Inclusive Education Research & Practice

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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

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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).

Effective adaptations for students with mild disabilities:

- **Graphic/advanced organizers**
- **Mnemonics**
- **Content enhancement routines**
- **Strategy instruction**
- **Supplementing grade level textbook with other materials**
- **Inquiry approach to science**

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.