



Inclusive Education: Research

General education = Optimal for academic outcomes

- "The **general education classroom is the optimal place** where access to the general education curriculum occurs and inclusive education is an evidence-based practice for achieving that goal" (Wehmeyer & Agran, 2006; Jackson, Ryndak, & Wehmeyer, 2008/2009).
- The NLTS2 (11,000 students with disabilities) showed that **more time spent in the gen ed classroom** was positively correlated with:
 - **Higher scores on standardized tests of reading and math**
 - **Fewer absences from school**
 - **Fewer referrals for disruptive behavior**
 - **Better outcomes after high school in the areas of employment and independent living**
 - Wagner, Newman, Cameto, Levine, & Garza, 2006
- **Independent of students' disability severity of disability, gender or socio-economic status** "**Research overwhelmingly shows** that students with disabilities, when included in general education classrooms, make greater academic progress." McGregor, G. & Vogelsberg, R.T. (1998) *Inclusive Schooling Practices: Pedagogical and Research Foundations*. Baltimore: Paul H. Brookes Publishing Co.
- "Although **separate classes**, with lower student to teacher ratios, controlled environments, and specially trained staff would seem to offer benefits to a child with a disability, **research fails to demonstrate the effectiveness of such programs.**" Lipsky, 1997; Sailor, 2003
- "Even with a less distracting setting, smaller student/teacher ratio and providing individualized instruction, the research has **failed to demonstrate the effectiveness of separate class placements for students with disabilities.**" Baker, Wang and Walberg, 1995
- Research and best practice show that students with severe/multiple disabilities *perform better socially and academically in less restrictive environments* with numerous and spontaneous opportunities to interact with peers. Hocutt, A. "Effectiveness of Special Education: Is Placement the Critical Factor?" *The Future of Children SPECIAL EDUCATION FOR STUDENTS WITH DISABILITIES* Vol. 6 • No. 1 – Spring 1996.

- “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 disabilities in co-taught classes significantly increased in achievement...**” Hand and Rabren (2009)
- “Placement in inclusive programs led **to academic gains for students with disabilities**, including improved performance on standardized tests, mastery of IEP goals, grades, on-task behavior and motivation to learn.” *National Center for Education Restructuring and Inclusion; 1995*
- “Time spent engaged in the general education curriculum is **strongly and positively correlated to math and reading achievement** for students with disabilities.” Cole, Waldron & Majd, 2004; Cosier, Causton-Theoharis & Theoharis, 2013

Students with ANY disability show greater achievement and academic progress in inclusive settings.

Optimal for students with IDD labels, including Down syndrome

- Higher expectations for student learning (Jorgensen, McSheehan, & Sonnenmeier, 2007)
- Heightened engagement, affective demeanor, and participation in integrated social activities (Hunt, Farron- Davis, Beckstead, Curtis, & Goetz, 1994)
- Improved communication and social skills (Beukelman & Mirenda, 2005; Fisher & Meyer, 2002; McSheehan, Sonnenmeier, & Jorgensen, 2009; Soto, Muller, Hunt, & Goetz, 2001)
- More satisfying and diverse social relationships (Guralnick, Connor, Hammond, Gottman, & Kinnish, 1996);
- Optimal access to the general education curriculum (Jorgensen, McSheehan, & Sonnenmeier, 2010; Wehmeyer & Agran, 2006)
- Improved academic outcomes in the areas of literacy and mathematics (Cole, Waldron, & Majd, 2004; Cosier, Causton-Theoharis, & Theoharis, 2013; Dessemontet, Bless, & Morin, 2012; Kurth & Mastergeorge, 2010; Ryndak, Alper, Ward, Storch, & Montgomery, 2010; Ryndak, Morrison, & Sommerstein, 1999)
- Better quality Individualized Education Programs (IEPs) (Hunt & Farron-Davis, 1992)

- Fewer absences from school and referrals for disruptive behavior (Helmstetter, Curry, Brennan, & Sampson-Saul, 1998)
- Achievement of more IEP goals (Brinker & Thorpe, 1984)
- Improved adult outcomes in the areas of post-secondary education, employment, and independence (White & Weiner, 2004).

Optimal for social outcomes

- Students with intellectual and other developmental disabilities in inclusive settings had a higher likelihood to be identified as a member of a social network by peers without disabilities. Students with disabilities demonstrate high levels of social interaction in settings with typical peers. Social competence and communication skills improve when students with disabilities are educated in inclusive settings. Students with disabilities have demonstrated gains in other areas of development when they are educated in inclusive settings, such as level of engagement, involvement in integrated activities, affective demeanor, and social interaction (meta-analysis of research, McGregor and Vogelsberg, 1998)
- Research and best practice show that students with severe/multiple disabilities *perform better socially and academically in less restrictive environments* with numerous and spontaneous opportunities to interact with peers. Hocutt, A. "Effectiveness of Special Education: Is Placement the Critical Factor?" *The Future of Children SPECIAL EDUCATION FOR STUDENTS WITH DISABILITIES* Vol. 6 • No. 1 – Spring 1996.
- "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.
- Cole and Meyer (1991) found that students in integrated educational placements demonstrated substantial progress on measure of social competence encompassing specific communication and social skills (initiation, self-regulation, choice and terminating contact).
- In contrast, comparison students in segregated settings showed *regression* in these areas across the two year period. McGregor, G. & Vogelsberg, R.T. (1998) *Inclusive Schooling Practices: Pedagogical and Research Foundations*
- "...achievement test performance among students who were classmates of students with significant disabilities were equivalent or better than a comparison group." (Salisbury, 1993)

- "students developed more positive attitudes towards peers with disabilities" (CRI, 1992)
- "self concept, social skills, and problem solving skills improved for all students in inclusive settings." (Peck, Donaldson, & Pezzoli, 1990, Salisbury & Palombaro , 1993)

Best for all students

- The performance of students without disabilities is **not compromised** by the presence of students with disabilities in their classrooms (Baker, Wang, & Walberg, 1994/1995; Cole, Waldron, & Majd, 2004; Idol, 2006; Staub & Peck, 1994)
- Schools adopting inclusive education showed improved academic learning for **all students** in their building (Theoharis & Causton-Theoharis, 2010).
- Improved attitudes towards diversity (Finke, McNaughton, & Drager, 2009);
- Unique opportunities for learning about prejudice and equity (Fisher, Sax, & Jorgensen, 1998)
- Increased academic achievement, assignment completion, and classroom participation by students providing peer supports (Cushing & Kennedy, 1997).
- "Placement in inclusive classrooms **does NOT interfere with the academic performance of students without disabilities** with respect to the amount of allocated time and engaged instructional time, the rate of interruption to planned activities and students' achievement on test scores and report card grades." *York, Vandercook, MacDonald, Heise-Neff & Caughey; 1992*
- "Students without disabilities made significantly greater progress in reading and math when served in inclusive settings." *Cole, et al., 2004*
- "There is no significant difference found in the academic achievement of students without disabilities when served in classrooms with and without inclusion." *Sermeir, Dessemontet & Bless, 2013*
- The positive effects of inclusive education on classmates without disabilities have been well documented. Both research and anecdotal data have shown that typical learners have demonstrated a greater acceptance and valuing of individual differences, enhanced self-esteem, a genuine capacity for friendship, and the acquisition of new

skills. From *Inclusive Education: Practical Implementation of the Least Restrictive Environment*; Power-deFur and Orelove; 1997, Aspen Publishers, Inc.

- **"Low-achieving students also benefited from the review, practice, clarity, and feedback provided to students with disabilities."** From *Inclusive Education: Practical Implementation of the Least Restrictive Environment*; Power-deFur and Orelove; 1997, Aspen Publishers, Inc.
- **"There is no research that supports the provision of self-contained classes or separate schools as a means of offering a place in which students will have greater progress than in the neighborhood school."** McGregor & Vogelsberg, *Inclusive Schooling Practices: Pedagogical and Research Foundations: A Synthesis of Literature that Informs Best Practices in Inclusive Schooling*, 1998

***It's not just that general education is better,
but a separate setting is also worse***

Jackson, Ryndak, and Wehmeyer (2011) said that **any benefit to students of the intensive, one-on-one instruction that they may get in a self-contained classroom is overridden by the benefits of being in a general education classroom.**

No studies conducted **since the late 1970s** have shown an academic advantage for students with IDD educated in separate settings (Falvey 2004).

References

- Baker, E., Wang, M., & Walberg, H. (1995). The effects of inclusion in learning. *Educational Leadership*, 52(4), 33-34.
- Beukelman, D., & Mirenda, P. (2005). *Augmentative and alternative communication: Supporting children and adults with complex communication needs*. Baltimore: Brookes Publishing.
- Brinker, R. P., & Thorpe, M. E. (1984). Integration of severely handicapped students and the proportion of IEP objectives achieved. *Exceptional Children*, 51(2), 168-75.
- Cole, D. A., & Meyer, L. H. (1991). Social integration and severe disabilities: A longitudinal analysis of child outcomes. *The Journal of Special Education*, 25(3), 340-351.
- Cole, C. M., Waldron, N., & Majd, M. (2004). Academic progress of students across inclusive and traditional settings. *Mental Retardation*, 42(2), 136-144.
- 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.
- Falvey, M. (2004). Towards realizing the influence of "Toward realization of the least restrictive environments for severely disabled students." *Research and Practice for Persons with Severe Disabilities*, 29(1), 9-10.
- Finke, E. H., Finke, E. H., McNaughton, D. B., & Drager, K. D. (2009). All Children Can and Should Have the Opportunity to Learn: General Education Teachers' Perspectives on Including Children with Autism Spectrum Disorder who Require AAC. *Augmentative and Alternative Communication*, 25(2), 110-122.
- 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., & Jorgensen, C. M. (1998). Philosophical foundations of inclusive, restructuring schools. *Restructuring high schools for all students: Taking inclusion to the next level*, 29-47.
- Guralnick, M. J., Connor, R. T., Hammond, M., Gottman, J. M., & Kinnish, K. (1996). Immediate effects of mainstreamed settings on the social interactions and social integration of preschool children. *AJMR-American Journal on Mental Retardation*, 100(4), 359-377.
- Hang, Q., & Rabren, K. (2009). An examination of co-teaching: Perspectives and efficacy indicators. *Remedial and Special Education*, 30(5), 259-268.
- 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*, 216-227.
- Hocutt, A. M. (1996). Effectiveness of special education: Is placement the critical factor? *The Future of Children*, 77-102.
- 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.
- Idol, L. (2006). Toward inclusion of special education students in general education: A program evaluation of eight schools. *Remedial and Special Education*, 27(2), 77-94.
- 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.
- 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.
- Jorgensen, C. M., McSheehan, M., & Sonnenmeier, R. M. (2007). Presumed competence reflected in the educational programs of students with IDD before and after the Beyond Access professional development intervention. *Journal of Intellectual and Developmental Disability*, 32(4), 248-262.

- Jorgensen, C. M., McSheehan, M., & Sonnenmeier, R. M. (2010). The beyond access model. *Promoting membership, participation, and learning for students with disabilities in the general education classroom*. Baltimore: Paul. H. Brookes.
- 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.
- Lipsky, D. K., & Gartner, A. (1996). Inclusion, school restructuring, and the remaking of American society. *Harvard Educational Review, 66*(4), 762-797.
- Lipsky, D. K., & Gartner, A. (1997). *Inclusion and School Reform: Transforming America's Classrooms*. Maryland, Paul H. Brookes Publishing.
- 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.
- McSheehan, M., Sonnenmeier, R. M., & Jorgensen, C. M. (2009). Membership, participation, and learning in general education classrooms for students with autism spectrum disorders who use AAC. *Autism spectrum disorders and AAC, 413-442*.
- Peck, C. A., Donaldson, J., & Pezzoli, M. (1990). Some benefits nonhandicapped adolescents perceive for themselves from their social relationships with peers who have severe handicaps. *Journal of the Association for Persons with Severe Handicaps, 15*(4), 241-249.
- Power-deFur, L. A., & Orelove, F. P. (1997). Inclusive education: The past, present and future. *Inclusive education: Practical implementation of the least restrictive environment, 1-14*.
- Ryndak, D. L., Ward, T., Alper, S., Montgomery, J. W., & Storch, J. F. (2010). Long-term outcomes of services for two persons with significant disabilities with differing educational experiences: A qualitative consideration of the impact of educational experiences. *Education and Training in Autism and Developmental Disabilities, 323-338*.
- Ryndak, D. L., Morrison, A. P., & Sommerstein, L. (1999). Literacy before and after inclusion in general education settings: A case study. *Journal of the Association for Persons with Severe Handicaps, 24*(1), 5-22.
- Salisbury, C. L., Palombaro, M. M., & Hollowood, T. M. (1993). On the nature and change of an inclusive elementary school. *Journal of the Association for Persons with Severe Handicaps, 18*(2), 75-84.
- Sailor, W., & Roger, B. (2005). Rethinking inclusion: Schoolwide applications. *Phi Delta Kappan, 86*(7), 503-509.
- 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.
- 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*(2), 62-72.
- Staub, D., Schwartz, I. S., Gallucci, C., & Peck, C. A. (1994). Four portraits of friendship at an inclusive school. *Journal of the Association for Persons with Severe Handicaps, 19*(4), 314-325.
- Theoharis, G., & Causton-Theoharis, J. (2010). Include, belong, learn. *Educational Leadership, 68*(2), 1-6.
- 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). (NCSE 2006-3000). Menlo Park, CA: SRI International.
- 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). (NCSE 2006-3000). Menlo Park, CA: SRI International.
- Wehmeyer, M., & Agran, M. (2006). Promoting access to the general curriculum for students with significant cognitive disabilities. *Teaching language, arts, math, & science to students with significant cognitive disabilities, 15-37*.
- White, J., & Weiner, J. S. (2004). Influence of least restrictive environment and community based training on integrated employment outcomes for transitioning students with severe disabilities. *Journal of Vocational Rehabilitation, 21*(3), 149-156.
- York, J., Vandercook, T., Macdonald, C., Heise-Neff, C., & Caughey, E. (1992). Feedback from teachers and classmates about integrating middle school learners with severe disabilities. *Exceptional Children, 58*, 244-259.