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We the undersigned, certify that this project entitled, Students with Emotional and Behavioral Disorders and Other Health Impairments: Effects of Less versus More Restrictive Placements on Academic Achievement by Claire Flynn, Candidate for the Degree of Master of Science in Education, Curriculum and Instruction Inclusive Education, is acceptable in form and content and demonstrates a satisfactory knowledge of the field covered by this project.

  
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**Students with Emotional and Behavioral Disorders and Other Health Impairments: Effects  
of Less versus More Restrictive Placements on Academic Achievement**

By

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### **Abstract**

Though federal educational laws mandate that students with special needs must be placed in the least restrictive environment, many students with emotional and behavioral disorders (EBD) and others with special needs are often placed in self-contained classrooms or even self-contained schools. This study was intended to take a closer look at achievement levels of students with emotional and behavioral disorders and other health impairments (OHI) while they attended general education or inclusive settings and then one year later after they had been placed into a more restrictive environment (e.g., self-contained, special education classroom). The study compared the standardized test and rubric scores of 17 students with special needs to determine if there were any noticeable effects on pupil achievement as a function of their changes in placement. Results indicated that: (a) that pupil performance on high stakes assessments was distressingly low across the board, (b) there were negligible effects of placement changes on pupils' test performance, and (c) there were a few isolated yet potentially negative outcomes associated with placement changes for a few individual pupils. Implications for research and practice are discussed.

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### **Introduction**

Though federal educational laws mandate that students with special needs must be placed in a least restrictive environment to the maximum extent possible, many students with emotional and behavioral disorders (EBD) and other health impairments (OHI) are still placed in self-contained classrooms or even self-contained schools due to the need for additional supports (Heward, 2010; Mattison, 2011). The Individuals with Disabilities Education Act (IDEA) stated that, "...to the maximum extent appropriate, children with disabilities including children in public or private institutions or care facilities, are educated with children who are *nondisabled*; and special classes, separate schooling, or other removal of children with disabilities from regular educational environment occurs only if the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily." (Department of Education [DOE], 2005). If the decision is made that a child classified as having EBD or OHI is placed in a more restrictive environment, then the intent is to give that child a satisfactory learning experience. The placement should *complement* that child's learning style and enable that student to be taught with their non-disabled peers if deemed appropriate. Many researchers have taken a closer look at this issue to determine how a more restrictive environment might affect the academic achievement of students with special needs. There is a great deal of consideration, for example, when determining the proper placement for students with any type of disability. The placement should support the intended educational outcomes. This is a very important issue because there was some discussion that suggested the full-time inclusion of children with special needs in general education classrooms. According to Danforth and Morris (2006), for instance, "The very thought of this move brings about a host of

fears, including fear that the EBD labeled students will create havoc in general education and that general education teachers will reject this vulnerable population” (p.135). Full inclusion would drastically change education as we know it, particularly for those students labeled as emotionally and behaviorally disordered.

The Individuals with Disabilities Education Act (IDEA) 2004 required all children to be educated in a general education classroom *to the maximum extent possible*. By separating general and special education, it reduced funds available to schools which would limit educational opportunities to all students (Rao, 2009). According to Rao, “one way of meeting needs of *all* children in general education classrooms and consequently, reducing the number of children identified to receive special education is to provide appropriate and timely intervention and instruction to *all students* in general education classrooms” (p. 26).

The proposed study examined more closely the impact of changing educational placements on the academic achievement of students with Emotional and Behavioral Disorders and Other Health Impairments. The study compared pupils’ standardized test and rubric scores across two years (i.e., 2010 and 2011). During the first year, 17 students with EBD and OHI were enrolled in general education and/or inclusive settings. During the second assessment, all pupils had been placed in self-contained special education classrooms. The intent was to determine what effects, if any, these placement changes had on target subjects’ reading and math achievement levels. It is anticipated that study results will inform child support teams and other educational professionals in their instructional decision-making. This study may also help to answer the basic question: Do elementary students with Emotional and Behavioral Disorders and Other Health Impairments, whose educational placements have been changed from less to more restrictive settings, experience any collateral effects on their academic achievement?

### **Literature Review**

This literature review examines the academic achievement of students with special needs who are educated in a variety of settings (e.g., self-contained special classes to inclusion settings). While target subjects will include both students with EBD and OHI, the literature review focuses exclusively on students with emotional and behavior disorders. Readers interested in working with students with other health impairments should review the following excellent sources (Batshaw, 2002; Best, Heller, & Bigge, 2005; Hill, 1999). The literature review on students with EBD describes the relevant classification systems and federal guidelines impacting the education of this vulnerable population. The main topics reviewed included self-contained classrooms, self-contained schools, and inclusion settings. The review also looks at *alternative programs* that are being used increasingly to facilitate academic gains in students with EBD. Hopefully, the literature review will illustrate which settings yield the most positive outcomes for students with behavioral or emotional disorders.

### **Students with EBD**

Students with EBD have certain characteristics that present them with challenges regarding their educational experiences. For example, many of these pupils are underachieving academically; their levels of academic functioning are typically more than a year below general grade expectations in, most if not all, subject areas (Kauffman, Mock, & Simpson, 2007). One alarming fact is the academic achievement of students with EBD is lower than any other group of students with disabilities (U.S. Department of Education, 1994). According to Landrum (2003), “students with EBD probably experience less school success than any other subgroup of students with or without disabilities” (p.148). Achenbach (1991) (as cited by Lane, Wehby, Little, &

Cooley 2005 a, b) stated that students with EBD have *internalizing* behavior such as anxiety or depression and/or *externalizing* behavior such as aggression and acting out. These students have difficulty learning basic academic skills (e.g., reading, writing, spelling, and math) which, in turn, hinders their future learning in content area subjects (e. g., Lane, 2007). Students with EBD also have low rates of instructional engagement due to behavior which can compromise their academic progress (Sutherland, Lewis-Palmer, Stichter, & Morgan, 2008). Many of these students, for example, have frequent emotional outbursts that interfere with their own and others' learning. There are different subgroups under the general classification of emotional and behavioral disorders. Each subgroup has different needs related to the problem behavior and academic achievement. There are federal educational laws to ensure that these students are given a fair education and that the resources to support their behavior are available in whatever placement they are assigned.

### **Federal Special Educational Laws**

Individuals with Disabilities Education Act (IDEA) was established in 1975 and the Education of All Handicapped Children's Act which was then amended in 2004. This act was designed to make sure that all children with disabilities received a free and appropriate public education (FAPE). IDEA also outlined procedures for dealing with early intervention, special education, and other related services (U. S. Department of Education, 2006).

One critical term embedded with the federal legislation was the concept of the *least restrictive environment* (LRE). IDEA mandated, for example, that all students with special needs must be educated in the LRE to the maximum extent possible (DOE, 2006). Typically, the least restrictive environment was identified as those settings closest to where normally developing peers are education. LRE must be determined, however, in conjunction with the

provision of an *appropriate education*. Because of these laws, classrooms are much different than they used to be. Many classrooms are now blended and certainly more inclusive of individual student differences (e.g., cultural and linguistic, socio-economic, and disabilities). This law requires that children with a plethora of disabilities are being educated in the same classrooms as children without disabilities. Teachers are responsible for differentiating instruction to meet the needs of all the students within their classroom. Children with disabilities have an Individualized Education Plan (IEP) which is a written, legal document to illustrate the educational plan tailored for the student. It is developed by the committee on special education and it is updated during the annual review meetings. It is to ensure that students are getting the support they need to progress in school and can be amended anytime throughout the year if deemed necessary.

### **Self-contained Classrooms and Schools**

Many people believe that good behavior classroom behavior and learning go hand in hand. For children to have successful school experiences their work and behavior must be unacceptable. It is not surprising, therefore, that most students with behavioral and emotional disorders struggle behaviorally in school and as a result their academic achievement suffers. It can be very challenging for children with EBD to control their behavior in general education classrooms. According to Barton-Atwood, Wehby, and Falk (2005), “while reducing the problem behavior of students with EBD is a priority, it is important to focus on academic achievement as well, for several reasons” (p. 8), and this is where more restrictive environments come into play. There are many benefits associated with self-contained classrooms and self-contained schools. Class sizes are smaller, which provide additional support for students’ behavior, social, and academic needs. Adequate yearly progress, which is part of NCLB also holds schools and

teachers accountable for students with disabilities to be measured in the same manner as their non-disabled peers (Van Nest, Kimberly, Temple-Harvey, & Mason, 2008). While behavioral challenges are not as prevalent among students with OHI as they are with the EBD counterparts, their teachers must use effective and/or “evidence-based” instructional practices. Evidence-based practices are those educational approaches that have been shown empirically to improve pupils’ academic, behavioral, or interpersonal performance. It was argued that teachers in self-contained classes and schools are trained specifically to deal effectively with students with a variety of disabilities. They may use more appropriate academic strategies, employ more sound classroom management practices and deal more effectively with students’ needs by adapting their curriculum as needed. Another potentially positive aspect of e self contained classrooms is the availability and use of paraprofessionals. Finally, self-contained classes and schools may offer more appropriate therapeutic and behavioral support for students (Lane, Barton-Arwood, Nelson, & Wehby, 2005). Despite the potential benefits of educating children with EBD and OHI in self-contained classrooms or schools, most research suggests that these youngsters may actually make better academic progress in *less restrictive* educational support. In general, there is very little research that supports educating students with EBD and OHI in more restrictive environments.

In a recent investigation, Mattison (2011) compared academic outcomes and externalizing psychopathology of students with EBD who were educated in self-contained classroom versus self-contained schools over the course of one school year. He examined 76 middle school students (grades 6 to 8) academic achievement while enrolled in both types of settings and found that students educated in self-contained classrooms had more academic growth in reading than their counterparts in more restrictive, self-contained, special schools. In

addition, students educated in self-contained schools were significantly behind those enrolled in self-contained classroom in mathematics as well. However, in an earlier study (Mattison & Schneider, 2009) the same researcher followed students who were new to self-contained middle schools for students with EBD during their first year and found promising achievement results for self-contained schools. That particular study looked at school functioning as well as psychopathology and included 24 middle school students with EBD. They looked at data collected from the year prior to enrollment along with data collected at the end of the first year in the self-contained middle school. They found that the students made significant gains in their mean IQ and their reading scores increased by at least 15 points.

In another related study, Lane and her colleagues (2005a, b) examined students with EBD's performance in academic, social, and behavioral domains. According to both studies, there were *no* significant differences in growth in oral reading, reading comprehension, and/or math achievement for students who were educated in self-contained classrooms or schools. Other results showed that students with EBD educated in self-contained schools displayed significant decreases in written language as compared to students educated in the self-contained classes. This particular study took place over one academic year and had 60 participants who were enrolled in kindergarten through 8th grade. Their academic performances were assessed at the beginning and end of the school year using the *Woodcock-Johnson III Test of Achievement* (WJ-III; Woodcock, McGrew, & Mather, 2001) and other curriculum-based measurements and standardized achievement tests. This study also examined how often students were retained in grade level or school. Overall, results found very little academic progress in these more restrictive environments on any academic assessments.

In these researchers' parallel study (Lane et al., 2005b) 72 pupils with EBD served as participants. Lane et al. found that there were no significant differences in academic achievement between students served in self-contained classrooms or schools. There was also no significant difference in terms of their intellectual performance. Given a general absence of empirical support for the placement of students with special needs in more restrictive settings, there has been concurrent political pressure to place such youngsters in less restrictive settings such as general education classrooms.

### **Inclusion Settings**

Empirical research on the effects of placement on pupil performance in inclusive settings is not as abundant as research for self-contained settings. A meta-analysis by Reid, Gonzalez, Nordness, Trout, and Epstein (2004), for example, examined research completed from 1961 to 2000 on pupils' academic progress in a variety of settings including: (a) general education, (b) resource rooms, (c) self-contained classes, and (d) separate special education schools. This study found no significant differences in academic achievement among any of the four possible placements.

Another study (Signor-Buhl, Leblanc, & McDougal, 2006) compared the academic achievement of students with EBD enrolled in self-contained and inclusion classes in the same school district. Participants were in 4<sup>th</sup> grade and were in their current placement for at least two years. Their findings were contradictory to the earlier meta-analysis in that they found that students educated in inclusion settings performed significantly higher on academic assessments than their counterparts in self-contained classrooms. Students in inclusive placements outperformed their peers on reading and math achievement. This particular study suggested that less not more restrictive educational settings may be better places to improve pupils' academic

performance. As such, there appears to be some contradictory findings regarding the overall impact of placement on academic achievement. When discussing students with EBD, however, it is also important to examine the potential effects on their behavioral performance as well. What impact if any does placement in less or more restrictive educational settings have on pupils with EBD school-related behavior? Other important questions include: Do students with EBD who are enrolled in less restrictive, inclusion settings have greater academic achievement because their disability is not as severe as other students who are educated in a more restrictive environment? Perhaps students who were placed in inclusion classrooms did not have as extreme academic deficits and their self-contained peers. Conceivably the studies should have taken into consideration the students' academic achievement *before* students were placed in more restrictive environments. Simpson (2004) brought up a valid point regarding the inclusion of students with EBD. He said two things must be considered when deciding if students with EBD should be educated in inclusive settings. First, are they benefiting *socially* from their placement? For example, do they interact with adults and peers in more socially acceptable ways? Are they more socially accepted by their peers, and/or do they have any friends? Second, are students benefiting academically from their placement? Obviously, much more empirical research must be completed on the relationships among placement types and students' academic, behavioral, and interpersonal outcomes.

### **Alternative Programs for Students with EBD**

This section examines some programs that have been found to promote the academic, behavioral and interpersonal performance of students with EBD. The first study (Wehby, Lane, & Falk, 2005) explored a comprehensive reading program used in a general education kindergarten setting and its effects on four, young students with EBD. These students had

typically spent their days in a self-contained special education classroom before they were reintegrated into the general education classroom *exclusively* for this reading program. This proved to be a promising strategy as all four students made modest gains in their early reading performance (Wehby et al., 2005). This instructional arrangement that combined “pull out” and “push in” service delivery options allowed students with EBD the opportunity to engage in an effective academic intervention and do so in the presence of their normally developing peers. Students may have the best of both worlds.

Another interesting educational alternative was described as *nurture groups*. According to Doyle (2004), “Nurture groups exist as a bridge between the needs of mainstream classrooms and children who, for a wide variety of reasons, are without the basic essential early learning experiences that enable them to function socially and emotionally at an age-appropriate level” (p. 24). Nurture groups are early intervention programs to prepare the students with EBD to be reintegrated into less restrictive settings. Nurture groups are student-centered and integrated into existing curricular activities. They were developed to meet children’s behavioral and emotional needs (Doyle, 2004). Focusing on these developmental areas, provides children with the tools to better control their behavior. Nurture groups also provide a constructive framework for improving academic achievement. They may provide a valuable placement option for those pupils whose daily behavior is too disruptive to permit full time integration in general education classrooms.

Nurture groups offer on good example of an early intervention program that has been used effectively to improve student behavior which, in turn, could enhance pupils’ academic achievement. Another potentially-effective intervention option for schools are *Positive Behavioral Interventions and Supports* (PBIS) (Eber, Sugai, Smith & Scott, 2002; Sugai &

Horner, 2002; Sugai, Horner, et al., 2000). According to Lane (2007), “Rather than just preventing problem behaviors from occurring, PBIS focuses on teaching appropriate, functional skills and providing students with opportunities to practice and receive reinforcement for using these skills” (p. 138). Another promising intervention option designed to improve children’s interpersonal competence was labeled *Social Skills Training* (SST) (Gresham, Clayton, & Crews, 2004). This study explored the SST intervention for students with or at risk for EBD and found the intervention to be effective and beneficial. All of these intervention models followed the belief that more controlled behavior enhances pupils’ opportunities for academic success.

Unfortunately, much literature has yielded modest to non-significant academic gains for children with EBD. The lack of improvement academically is concerning. It is reasonable to assume that professionals must document benefits before making changes in children’s educational placements (e.g., from less to more restrictive classes). If students do not improve in *any* classroom environment, then placement changes may be considered. On the other hand, if students with EBD have academic deficits to begin with, then maybe drastic improvements may not occur in any placement. Perhaps what goes on within that placement is more important than the setting itself in influencing important pupil outcomes.

One reason noticeable academic gains may not be occurring is because of disruptive behavior and the therapeutic focus of their curricula. Perhaps less time is spent on academic instruction because of competing disruptive behaviors (Lane, 2005b). Many students with EBD may also experience adjustment problems when moving into new settings. They change academic settings more frequently than any other disability group (Lane, 2007). The frequent changes of academic placement are very challenging for students with EBD. It is not surprising, therefore, that they have difficulty adjusting to the different classroom behavior expectations.

Another important factor to consider when examining placement options for students with EBD is the type of behavior problems that they exhibit. According to Lane (2007), there are four major types of behavior problems: (a) Oppositional Defiant Disorder (ODD), (b) anxiety or depressive disorders, (c) pervasive disruptive behavior disorders, and (d) Attention Deficit Disorder. The literature has been compromised somewhat in that the types of students with EBD in each of these studies were not clearly described. As such, it is difficult to assess what kinds of problem behaviors these students exhibited and/or the severity with which it occurred. Another limitation to existing research involved researchers' failure to document students' academic records *before* and *after* placement changes. In the absence of pre- and post-measures, it is difficult to provide any definitive conclusions at this time. This would illustrate whether or not any children made important academic gains irrespective of the type of educational placement.

One final area of consideration is the role of early intervention with students with EBD. Most literature mentions early intervention as being a key component to successful development for students with EBD. It would be very interesting to see some results of early intervention programs in conjunction with different academic placements and academic achievement. Landrum (2003) noted, however, that many times students with EBD are not identified at an early age as they should be when early intervention programs would be most beneficial. The main reason why early intervention is important is because behaviors intensify over time (Lane, 2005a). As time goes on, the behavior of students with EBD becomes more and more resistant to change (Lane, 2005a). If there are no efforts towards early intervention, it could lead to a snowball effect where students' behavior progressively worsens and the appropriate educational environment becomes more and more restrictive (Lane, 2005a).

Though some research suggested that more restrictive environments do not yield significant academic improvements, such placement decisions continue to be made for students with EBD. This study was designed initially to examine the impact of placement changes from less to more restrictive on the academic achievement of students with EBD. However, given the small number of such placements that typically occur in this direction, the impact on a small group of students with other health impairments was also included. The basic research question was: what effects, if any, will changes in student placement from less to more restrictive settings have on the academic performance of a small group of students with special needs? The study compared the standardized test and rubric scores of students with EBD and OHI when they were enrolled in general education classrooms (2010) and following their placement in self-contained special education classrooms (2011).

## **Method**

### **Participants and Setting**

This study took place in a fairly large urban community in Western New York with a population of over 290,000. The urban school district within this setting was quite diverse and had a total population of over 32,000 students. The school district was made up of 59 school buildings; 45 elementary schools, 12 high schools, and two adult education centers. The average class size across the district was 22 pupils and approximately 70% of the student population were eligible for free and/or reduced meals. Like other large urban centers, the target school district struggled with overall low academic achievement, high absentee and truancy rates, and issues involving student discipline.

Participants included a small group of elementary students with special needs. A total of 20 pupils were identified through data provided by the Director of Special Education within the

target school district. Given confidentiality issues, specific information regarding gender, ethnicity, and school location were not made available to the investigator. Of the 20 pupils, useable data were provided for only 17 students. Nine of these pupils were identified formally as having *Other Health Impairments* (OHI) and eight others were classified as being *Emotional and Behavioral Disorders* (EBD) according to New York State special education standards. The nine pupils with OHI included five 4<sup>th</sup> graders, three 5<sup>th</sup> graders, and one pupil in 6<sup>th</sup> grade. Of the eight students with emotional and behaviorally disorders, three were enrolled in 4<sup>th</sup> and 5<sup>th</sup> grade respectively while the other two were 6<sup>th</sup> graders.

The study was primarily concerned with the impact of placement changes from general education and/or inclusion settings to self-contained, special education classrooms. The study was designed to determine if and how placement changes from less to more restrictive educational settings impacted students' academic achievement.

### **Data Collection and Analysis**

To examine the impact of placement changes on pupils' academic achievement, two data sets were reviewed: (a) New York State English Language Arts (ELA) and (b) New York State Mathematics test scores that were administered during the 2010-2011 academic year. The ELA and math scores are the "high stakes" assessments used in New York State. Two types of achievement data were provided: (a) standard scores and (b) rubric ratings (i. e., 1 to 4). Rubric scores of 3 and 4 are considered "passing" while scores of 1 and 2 were indicative of "failing" performance. Target students' scores were examined before and after their educational placements were changed from more inclusive to more segregated special education placements. As such, the initial data sets (ELA and Math scores from 2010) represented pupil achievement

while enrolled in inclusion or general education classrooms while the 2011 data followed placement in self-contained, special education classrooms.

Student data were disaggregated initially by classification type (i. e., Emotional and Behavioral Disorders versus Other Health Impairments), academic domain (ELA versus Mathematics), and then outcome measures (i. e., standardized scores versus rubric ratings). These data were then displayed in tabular fashion and examined for gains and/or losses across academic assessments (i. e., before and after placement changes).

### **Research Design and Procedures**

The present investigation can be described best as a descriptive study (Kennedy, 2005). Basically, the investigator contacted the Director of Special Education in this large urban school district and requested achievement data on all elementary-school children who were classified as having special needs and whose educational placement had been changed from less restrictive (i.e., inclusion classroom) to more restrictive (i.e., self-contained, special education classroom) placements. These data were forwarded to the investigator without identifying demographics such as names, gender, ethnicity, and school location. As such, the investigator worked with existing district data on pupil achievement. These data were then entered into Excel spreadsheets and descriptive statistics were generated and presented in tabular fashion. These data were used to describe the relative academic performance of target subjects and note any changes in performance resulting from placement changes.

### **Results**

The primary research question was what effects, if any, will changes in students' educational placements (inclusive to segregated) have on their academic achievement as measured by New York State high stakes assessments in literacy and mathematics. Data related

to the impact of such placement changes on the performance of students with EBD can be seen in Table 1. As shown, pupil achievement in both literacy and math during 2010 was below average and fairly consistent across students and subject areas. The mean score for students with EBD in literacy was 649 (range = 612 to 694) and 664 in mathematics (range = 620 to 706). Both means were indicative of below average academic achievement. No students scored at the 700 level in literacy and only one pupil exceeded this level in math. Following their placement into self-contained special education classrooms, pupils earned mean scores of 644 and 654 in literacy and math respectively during their 2011 assessments. Both means were slightly but not significantly lower than the previous year's scores. In terms of individual performance, four of six students made "gains" in literacy, while three of six made gains in math. Overall, there were net "losses" in both subject areas.

Data related to the impact of placement changes on the academic achievement of students with other health impairments (OHI) can be seen in Table 2. As depicted, literacy and math achievement levels for students with OHI during 2010 were also below average and fairly consistent. The mean score for students with OHI in literacy was 624 (range = 565 to 663) and 641 in mathematics (range = 614 to 697). Both means indicated below average academic achievement. No students scored at the 700 level in literacy and/or math. Following their placement into more restrictive special education classrooms, pupils earned mean scores of 628 and 638 in literacy and math respectively. In general, there was very little change (+ 4 gain in literacy, -3 loss in math) across assessments. Individually, only three of eight students with OHI made "gains" in literacy, and four of nine did the same in math. There was one noticeable decrease in performance (i.e., -81 points) for pupil #6 in mathematics. Unfortunately, comparable data were not available regarding performance in literacy.

Student achievement levels were then examined in terms of standard rubric scores ranging from 1 to 4. Data on pupils with EBD performance are presented in Table 3. As shown, pupil achievement in both literacy and math during 2010 was below average and consistent across students. The mean rubric score for six students with EBD in literacy was 1.8 (range = 1 to 4) and 2 in mathematics (range = 1 to 3). Both means were considered “failing” scores on the state’s high stakes assessments. Only one student with EBD (pupil # 6) had a “passing” score in literacy and math. It is important to note that this particular student’s rubric score fell to 2 (failing) following placement in a more restrictive placement. Following placement into self-contained special education classrooms, pupils’ mean rubric were 1.5 and 2 in literacy and math respectively. Mean scores in literacy were slightly lower in 2011 while math scores were the same. Only one of six students with EBD’s rubric score improved (pupil #5) in literacy while all others lost or stayed the same. Two of six pupils ( #4 & #7) made slight gains in math. In terms of passing scores, there was only one of 12 “passing” scores (pupil #6, 2010) in literacy; in contrast, almost one third of pupils’ rubric scores (29%) in math were passing. It is also important to note that the one pupil with EBD who passed the high stakes exam in literacy and math in 2010, failed to do so in literacy the following year.

Data on pupils with OHI performance can be seen in Table 4. As shown, pupil achievement in both literacy and math during 2010 was below average and consistent across students. The mean rubric score for eight of nine students with OHI in literacy was 1.3 (range = 1 to 4) and 2 in mathematics (range = 1 to 3). Both means were considered “failing” scores on the state’s high stakes assessments. Following placement changes pupils’ mean rubric scores were 1.1 and 1.6 in literacy and math respectively. Mean scores in literacy were slightly lower in 2011 while math scores showed a very slight increase. No students’ with OHI had improved rubric

scores in literacy and one-third showed slight increases in math. In terms of passing scores, there was only one of 17 “passing” scores in literacy (pupil #9, 2010) and one of 18 passing scores in math. Interestingly, both passing scores were received during 2010 (general education placement) and both students earned “failing” scores on subsequent assessments.

### **Discussion**

The primary purpose of this study was to examine the impact of changes in educational placement, from less to more restrictive, on a small sample of students with special needs academic achievement. Using standardized high stakes test results on a small sample of students with special needs (9 OHI & 8 EBD), the investigator found: (a) that pupil performance on high stakes assessments was distressingly low across the board, (b) there were negligible effects of placement changes on pupils’ test performance, and (c) there were a few isolated yet potentially negative outcomes associated with placement changes for a few individual pupils. The finding that students with special needs, particularly those with EBD and OHI, perform poorly on standardized, high stakes tests is consistent with previous research outcomes (e.g., Heward, 2010). The present study extends the literature by adding a new student population, in another geographic setting, using different outcome measures. While the present findings are consistent with previous research, they are still educationally distressing. Almost all pupils performed well below average on standardized scores and received very few “passing” scores on standardized rubrics.

These outcomes were similar regardless if students were placed in general or special education settings. As the aggregated data showed, pupils with EBD and OHI performed almost identically in statistic terms when they were placed in inclusive or self-contained special education settings; and that similarity included below average and failing scores on high stakes

assessments. Clearly, there was no noticeable impact on pupils' test scores after they were moved to more restrictive educational placements, although six of eight comparisons produced achievement "loses" versus "gains". In one respect, this fails to support the notion that pupils will receive more effective and individualized services in these more restrictive settings. Again, these findings are not new nor should they be surprising. Changes in physical placements are often off-set by the nature and quality of instruction received within those respective settings. Minimally, the failure to find academic improvements as a result of placement changes to more restrictive settings should prompt further analysis of the decision-making process used by Child Support Teams. In addition, it would be important to monitor other educational outcomes that may be affected, positively or negatively, by changes in placement. For example, what are the interpersonal, behavioral, and social effects associated with moving from a less to more restrictive educational setting?

While there did not appear to be any specific benefits associated with a movement from less to more restrictive placements, there were a few isolated negative outcomes that might warrant further investigation. One pupil with emotional and behavior disorders (pupil #6), for example, had earned a rubric score of 4, the highest rating, on the 2010 literacy assessment. However, after being moved to a more restrictive placement, the same student only earned a 2 and failed the literacy assessment. The same student's standardized scores in literacy dropped by 35 points from 2010 to 2011. There were two similar instances among pupils with other health impairments. Pupil # 9, for instance, earned a passing score in literacy (3) while enrolled in an inclusive setting, yet received a failing grade (2) the following year after placement in a more restrictive setting. Student #6 also earned a passing grade in math in 2010 and then received a failing grade (1) after moving to a special education classroom. There were no instances of

pupils receiving passing grades after being placed in more restrictive settings. Although these events appeared to be isolated, the fact that they were not outweighed by any benefits does raise some concern.

Obviously, much more research must be completed on the potential role(s) of placement changes on students with special needs academic achievement. Present findings are limited by a number of variables. First, there was a very small sample size that was taken from one elementary-age group (Grades 4-6) in one urban school district in one section of New York State. Generalizations to students in other urban, rural and suburban settings, those from different ethnic and socio-economic status levels, and to different subject areas and assessment measures are not warranted. Future research should include larger and more representative sample sizes and document specific demographic variables associated with those outcomes. Second, the use of high stakes, standardized assessments, while increasing in use and importance, are fraught with conceptual and methodological issues, particularly when used as measures of pupil progress. Therefore, no definitive conclusions can and should be drawn from the current data sets. All outcomes must be interpreted with the utmost caution. Third, no *direct* measures of student achievement (e.g., grades, changes in curriculum-based assessment measures, and progress on IEP goals) were collected as part of the present study. It is possible, therefore, that the 17 target students were actually doing better in school than that reflected in their high stakes test performance. Future researchers should include more direct measures of pupils' academic performance, as well as outcomes associated with behavioral and interpersonal outcomes (e.g., discipline referrals, behavior ratings, and socio-metric measures). Finally, the present study did not account for either the nature (i.e., what occurred) or intensity (i.e., how long) of student placements. It is not known, for example, what happened instructionally within either the

inclusive or more restrictive classrooms. Similarly, the investigator did not have access to information about how much and how long special education services were provided to pupils within each respective settings. Future studies, therefore, should also collect more direct measures of the instructional services that were provided in inclusive versus restrictive educational settings.

Clearly, there was insufficient evidence to support the use of more restrictive placements to improve the academic achievement of students with special needs; at least a small sample of students with EBD and OHI. Given the lack of overall beneficial effects of more restrictive educational placements and the isolated instances of adverse outcomes, considerable consideration must be applied in their future use. Indeed, if behavioral and/or interpersonal outcomes showed similar patterns, then there may be legitimate reason to call for the generalized disuse of such placement options, except under extreme situations.

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Table 1. New York State ELA and Mathematics Standardized Scores for Pupils EBD from 2010 to 2011.

Students	English Language Arts (ELA)			Mathematics		
	2010	2011	Gains/Losses	2010	2011	Gains/Losses
1	612	615	+3	645	609	-36
2	632	638	+6	660	595	-65
3	NA	642	NA	NA	647	NA
4	653	641	-12	620	642	+22
5	634	652	+18	653	646	-7
6	694	661	-33	697	706	+9
7	655	660	+5	670	689	+19
8	663	NA	NA	706	NA	NA
Mean	<b>649</b>	<b>644</b>	<b>-5</b>	<b>664</b>	<b>654</b>	<b>-10</b>

Table 2. New York State ELA and Mathematics Standardized Scores for Pupils with Other Health Impairments from 2010 to 2011.

Students	English Language Arts (ELA)			Mathematics		
	2010	2011	Gains/Losses	2010	2011	Gains/Losses
1	632	630	-2	664	646	-18
2	626	640	+14	614	651	+37
3	656	646	-10	617	634	+17
4	636	628	-8	613	648	+35
5	632	586	-46	633	623	-10
6	565	NA	NA	697	616	-81
7	625	639	+14	664	641	-23
8	583	621	+38	614	634	+20
9	663	637	-26	653	648	-5
Mean	<b>624</b>	<b>628</b>	<b>+4</b>	<b>641</b>	<b>638</b>	<b>-3</b>

Table 3. New York State ELA and Mathematics Rubric Scores for Pupils with EBD from 2010 to 2011.

Students	English Language Arts (ELA)			Mathematics		
	2010	2011	Change	2010	2011	Gains/Losses
1	1	1	0	2	1	-1
2	1	1	0	2	1	-1
3	NA	1	NA	NA	1	NA
4	2	1	-1	1	2	+1
5	1	2	+2	2	2	0
6	4	2	-2	3	3	0
7	2	2	0	2	3	+1
8	NA	2	NA	NA	3	NA
Mean	<b>1.8</b>	<b>1.5</b>	<b>-1</b>	<b>2</b>	<b>2</b>	<b>0</b>

Table 4. New York State ELA and Mathematics Rubric Scores for Pupils with Other Health Impairments from 2010 to 2011.

Students	English Language Arts (ELA)			Mathematics		
	2010	2011	Change	2010	2011	Gains/Losses
1	1	1	0	2	2	0
2	1	1	0	1	2	+1
3	2	1	-1	1	1	0
4	1	1	0	1	2	+1
5	1	1	0	1	1	0
6	1	NA	NA	3	1	-2
7	1	1	0	2	2	0
8	1	1	0	1	1	0
9	3	2	-1	1	2	+1
Mean	<b>1.3</b>	<b>1.1</b>	<b>-2</b>	<b>1.4</b>	<b>1.6</b>	<b>+2</b>