely to lectures and teacher instructions.

Social Outcomes

In addition to affording distinct curricular advantages, general education classes offer opportunities and avenues for peer interaction simply not available in self-contained settings. The general curriculum provides a natural context for peer interaction as students work together on shared learning tasks, providing a meaningful context for acquiring social-related skills, accessing social supports, meeting additional classmates, and developing new friendships. Indeed, improving the social relationships of students with severe disabilities is a perennial concern articulated by educators, parents, and peers. Yet, youth with severe disabilities are often among the most socially isolated students in secondary schools (Carter, Hughes, Guth, & Copeland 2005; Marder, Wagner, & Sumi, 2003).

The social benefits of peer-mediated strategies are well-documented (e.g., Carter & Hughes, 2005; McConnell, 2002). Research indicates that peer support interventions also improve a broad array of social outcomes—from brief interactions to sustained social contacts. Shukla et al. (1998) found that the social interactions of middle school students with severe disabilities were both more frequent and lasted longer when students worked with peer supports, relative to when they received support primarily from a paraprofessional or special educator. Shukla et al. (1999) extended these findings by also examining the social support behaviors

exchanged by classmates with and without disabilities. When working with peer supports, students with severe disabilities were the recipients of increased and more diverse social support behaviors, including emotional support, companionship, material aid, informational support, and assistance with decisions. Moreover, such arrangements increased the amount of social support that students with severe disabilities were able to offer to their peers. A descriptive study conducted by Carter, Hughes, et al. (2005) suggests that peer support arrangements may facilitate similar outcomes in high school classrooms. Students with moderate to severe disabilities engaged in more frequent, higher quality interactions when working with a peer support.

These social-related outcomes are not surprising. given the nature of adolescent peer relationships and the instructional contexts of typical secondary classrooms. Peer support interventions appear to address several prominent barriers to accessing the peer social environment. First, the constant presence of a paraprofessional or special educator can have a suppressive effect on youth interactions, communicating that all academic-related interactions must be channeled through special educators and reducing the likelihood that peers will attempt to initiate social-related interactions. Second, secondary teachers rely heavily on instructional arrangements (e.g., lectures, independent seatwork) during which peer interactions generally are discouraged. Peer support arrangements serve to restructure students' instructional environment by establishing teacher-sanctioned, interdependent interactions between students with and without disabilities. Such arrangements create additional communication opportunities by increasing the number of initiations directed to the student with severe disabilities, as well as increasing the likelihood that students' interaction attempts will be reinforced by their peers. Third, many students with severe disabilities have substantial difficulties in the areas of communication, language, and social interaction skills. Peer support arrangements promote these skills by providing additional practice opportunities and peer modeling, whereby students receive peer feedback regarding the appropriateness of their social behavior. As the real experts on both critical conversation skills and adolescent peer culture (Hughes et al., 1998), peers may be more effective than adults at shaping appropriate conversational behaviors. Fourth, the initial training provided to peers, coupled with ongoing information and feedback from educators, ensures that students demonstrate confidence when interacting with and supporting their classmates with severe disabilities (Copeland et al., 2004; Downing, 2005). This intervention component can overcome any initial hesitation students may have related to interacting with classmates who communicate using an assistive device, engage in stereotypical behavior, or exhibit other idiosyncratic behaviors.

Social Validity

It has been well-documented that peer support interventions improve the academic engagement and social interactions of participating students (e.g., Cushing & Kennedy, 1997; Shukla et al., 1999). Intervention effectiveness, however, is only one factor educators consider when deciding whether to adopt particular educational strategies in their classrooms (Kennedy, 2002). Interventions must also be feasible to implement and align well with current instructional practices (Greenwood & Abbott, 2001; Klingner, Ahwee, Pilonieta, & Menendez, 2003). Peer support strategies appear to constitute an acceptable and practical intervention approach within inclusive secondary classrooms. The widespread adoption of peer-mediated programs attests to their acceptability among educators. For example, approximately 40% of youth with disabilities attend schools that offer some type of peer support program (Wagner et al., 2003).

For general educators, peer support strategies appear to constitute a flexible, practical approach for differentiating instruction within increasingly diverse classrooms. These strategies can be implemented on an individual basis without necessitating classwide changes in instructional approaches. As a highly adaptable strategy for meeting the individualized needs of students, the supports provided by peers can be tailored more heavily toward facilitating academic participation (e.g., Carter, Cushing, et al., 2005; Collins, Branson, Hall, & Rankin, 2001) or promoting social relationships with classmates within and beyond the classroom (e.g., Kennedy & Itkonen, 1994; Haring & Breen, 1992). Not only are peers a source of support already available in any classroom, but research demonstrates that youth can learn to implement peer support strategies fairly readily (Cushing, Clark, Carter, & Kennedy, 2005). It is therefore not surprising that general and special educators judge peer support interventions to be highly feasible strategies that align well with the resources available in general education classrooms (Carter & Pesko, 2007).

Peer support interventions also define clear roles for paraprofessionals within inclusive classrooms. One-onone support models often lead general educators to defer responsibility for educating students with disabilities entirely to paraprofessionals, leaving paraprofessionals isolated and without clear guidance, support, or direction (Giangreco & Broer, 2005; Marks, Schrader, & Levine, 1999). When peer support arrangements are established, paraprofessionals assume responsibilities for (a) teaching peer supports to interact with and support their classmate with severe disabilities, (b) providing ongoing supervision and feedback to participating students, (c) ensuring that curricula and standards remain accessible to students, (d) monitoring students' progress on standards-based and individualized goals, and (e) providing assistance to other students within the classroom, as directed by the general education teacher.

Clarifying these roles for paraprofessionals may be one key to enhancing their effectiveness and job satisfaction (Giangreco, Edelman, & Broer, 2001).

Several studies provide insight into the perceptions of youth without disabilities regarding their roles as providers of social and academic support. Hendrickson, Shokoohi-Yekta, Hamre-Nietupski, and Gable (1996) found that middle and high school students believed that they should assume primary responsibility for developing friendships with their classmates with disabilities, a sentiment echoed in research by Fisher (1999) and Copeland et al. (2004). Moreover, youth who have had the opportunity to provide support to their classmates with severe disabilities frequently articulate substantive personal benefits, including greater appreciation of diversity, personal growth, raised expectations of their classmates with disabilities, new friendships, a sense of accomplishment, and the acquisition of new skills (Copeland et al., 2004; Hughes et al., 2001).

Less is known, however, about how youth with severe disabilities perceive their own involvement in peer support interventions. Interviews with youth and young adults with severe disabilities reveal numerous concerns related to receiving support extensively or exclusively from paraprofessionals (Broer, Doyle, & Giangreco, 2005; Hemmingsson et al., 2003; Skär & Tamm, 2001). A shift to peer-delivered supports is expected to alleviate many of the concerns articulated during these interviews, including the potential stigma associated with having a paraprofessional always by their side; their limited contact with the curriculum, general education teachers, and instructional interactions; and having infrequent opportunities for interactions with classmates. Like other forms of support, peer-delivered support can be extended in ways that either enhance peers' perceptions of competence or set students apart. Involving students with severe disabilities in selecting which classmates will provide support, as well as the nature and contexts of that support, can be expected to enhance the extent to which youth judge these interventions to be acceptable.

Future Research

These initial research findings suggest that peer support interventions can improve the academic engagement and peer interactions of youth with severe disabilities. Systematic replication of these interventions is essential to improving the field's understanding of how, for whom, and under what conditions these intervention strategies work most effectively. Such refinement efforts are critical when seeking to develop intervention strategies that strike the optimal balance between impact, feasibility, and acceptability.

Identifying Optimal Configurations

Peer support interventions are comprised of multiple components related to selecting, training, monitoring, and providing feedback to participating students. Each aspect of these interventions—alone or in combination with others—may impact student outcomes in specific ways. To refine these interventions so that they retain their effectiveness, while maximizing both feasibility for and acceptability to teachers, researchers must determine which interventions components and configurations constitute essential, desirable, and unnecessary elements in relation to sought after outcomes. Such information would provide educators with important information about how best to tailor peer support arrangements for individual students in specific classroom contexts. The contributions of some intervention components have been explored in previous research. Shukla et al. (1998) demonstrated that the additional adult contact associated with these arrangements made an important contribution to increased academic engagement of peer supports. Carter, Cushing, et al. (2005) found that the number of peers involved in peer support arrangements differentially influenced the academic and social participation of students with disabilities. Additional elements, however, remain unexamined. For example, student outcomes may be influenced by variations in the type and schedule of feedback provided by paraprofessionals and other adults, the focus of and approach used to deliver initial training to peer supports, the instructional activities students participate in together, and the criteria used to identify classmates as peer supports. Future research should examine the contributions of these and other components.

Outcome Measures

Increases in academic engagement are noteworthy, as engagement is a prerequisite for learning and is highly correlated with improved academic achievement. Given the current emphasis on documenting students' progress in relation to modified grade-level content standards, however, demonstrating that peer support interventions actually enhance students' academic performance, as well as increase knowledge and skill acquisition, remains a critical challenge. Progress monitoring offers promise for closely tracking attainment of important learning outcomes (Browder, Wallace, Snell, & Kleinert, 2005). For example, curriculum-based measurement, performance assessment, and portfolio assessment each comprise potential approaches for monitoring academic growth and functional skill development as students receive support from their peers. Attributing the small, incremental changes likely to be captured with these measures to intervention packages may require researchers to explore different design and analytic tactics (Kennedy, 2005).

Generalized Impact

Although increases in social interaction are readily apparent in the specific classrooms in which peer support arrangements are established (Kennedy et al., 1997; Kennedy & Itkonen, 1994; Shukla et al., 1998, 1999), less

is known about the extent to which these interactions extend throughout and beyond the school day. In middle and high schools, rotating classes, staggered lunch and break schedules, and large learning communities each may reduce opportunities for students to maintain contact throughout the school day. Additional research is needed to identify adjunctive strategies that will facilitate development of durable relationships that spill-over to additional classrooms and other school contexts (e.g., lunch, extracurricular activities, class breaks).

Downward Extension

Adolescents are capable of providing fairly sophisticated support to their peers, as evidenced by the abundance of peer tutoring interventions evaluated at the secondary level (e.g., Hughes et al., 2001; McDonnell, Thorson, Allen, & Mathot-Buckner, 2000). Although numerous studies attest to the social benefits associated with peer-mediated interventions for elementary-age children with severe disabilities (Goldstein et al., 2002; Odom et al., 2003), less is known about the extent to which younger children can deliver academic support effectively to their classmates with severe disabilities. Several studies offer evidence that elementary-age children can deliver academic support within the context of structured cooperative groups (Dugan et al., 1995; Hunt, Staub, Alwell, & Goetz, 1994), partner learning (e.g., McDonnell et al., 2000), and classwide peer tutoring (e.g., Kamps, Barbetta, Leonard, & Delquadri, 1994). Research is needed exploring whether and how procedures for selecting, training, and monitoring peers may need to be altered when individualized peer support arrangements are implemented in elementary schools.

Implications for Practice

Peer support arrangements offer an effective and feasible approach for promoting access to and progress within the general curriculum for students with severe disabilities. However, the potential impact of these interventions will always remain constrained unless these strategies are couched within educational programs guided by careful planning, collaborative teaming, relevant curriculum, and sound instruction. As one element of a multifaceted approach to supporting general education participation, peer support arrangements should be considered alongside other individualized support strategies-such as curricular modifications, related services, and other classroom-level practices-that are likely to enhance students' academic and social success. Cushing et al. (2005) outlined one process for determining how peer support interventions could be coupled with other instructional and support tactics to ensure that youth with severe disabilities participate meaningfully within the general curriculum. Similar instructional planning models have been described in other sources (e.g., McSheehan, Sonnenmeier, Jorgensen, & Turner, 2006; Wehmeyer, Lance, & Bashinski, 2002).

Peer support interventions will be most effective when strategies are tailored in response to formative data. Ultimately, decisions about the extent to which peer support strategies are enhancing a particular student's participation and progress within the general curriculum must be determined individually on the basis of ongoing, systematic data collection. Research suggests, however, that data-driven decision-making may be either infrequent and/or poorly implemented (Farlow & Snell, 1989; Sandall, Schwartz, & Lacroix, 2004). Indeed, the pervasive use of individually assigned paraprofessionals intimates that other variables—apart from academic and social performance data—may be guiding the decision to rely so heavily on adult-delivered support models.

As educators establish and maintain peer support arrangements, it is wise to consider factors that prompt and sustain the involvement of classmates without disabilities in these interventions. The reasons to serve as a peer support derive from multiple sources, including previous experiences with people with disabilities, existing relationships with their classmates who have disabilities, desire to have greater access to adults, encouragement from teachers, or academic feedback from adults. However, what sustains the involvement of youth may be quite different from what initially draws them to these roles. Understanding these determinants may offer one key to facilitating relationships that spread beyond the classroom.

Conclusion

The standards-based reform movement has placed heightened emphasis on increasing the quality of instruction and educational supports provided to students with severe disabilities in general education classrooms. Debate about whether to include students with severe disabilities in general education has largely been supplanted by pursuit of how best to promote meaningful learning, skill acquisition, and durable social relationships. Research documenting the impact of peer support interventions on the academic and social outcomes of participating youth offers promise for educators seeking effective, but practical, intervention strategies for promoting access to the general curriculum. Further research is needed to elucidate the sources of academic and social improvements associated with peer support interventions, as well as to determine the contexts under which these interventions maintain their effectiveness.

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