

Special Education: A Review of Relevant Literature

Special Education, as a descriptive term, covers an array of possible conditions, ranging from learning disabilities and Attention Deficit Disorder to autism and deafness, and on to severe intellectual and physical handicaps, many of which are, in turn, on continuums of their own. How can districts best serve this particular population of learners? Identification of children for special education services has long been associated with socio-economic levels and ethnicity, a problem that districts must be aware of and attempt to ameliorate since research shows placement in Special Education can have long-term implications for children well into adulthood. Probably the most critical – and debated – question is that of inclusion. Some argue that inclusion isn't the best option for some categories, while others envision a system of total inclusion in which all children are served in the regular classroom. Special education students have special needs and how best to meet those needs in the general education setting is a challenge, one that research demonstrates not all teachers are rising to. Problems with the gap between documented best practices and what actually occurs in the classroom are evident, as are issues with ability grouping which can undermine some of the benefits such grouping provides.

Identification: Getting it Right

No discussion of Special Education can avoid addressing the problems inherent in identifying children who need services. Over-representation of ethnic minorities, English-language learners, and children of poverty in Special Education is a national issue and one that districts must keep at the forefront as they seek to develop protocols for identification because that identification, however well-intentioned, can have a negative long-term impact on the child. On the continuum of disabilities, identification becomes more problematic the less obvious the disability is. A child who is deaf and blind obviously qualifies for services, while one who *might* have a learning disability requires more examination. A recent study compared students identified between grades 1 and 8 for Special Education with their matched peers who were not so identified and tracked their outcomes as adults in a number of areas including educational attainment, emotional health, and incarceration rates. While this was only one urban district, the results were striking and offer at least an invitation to caution. Students who were identified for placement in Special Education were:

- More likely overall to work entry-level, low-paying jobs with little chance of promotion;
- Thirty-nine percent less likely to graduate from high school and had fewer years of education overall;
- Fifty-five percent more likely to be incarcerated;
- Sixty-nine percent more likely to misuse substances;
- One hundred thirty-three percent (133%) more likely to suffer depression if their special education placement occurred between grades four and eight. Placement in lower grades was not associated with an increase in depression rates (Chesmore, Ou & Reynolds, 2016).

Further research would be necessary to determine the degree to which these findings apply in other districts, and it should be noted that these students were all minorities from a high poverty area, so it is possible the placement in special education compounded other issues. However, given the fact that poverty and minority status has led to over-representation in special education programming, this study

should give educators and school psychologists pause for consideration. Getting it wrong may have a very real, life-long, negative impact.

So how to counter over-identification? Three studies provide insight into methods which appear to reduce identification overall for special education; two rest on early intervention and the third utilized an intensive RTI process. The first study examined participants in the Chicago Child-Parent Center program, a preschool program which emphasized child-centered education and family support services for children in high poverty neighborhoods. Participation in the program was associated with lower rates of identification for special education services as compared to children in other Chicago early education programs (Conyers, Reynolds & Ou, 2003). The study found that 12.5% of children in the CPC program were subsequently identified for special education, as compared to 18.4% in the non-CPC group. Interestingly, the CPC program, with its focus on reading readiness activities, reinforcement and feedback, and parental involvement, had the most impact on rates of identified learning disabilities (LD).

The second study examined the effect on special education identification of Head Start when coupled with transition experiences through grade 3 as compared to traditional Head Start which terminates with the beginning of Kindergarten. Families in this program received transition experiences from kindergarten through grade three, including curricular modification, health screening, parental involvement activities, and social services. The study found that Head Start with extended transition services had a measurable impact on rates of identification for some special education services – 29% fewer identified as intellectually disabled and 27% fewer identified as emotionally disturbed (Redden, *et al.*, 2001).

The implications of these two studies is in two areas: early intervention focusing on academic readiness, particularly reading and writing activities, and family involvement and support seem to offer viable approaches to mitigating the effects of poverty long-term and decreasing the incidence of identification of children for special education. One interesting thing to note is that both studies showed a reduction in the incidence of identification, but the studies showed that reduction in *different* categories. This may simply be because of differences in populations studied, or it may be because of the relatively subjective nature of identification for these particular categories (Speech and language disability, Learning Disabled, Emotionally Disturbed, and Intellectual Disability), but the over-arching principal is the same: early, targeted, and sustained intervention beginning in preschool or Head Start, reduces the likelihood of identification for special education.

The third study employed an intensive RTI process called STEEP, which uses a commercially available set of probes in reading and math to obtain data surrounding performance on objectives. RTI processes and protocols can differ from state to state and district to district, so the methods and definitions of any particular program under study are important to understanding what worked. The teachers and school psychologists were trained in the use of the probes, the use of the data from the probes to inform instructional decisions and plan remediation, and to evaluate the effectiveness of those interventions. The program examined data from four schools for several years before and after implementation of the STEEP protocols. The study found that after STEEP was implemented, fewer children overall were evaluated for special education, but more of those evaluated were found to qualify for services. At one school, the number of evaluations went from 30 in a non-STEPP year to 9 in the year STEPP was implemented. The study also found that psychologists trained in using STEEP evaluated fewer children for services than did psychologists not trained in STEEP (VanDerHeyden, Witt & Gilbertson, 2007). This suggests that the possession of adequate tools for data collection and intensive training on interpreting data and using it to effectively plan instruction to remediate deficits leads to more accuracy in referring children to special education.

Inclusion: Best for Most

Inclusion, like everything else in special education, is on a continuum ranging from full inclusion to segregated special schools. Student placement in these settings depends largely on the type of disability. High-incidence (HI) disabilities – those disabilities which are less severe – are the ones most likely to be serviced with more inclusion. These include Learning Disability (LD) Speech Language Disability (SL) Intellectual Disability (ID) and Emotionally/Behaviorally Disturbed (ED) as well as ADD and ADHD and milder forms of autism. The questions many educators have are, does inclusion benefit special education students and if so, how does it benefit them? And closely aligned to that is, which students should be serviced in an inclusion model? Research demonstrates that inclusion is beneficial, with varying benefits depending on the disability.

Because of the potential negative effects of being identified as “special education,” it would seem that the more inclusive a child’s setting, the better. Keeping a child with his or her grade level peers may help them avoid the stigma of special education. Additionally, there is good evidence that a significant percentage of children receiving tier 1 or tier 2 interventions can return to general education without ever being formally identified as special education (Vaughn & Linan-Thompson 2003). The Response to Intervention model (RTI) also allows classroom teachers to begin addressing curricular areas of need in a focused, intense, extended manner without needing to wait for a special education designation. This allows the classroom teacher to more effectively monitor student progress toward grade level benchmarks without needing to coordinate with other teachers or departments because all of the instruction is taking place in one setting. Likewise, a push-in program of special education services keeps all the instruction in one setting and the teacher can monitor exactly what the student is doing and what his or her progress toward mastery is. These are important considerations, especially since some children were often required to demonstrate failure before qualifying for special education services and anytime services have to be coordinated between multiple settings and teachers the potential for fragmentation of the learning increases.

Move a little farther along the continuum to students with moderate disabilities and there are important benefits to inclusion. Research demonstrates that when students with moderate intellectual disabilities such as Down syndrome are included in a general education setting they experience measurable benefits in literacy skills, vocabulary, and grammar comprehension (Dessemontet, Bless & Morin 2012) and that this improvement was sometimes not evident until four years or more in an inclusive setting. Additionally, students in an inclusive setting saw more improvement in their adaptive skills than did those who were in segregated programs. A little farther still along the continuum, and autistic students in inclusive classrooms were found to spend more time on academic tasks and use grade level and adapted curriculum than their peers in special education classrooms, who spent less time on academic tasks and used special education curriculum or no curriculum. They were also more likely to receive instruction from a teacher as opposed to a paraprofessional (Kurth & Mastergeorge 2012) In fact, separated students spent one third less time on math and language arts than did autistic students in an inclusive setting (this was not an undiluted benefit, however; separated students were more likely to receive small group and individual instruction than those in inclusive settings).

The students farthest along on the continuum are those with low-incidence disabilities. LI conditions such as deaf-blindness, severe autism, and multiple disabilities are the least likely to be served in an inclusive setting. The rationale for this has rested on three precepts: 1) Students should not be exposed to the potential assault on their self-esteem; 2). Students with severe disabilities require a more functional, rather

than academic, curriculum; and 3). Segregated special education has been effective for them in the past and will continue to be so. However, a series of studies has demonstrated that even for these children, the inclusive classroom leads to the development of academic skills such as math and literacy, and overall improved academic performance. Inclusion also leads to improved communication, social, and employment skills when children are fully involved in general education settings and this inclusion now serves as a critical predictor in school and post-school outcomes (Kurth, Morningstar & Kozelski 2014). The authors of the LI study went so far as to say that research does not confirm any benefit for segregation of LI students. Inclusion offers improved outcomes socially, academically and from an employment standpoint at every level one might care to examine.

That being said, there are some children for whom inclusion is *not* the best setting. These children include those for whom large groups create too much stress or too much distraction for learning to take place; children with severe sensory processing issues; and children whose self-esteem or self-regulation is too fragile to cope with the vicissitudes of the general education classroom. For these children, a segregated setting may be the best choice. While the over-arching goal of any district should be to include as many children as possible in a general education setting, reality dictates that provision must exist for those who can't tolerate an inclusive setting (Hornby 2015). Therefore, inclusion should be considered on a case-by-case basis, with the needs of the individual child serving as the final, determining factor for placement.

The final question to be answered is whether inclusion is best for *non*-disabled students. There is actually ample research in this area, but it was brought home to this reviewer during a recent discussion with a sitting board member that the public (and sometimes board and administrative) perception is that regular and high ability learners suffer when “forced” to share classroom space and instructional attention with special education students. Actually, the reverse is true. A study from 1995 demonstrated that general education students do *not* experience academic decline in inclusive classrooms, nor do they receive less instructional attention (Staub & Peck, 1995). Other studies have demonstrated that the presence of special education students in the classroom actually *increased* the academic achievement of the general education students because the differentiation techniques employed by the teacher were beneficial to all learners in the class. Exploring the effects of inclusion on gifted children is beyond the scope of this review, but it may be possible that gifted populations do receive less instructional attention than the non-gifted and that this would be ameliorated by thorough training in differentiation for all ability levels; in fact, it is possible that without proper staff development in RTI, monitoring, differentiation, etc. that these allegations of a lack of benefit for general education students might be true simply because teachers are not equipped to deal with multiple ability levels in a single classroom. Academics aside, there were a number of social benefits to non-disabled students in inclusive classrooms, such as greater empathy and tolerance for differences. These traits were stronger the more time special education students spent in the general education classroom and weaker or non-existent in classrooms where special education students were only present for a portion of the day (Senecal, 2001).

Best Practice: Quality Instruction Which May Not be Happening

One of the ironies emerging from research surrounding Special Education is that some of the methods which made it “special” appear not to be as effective as was once believed. At the same time, greater focus is being paid to those methods which *do* show improved outcomes for students: targeting interventions to the student's *area of need* rather than on the processes which may interrupt his or her learning. In other words, focus on reading, math, or writing, etc. (Vaughn & Linan-Thompson, 2003).

The authors of that study went on to point out a number of instructional characteristics which were of benefit to special education students. Although their focus is primarily Learning Disabled students, the precepts would seem to hold true for many groups of students, including those without special needs. They include:

- Controlling task difficulty to maintain high levels of success;
- Teaching in small, interactive groups;
- Modeling questioning, reasoning, and metacognitive strategies;
- Utilizing direct and explicit instructional practices;
- Encouraging higher-order thinking skills and problem solving;
- Helping students know what strategies to apply and when to apply them;
- Monitoring specific skill progress on an ongoing basis to inform instructional decisions (Vaughn & Linan-Thompson, 2003).

Even a brief review of this list reveals the caliber of instruction required; and this is, don't forget, what is expected of the general education teacher. However, Vaughn and Linan-Thompson cite a number of studies that indicate that while research has confirmed the need for a differentiated and appropriate education for students with disabilities, *undifferentiated* instruction *not* specifically designed to meet the needs of special students is what typically prevails. So while much of their method relies on the teacher monitoring student progress and intervening in a targeted way when progress is not being made, it is not an enormous leap of logic to understand that the success of the entire program requires a series of supports to ensure that delivery conforms to the needs of the special education students. Those supports, such as adequate, focused staff development and training, quality curriculum guides with differentiation approaches, a battery of diagnostic assessment instruments, a further battery of intervention tools that are proven effective, and someone monitoring the instructional delivery to ensure compliance with best practice, would ameliorate the gap between research and actual practice.

Grouping and Clustering: Good if Small, Fluid, and Rigorous

There is ample evidence that grouping by ability level produces gains for high-, medium-, and low-ability students, and in fact produces more gains for low-ability learners than for medium-ability. However, one study highlighted a number of negative aspects to this type of small-group instruction which must serve as a warning to educators.

The first cautionary finding was that grouping by ability was *ineffective* unless the small-group instruction was accompanied by materials and teaching that accommodated the needs of the learners in the group. Without differentiation, grouping doesn't work. The authors posited that this differentiation was even more critical for low-ability students. The second cautionary finding was that ability groups tended to be rigid and restrict student mobility between groups. This is contrary to special education recommendations that such groups be fluid so that as children gain skills they can expand opportunities for academic growth. The third cautionary finding – and it's a big one – was that teachers tended to provide less instruction, and less effective instruction, for students in low-ability groups (Wilkinson & Fung 2002).

While this study is an older one, it bears further examination because of the current climate of high-stakes testing when so much effort is devoted to parsing skills into ever more discrete fragments. The study, which was of reading groups, found that in low ability groups:

- Less time overall was allocated for instruction than high ability groups and the pacing tended to be slower so that low-ability students read less overall.
- Teachers spent more time on decoding tasks focusing on individual words and parts of words rather than on tasks related to making meaning of text. High-ability students spent more time discussing aspects of text directly related to meaning.
- Teachers focused more on oral reading with low ability children than on silent reading. This oral reading also reduced students' total time reading because they waited for each other while they took turns reading. High ability students, by contrast, spent more time reading silently and therefore read considerably more in their allotted time.
- Teachers allowed more interruptions of the low-ability group from students outside the group.
- Teachers were more likely to interrupt low-ability learners who made reading errors, and to interrupt with the correct answer rather than providing a prompt to self-correct. When teachers did prompt low readers, it was to offer phonemic or graphemic clues rather than help them construct meaning from the text.
- Teachers tended to ask more factual, recall questions of low ability readers rather than questions that required reasoning or problem solving. In other words, questioning was low in rigor for low-ability learners; high-ability learners, however, were asked more critical thinking questions (Wilkinson & Fung 2002).

All of these points are troubling, because studies indicate that cognitive challenge is important for special education students (Vaughn & Linan-Thompson, 2003), yet grouping by ability seems to remove the challenge from low-ability groups and focus on reading in a fragmented way that detracts from making meaning – the very thing that makes reading an engaging, motivating activity. Reducing the rigor of the small group instruction makes it less engaging and less effective. The conclusion here would be that districts need to insure that teachers are trained in effective differentiation that provides content in ways that are appropriate to the students' needs but still cognitively challenging and engaging, and that teachers not lose sight of the critical need for students to make meaning of what they read so that comprehension doesn't get "lost in the weeds" of decoding and phonemic awareness, which are considerably less meaningful to students because they in no way resemble a real-life context. The central purpose of reading is communication; making meaning of text is vital to, and embedded in, that purpose.

It is worth noting here that it is entirely possible for a student to have a disability *and* also be gifted – to have ADHD or be autistic, for example, and also have advanced math ability. The general tendency, however, is for teachers to identify the disability and fail to see the giftedness. Students referred for special education are mostly *not* referred for gifted education (Mayes & Moore, 2016). In light of this tendency, and in light of the potential long-term deleterious effects of special education identification and in light of Vaughn and Linan-Thompson's research demonstrating that focused intensive intervention can raise some learners out of special education entirely, fluidity in ability grouping becomes that much more critical. Groups must remain fluid so that as students achieve goals they are regrouped to reflect that progress. One's ability group should not be one's destiny.

Clustering data for special education is somewhat difficult to find, but one dissertation did offer some insight into its effectiveness. The researcher found that students in cluster groups scored slightly higher than their non-cluster counterparts – but not significantly higher. The suggestion is that clustering may have some benefit, and is at least not harmful, to the academic achievement of special education students. However, it is important to note that the study examined elementary classes in which clusters of special education students were small – no more than six children. Additionally, the cluster classrooms were provided with an additional adult, either a Speech/Language therapist, a special education teacher, or a

special education aid. These adults rotated into classrooms so that the extra adult was not always a paraprofessional, and the second adult provided direct, small-group or individual instruction and the instruction for those students was modified for their ability needs (Daigneault, 2003). Since Vaughn and Linan-Thompson specified that groups for RTI tiers should be small, the conclusion here is that clusters *may* be beneficial, but should probably also be kept small. Overloading a class with special education students will likely not show good results.

Special Education presents districts with a number of challenges, chief among which is how to ensure that those who are identified for services are actually in need of them because of the long-term negative impact such designation can have on students. Focusing efforts on early interventions such as preschool and extended Head Start and investing heavily in teacher and psychologist training to measure progress and use data to modify instruction as part of a clearly defined Response to Intervention program are viable options to help reduce overall identification and improve the accuracy of those who are referred to special education. Inclusion for as many students as possible should be the goal in light of the many benefits accruing to both special education students and general education students in both academic progress and social skills. Districts need to monitor instructional delivery with great care to insure that quality teaching is taking place and again, training in differentiation, use of data to inform instructional choices, RTI program protocols and evaluating intervention effectiveness are of critical import. The more capacity teachers have in these areas the more successful such programs will be. Finally, clustering and grouping need to be carefully monitored to keep sizes small; clusters in individual classrooms should be no larger than six students and staffed with additional adults to provide targeted support and instruction to all students. Groups must remain fluid to prevent *de facto* tracking from occurring and delivery of instruction needs to be monitored to ensure that the overall quality of instruction remains high and that special education students are provided with problem solving opportunities and not denied instruction related to making meaning of text.

References

- Chesmore, A., Ou, S. & Reynolds, A. (2016). Childhood Placement in Special Education and Adult Well-being. *Journal of Special Education*, Vol. 50 (2) 109-120.
- Conyers, L., Reynolds, A. & Ou, S. (2003). The Effect of Early Childhood Intervention and Subsequent Special Education Services: Findings from the Chicago Child-Parent Centers. *Education Evaluation and Policy Analysis*, Vol. 25, No.1, 75-95.
- Daigneault, S. (2003). Clustering Children with Special Needs: Effects on the Academic Achievement of Students With and Without Special Needs. Boston College, Lynch Graduate School of Education, May 2003.
- Dessementet, R., Bless, G. & Morin, D. (2011). Effects of inclusion on the academic achievement and adaptive behavior of children with intellectual disabilities. *Journal of Intellectual Disability Research* Vol. 56 Part 6, 579-587.
- Hornby, G. (2015). Inclusive Special Education: Development of a New Theory for the Education of Children with Special Education Needs and Disabilities. *British Journal of Special Education* 2015.
- Kurth, J. & Mastergeorge, A. (2012). *The Journal of Special Education* 46(1), 36-48.
- Kurth, J., Morningstar, M. & Kozelski, E. (2014). The Persistence of Highly Restrictive Special Education Placements for Students with Low-Incidence Disabilities. *Research and Practice for Person with Severe Disabilities*, Vol. 39 (3), 227-239.
- Mayes, R. & Moore III, J. (2016). Adversity and Pitfalls of Twice-Exceptional Urban Learners. *Journal of Advanced Academics*, Vol. 27 (3) 167-189.
- Redden, S., Forness, S., Ramey, S., Ramey, C., Brezaussek, C., & Kavale, K. (2001). Children at Risk: Effects of a Four-Year Head Start Transition Program on Special Education Identification. *Journal of Child and Family Studies*, Vol. 10, No. 2, June 2001, 255-270.
- Senecal, B. (2001) Academic and Social Outcomes of General Education Students in Inclusion versus Non-Inclusion Classrooms: A Case Study. University of Massachusetts Amherst.
- Staub, D. & Peck, C. (1995) The Inclusive School: What are the outcomes for non-disabled students? *Educational Leadership*, Vol. 52 No. 4, 36-40
- VanDerHeyden, A., Witt, J. & Gilbertson, D. (2007). A multi-year evaluation of the effects of a Response to Intervention (RTI) model on identification of children for special education. *Journal of School Psychology* 45, 225-256.
- Vaughn, S. & Linan-Thompson, S. (2003). What is Special About Special Education for Students with Learning Disabilities? *The Journal of Special Education*, Vol. 37, No. 3, 140-147.
- Wilkinson, I. & Fung, I. (2002). Small-group composition and peer effects. *International Journal of Educational Research*, 37 (2002) 425-447.