

Running head: APPROPRIATE EDUCATIONAL ENVIRONMENT

Inclusion versus Specialization

An Analysis of Appropriate Classroom Environments

Emily E. Maggio

University of Florida

Abstract

Educators have long debated the best learning environment for students with disabilities. Advocates of inclusion propose that students with disabilities should remain in the general education classroom while advocates of specialization propose placing students with disabilities in a classroom with specific attention placed on the individual student. This experiment proposes randomly selecting students with learning disabilities and placing them in a specialized classroom. A battery of tests will be conducted to determine changes in the students' self-esteem, grade level performance and parent and teacher rating. It is expected that more improvement will be found in these areas for the students in the specialized classroom. This study may provide insight to parents and teachers in selecting the most appropriate classroom environment for students with disabilities.

Inclusion versus Specialization

An Analysis of Appropriate Classroom Environments

The past decade has brought countless new ideas to the field of education on how to best provide appropriate support to children. The environment in which a child learns is perhaps as important as what the child learns. The proper environmental placement is even more of an issue when one encounters a child with disabilities. Appropriate placement for children with disabilities ranges on a spectrum from a fully inclusive classroom to one that is specially geared towards the particular disability. One must begin by understanding the differences between these two environments.

Inclusion is an educational practice, which states that all students should be educated in a general education classroom with their same age peers. The Individuals with Disabilities Education Act calls for students to be placed in the least restrictive environment, which many educators feel is the regular classroom (Willis, 1994). Advocates of a full inclusion policy feel that special education classrooms constitute a form of segregation and that separate classrooms for special education students, like classrooms segregated by race, are inherently unequal.

Although “exclusion” is the opposite of inclusion, this term is not used. Instead educators speak of “self contained” or “specialized” classrooms in which students with special needs or disabilities are removed from the regular classroom environment and educated by a special education teacher with their fellow disabled peers. Such classrooms may include a wider range of ages, as the grouping is made based on ability, rather than age.

To best understand the needs of the students, one must also be aware of the proper definitions that describe a student with disabilities. The term disability is defined as a condition characterized by functional limitations that impede typical development as the result of a

physical sensory impairment or difficulty in learning or social adjustment. Exceptional children are those children whose performance deviates from the norm, either below or above, to the extent that special education programming is needed (Heward, 1999). Most importantly, the term learning disability is defined as a disorder that affects people's ability to either interpret what they see and hear or to link information from different parts of the brain. These limitations can show up in many ways: as specific difficulties with spoken and written language, coordination, self-control, or attention. Such difficulties extend to schoolwork and can impede learning to read, write, or do math (Neuwirth, 1993). Also, it is important to recognize that students with learning disabilities look and act “normally” and generally have average IQ scores (Heward, 1999).

Arguments on the most appropriate classroom environment for students with learning disabilities can develop into very heated debates. Advocates of inclusion argue that students are better off in a classroom with peers of the same age and will benefit from their models of appropriate behavior. For example, if students with communication disorders are placed together, the setting lacks an appropriate role model of proper language (Willis, 1994). Inclusionists also point to research, which suggests that peer-rating scores are generally very stable for both regular education and special education classmates (Putnam, 1996). Similar research adds that non-disabled students, who are exposed to students with disabilities in the classroom, generally have a more positive attitude towards all persons with disabilities (Fisher, 1999). Furthermore, in an experimental study by Maras and Brown, children with severe learning disabilities were involved in an integration program. Social orientations in this experimental group became significantly more positive over time, whereas the control group showed little change (Maras, 1996).

Advocates of special classrooms or schools for students with learning disabilities, point to the social well being of the student as one benefit of specialization. Improved learning

outcomes are also reasons to promote this practice. Supporters feel that it is beneficial for students to be in classrooms where other students can relate to one another. Teasing occurs less, and teachers are more specially trained to handle the special needs of students. Another argument is that students in a regular classroom are better able to learn when the teacher is not required to devote extra time to the students with special needs. Research studies indicate that students with disabilities had a greater dissatisfaction with their relationships with teachers, poorer bonds with school, and perceived higher school danger than did students without disabilities (Murray, 2001). Other studies show that students with learning disabilities compared with non learning-disabled students were less accepted by peers, had lower self-esteem and felt lonelier (Valas, 1999). Valas also suggested that besides the effects of low academic achievement, to be labeled “a student with LD” may have negative effects primarily on peer acceptance and directly and indirectly on feelings of loneliness, particularly in primary school (Valas, 1999). When asked, students with learning disabilities preferred specialized instruction outside the general education classroom and cited liking inclusion for friendships (Vaughn, 1998).

I believe that the more appropriate environment for students with learning disabilities will be a specialized classroom in which more attention and understanding is available to each student. Students will feel a greater sense of achievement when their non learning-disabled peers do not tease them. Also, with a specialized curriculum, the students will advance at a faster rate than if they were in a normal classroom. It is believed that in an inclusive classroom, students with learning disabilities will have a lower self-esteem than their non learning-disabled peers. Also, after a year of special education in a specialized classroom, students will improve in grade level more than their learning disabled peers who are being educated in an inclusive classroom. Finally, teachers and parents will rate the students in a specialized classroom as having a higher

satisfaction with school, less depression and higher self-esteem than those teachers and parents of students in inclusive classrooms. Overall, I expect that students in the experimental condition will show a change towards improvement in these areas from pretest to posttest. Although the arguments of inclusionists are supported by research, I find them to be rather unconvincing. Many arguments for inclusion point to the benefits it holds for non-disabled students rather than students with disabilities. These arguments quickly point out that students are more accepting and have a more positive attitude towards those students with disabilities, yet fail to discuss any social benefits for the students with disabilities.

Method

Participants

Participants will come from five randomly selected K-5 elementary schools from across the United States, which currently use the method of inclusion. In each school, the entire population of students who have been diagnosed with learning disabilities will be randomly assigned to one of two groups: the control group and the experimental group.

Procedure

Using a multistage sampling process, I will obtain a sample of five elementary schools that currently use the method of inclusion. Of this sample of schools, I will seek parental permission from the entire population of students with learning disabilities. The parents will be informed that their student will have the opportunity to be placed into a specialized classroom with a special education teacher and aide. The parents will also be informed that this new classroom environment is expected to be highly beneficial to the student. It will be explained that granting permission to participate in research does not guarantee that the randomized process will place that student in the specialized classroom. All students who have received permission

to participate in the study will be randomly assigned to one of the two conditions. All students who have been assigned a condition will undergo a battery of tests, which are highly typical of those tests used to diagnose a learning disability (see Appendix). These tests will comprise the baseline data.

The control group of students will remain in their assigned inclusive classrooms. The experimental group will be divided into classes based on their ability levels. For example, all students reading at a second grade level will be placed into one classroom regardless of their age. No class will have more than 10 students and certified special education teachers and aides will teach the classes.

The students in the specialized self-contained classes will participate with the other experimental classes in extra curricular activities such as music, art and physical education. These classes will however, remain separate from the rest of the school. This separation is done in order to best simulate what it would be like to attend a specialized school.

In order to control for the possibility that students in the specialized group will be stigmatized for being separate from the rest of the school, other students will be informed that these students are part of a special experiment. This will be done to ensure that the students in the experimental group will not be negatively labeled for their disability.

The placement into the two groups will start at the beginning of the school year so as not to disrupt the students and to create continuity. The testing will take place before the school year begins. A percentage of non learning-disabled students will take the test for self-esteem, which will be used in analysis of the first hypothesis. At the end of the school year, the students with learning disabilities will be reevaluated with the same tests.

Dependent Measures. Three dependent variables will be measured to test the three hypotheses. The first dependent variable will measure self-esteem using a self-esteem rating scale. Pretest and posttest results will be compared to determine the amount of change. The second dependent variable will measure the amount of academic advancement using several achievement tests which have been shown to have a high reliability. The pretest and posttest results will be compared to determine the amount of change in grade level. The final dependent variable will measure overall student adjustment by comparing parent and teacher ratings of the students from pretest to posttest. Additional analyses will be conducted to determine whether other measured variables such as gender, socioeconomic status and family composition moderate effects of education.

Results

It is expected that the following results will be obtained upon evaluation of the data. First, three independent samples T-tests will be conducted to compare the means of the students in the control group with those in the experimental group. It is expected that in the first test of self-esteem, there will be a slight increase in the self-esteem of the students in the experimental group. This change in self-esteem level between pretest and posttest would indicate that the learning environment plays a role in the self-esteem of students. It is also expected that pretests of students with disabilities and those without disabilities will indicate that overall self-esteem is higher for students without disabilities. In the test of grade level advancement, it is expected that there will be an increase in average grade level for the students in the experimental group. This would indicate that students show more improvement in a classroom with specialized attention. Finally, it is expected that parent and teacher rating scores will be significantly higher for the students who have spent the previous year in a specialized classroom environment. This would

indicate that parents and teachers notice a positive improvement in the behavior and well being of the students in the specialized classroom. The results of the additional analyses are expected to show slight gender differences and an effect of socioeconomic status and family composition on the amount of grade level improvement.

Discussion

It is expected that the results will support the first hypothesis. The self-esteem of the students in the experimental condition is expected to be higher than that of the students in the control condition because the students in the specialized classroom will not be faced with teasing and ostracism by their classmates. By placing students with learning disabilities in an environment with other students of similar background, the field is more leveled. Students may feel less intimidated by reading or solving math problems in front of the class. Students may also be more inclined to ask a teacher for help, knowing that other students can relate to his or her problem. Students will also be able to make friends who are more understanding of their personal situation. Also, the opportunity to improve one's academic performance may have an impact on one's self-esteem. A student who was not able to read, but through specialized attention, becomes able to read, will have more pride in his or her abilities, thus higher self-esteem.

It is expected that the results will support the second hypothesis. The grade level of the students in the specialized classroom is expected to increase more than that of the students in the inclusive classroom. Students with learning disabilities perform at a lower grade level than their age mates, because of this, it is important to be placed in an environment which will allow the most improvement so as not to cause the student to fall farther behind their age mates. The specialized classroom is inherently a positive learning environment because of the student to teacher ratio. A teacher who is able to focus on only 10 students as opposed to 25 or 30 will be

able to devote more time to each student. It is expected that this will allow the students to advance at a faster rate. Depending on how far behind the student was, it is possible that a student will be on grade level with his or her peers after one year in a specialized class.

It is expected that results will support the final hypothesis. Rating tests performed by teachers and parents of students with learning disabilities are expected to be higher for students in the specialized classroom. This is expected to occur due to a combination of two factors: self-esteem and grade level advancement. It would logically follow, that a student who has a higher self-esteem and has advanced in grade level, will be rated more highly than a student who has not shown improvement in these previously listed areas. If hypotheses one and two do prove to be supported, then hypothesis three should also be supported. The rating is the opinion of both the teacher and parents of the students. Thus, an expectancy bias may occur. If a student does not improve as much as expected, a parent may not provide as high a rating than if the student improved more than expected. Despite the fact that this measurement is extremely subjective, it is a practice that does occur in the field of special education and likely has some benefits. Furthermore, few if any people know a student better than his or her parents and teacher. Thus, any positive or negative changes in the student will be noted through the rating tests. These ratings will help educators determine ways to improve the system of special education.

Despite the positive expected outcomes, there are several potential limitations to this study. The first is that the tests used may not provide enough data to reach a conclusion on the more beneficial environment. More importantly, removing students from their regular classroom while still on the property of their school may have more disadvantages than advantages. Perhaps the location will not provide enough distance from the other students and distractions. Also, it is possible that students in the specialized classroom will be teased more frequently because they

do not attend the regular classes that the school offers. It is hoped that by labeling the specialized classes of students as “participants in an experiment” rather than “students with learning disabilities” will cause the other students to see them as “lucky” rather than a host of derogatory names. Further experiments may consider a completely separate school for the students with disabilities.

Another potential limitation is that students without learning disabilities may show similar levels of improvement when placed in a specialized classroom. Thus, further experimentation should provide a similar specialized environment for students without learning disabilities to be used as a comparison for the students with disabilities.

Should the results of this study turn out to be significant, it would be important to determine where the effects lie, this could be accomplished by controlling for different aspects of the environment such as class size, teacher experience and proximity of the classroom to the rest of the school. If no effects are discovered, I will then conclude that inclusion is the most appropriate practice for students with learning disabilities.

The implications of this study are far reaching. Any changes that would occur due to research suggesting that specialization is more beneficial than inclusion would have to begin in the colleges of education across the country. Currently, the policy of inclusion is most widely taught. At the University of Florida, the program for students who wish to become teachers of secondary education focuses solely on the benefits of inclusion. There stands the possibility that inclusion is perhaps the best environment for students. Should this study indicate any positive results of specialization, it would then be important for colleges of education to support both perspectives. Secondly, should research indicate that specialization is the most appropriate environment for students with learning disabilities then the state governments would need to

devise programs, which would provide public funding to specialized schools. Currently, schools for students with any disabilities are privately funded parochial or charter schools. It is necessary for all students to have an equal opportunity at the best learning environment.

Finally, it is likely that the most appropriate learning environment will be slightly different for all students. It should not be suggested that all students with disabilities should be placed in a specialized classroom, nor should all students be placed in an inclusive classroom. If research shows that specialized classrooms are beneficial then the state should provide funding for both learning environments, then parents, teachers and students can determine which environment is best for that student's personal needs. The goal of all parents, teachers and students should ultimately be an inclusive classroom environment however, one must accept that it may take specialization to get to the point where a child can be fully functional in a classroom environment with his or her same age peers. It is important to give each student the opportunity to excel in the best environment available.

References

- Fisher, D. (1999, December). According to their peers: Inclusion as high school students see it. *Mental Retardation, 37*, 458-467.
- Heward, W.H., & Heward, W.L. (1999). *Exceptional children: An introduction to special education* (6th ed.). New York: Prentice Hall.
- Maras, P., & Brown, R. (1996, December). Effects of contact on children's attitudes toward disability: A longitudinal study. *Journal of Applied Social Psychology, 26*, 2113-2134.
- Murray, C., & Greenberg, M. T. (2001, January). Relationships with teachers and bonds with school: Social emotional adjustment correlates for children with and without disabilities. *Psychology in the Schools, 38*, 25-41.
- Neuwirth, S. (1993). Learning Disabilities. National Institute of Mental Health. Retrieved from <http://www.nimh.nih.gov/publicat/learndis.cfm>
- Putnam, J., Markovchick, K., Johnson, D.W., Johnson, R. T. (1996, December). Cooperative learning and peer acceptance of students with learning disabilities. *Journal of Social Psychology, 136*, 741-752.
- Valas, H. (1999). Students with learning disabilities and low-achieving students: Peer acceptance, loneliness, self-esteem, and depression. *Social Psychology of Education, 3*, 173-192.
- Vaughn, S. (1998). Students' Perceptions of Inclusion and Resource Room Settings. *Journal of Special Education, 32*, 79-88.
- Willis, S. (1994, October). *Making Schools More Inclusive: Teaching Children with Disabilities in Regular Classrooms*. Alexandria, VA: Association for Supervision and Curriculum Development. (ERIC Document Reproduction Service No. ED378762)

Appendix

Table of Experiment Testing Materials

Name of Test	Abbreviation	What it Measures
Wechsler Intelligence Scale for Children—Third Edition	WISC-III	Verbal comprehension and perceptual organization
Oral and Written Language Scales	OWLS	Listening comprehension
Woodcock Johnson III Tests of Cognitive Ability and Achievement	WJ-III	Verbal problem solving and language
Peabody Picture Vocabulary Test—3 rd Ed.	PPVT-III	Receptive Vocabulary
Woodcock Johnson III Tests of Achievement, standard and supplemental batteries	WJ-III	Tests basic reading, math and writing skills.
Child Development Inventory		Behavioral and emotional factors (Parent Rating Scale)
Behavioral Assessment System for Children	BASC	Behavioral and emotional factors (Parent Rating Scale)
Behavior Rating Inventory of Executive Function.		Behavioral and emotional factors (Parent Rating Scale)
Behavior Assessment System for Children		Behavioral and emotional factors (Teacher Rating Scale)
Self- Esteem Rating Scale		Self Esteem