Socioeconomic Representation in Special Education

Elissa Lizzette Dailey
The College at Brockport, ekingsbury@spencerportschools.org

Follow this and additional works at: http://digitalcommons.brockport.edu/ehd_theses
Part of the Disability and Equity in Education Commons, and the Special Education and Teaching Commons

To learn more about our programs visit: http://www.brockport.edu/ehd/

Repository Citation
http://digitalcommons.brockport.edu/ehd_theses/372

This Thesis is brought to you for free and open access by the Education and Human Development at Digital Commons @Brockport. It has been accepted for inclusion in Education and Human Development Master’s Theses by an authorized administrator of Digital Commons @Brockport. For more information, please contact kmyers@brockport.edu.
Socioeconomic Representation in

Special Education

by

Elissa Lizzette Dailey

A thesis submitted to the Department of Education and Human Development of the State University of New York (SUNY) College at Brockport in partial fulfillment of the requirements for the degree of Master of Science in Education
Socioeconomic Representation in
Special Education

by

Elissa Lizzette Dailey
# Table of Contents

Abstract ........................................................................................................... 3  
Chapter One: Introduction .............................................................................. 4  
Chapter Two: Review of Literature ................................................................. 6  
Chapter Three: Methods ................................................................. 12  
  Subjects ............................................................................................................... 12  
  Instruments ......................................................................................................... 12  
  Procedures .......................................................................................................... 13  
Chapter Four: Results ..................................................................................... 15  
  Qualitative Results ............................................................................................ 15  
  Descriptive Statistics ........................................................................................ 15  
  Inferential Statistics ........................................................................................... 16  
Chapter Five: Conclusions ........................................................................... 17  
  Limitations ......................................................................................................... 17  
  Significance ......................................................................................................... 18  
  Future Research ................................................................................................ 19  
  Summary ............................................................................................................ 20  
References ........................................................................................................... 21  
Tables ................................................................................................................ 23
Tables

Table 1: Questionnaire ............................................................... 23
Table 2: Qualitative Results from Questionnaire ............................ 24
Table 3: Descriptive Statistics (Mean, Standard Deviation, Percentages) 26
Table 4: Number of Students Receiving Free or Reduced Lunches .......... 27
Table 5: Paired Sample t Tests ..................................................... 28
Abstract

The question this research explores is: Do general and special education teacher biases and the socioeconomic status (through knowledge of free and reduced lunches) of students with mild disabilities affect the placement in intermediate special education programs? This study will attempt to more closely examine the relationship between students who receive free or reduced lunches and their placement in special education programs. The major benefit of this study is that the findings will hopefully create awareness and reduce any harmful biases. One urban district, one suburban district, and one rural district were examined by looking at District Report Cards. In addition, anonymous questionnaires were distributed to elementary general and special educators. Research showed that a significant, positive discrepancy exists between the number of certifications a teacher has and whether or not they feel that the socioeconomic status of a student plays a role in their placement in special education programs, the number of certifications a teacher has and whether or not they feel that students who come from lower socioeconomic families tend to have more difficulties in school, and the number of special education students a teacher works with in one day, and the number of those students who receive free or reduced lunches.
Introduction

Through my graduate work at SUNY College at Brockport, I have studied the topic of disproportionate representation and have been particularly interested in the representation of students with disabilities that come from low socioeconomic families. In my internship, I have noticed that most of the children who are classified and participate in special education programs receive free or reduced lunches. The numbers do not coincide with the district numbers and this has sparked my interest. I want to know why this seems to be occurring.

I am not the only one who feels this way; rather there are many other experts that agree that this is a problem. Experts believe that economics and demographics influence the ethnic representation in special education. Teacher views of the outcome of inclusion have an effect on students in special education programs regarding gender and sociodemographics. (Coutinho, Oswald, & Best, 2002). In addition, teacher bias has a role in referral rates. (Smart, Wilton, & Keeling, 1980). Researchers also believe that students with learning disabilities are at risk for low socioeconomic status disproportion. (Blair, & Scott 2002).

As a result of the observations and numbers showing that disproportionate representation occurs among children who come from low-income families, I am eager to learn more about this topic to reveal the truth about representation in special education programs. I feel that all children deserve a chance to be fairly referred and placed despite their family’s income level.

Therefore, my research question for the purpose of this study will be: Do general and special education teacher biases and the socioeconomic status (through
knowledge of free and reduced lunches) of students with mild disabilities affect the placement in elementary special education programs? When looking at this question there are two themes than can be observed. The first theme that I will look at during my research is the views and attitudes of teachers towards students with disabilities. The second theme is outside factors leading to referral rates of students into special education programs. I will also mention gaps in the research literature that should be considered when conducting future research.
Review of Literature

Teacher attitudes regarding low-income students play an important role in referral rates into special education programs. Teachers' referral decisions appear to be biased by variables unrelated to the specific academic difficulties of the student. (Podell & Soodak, 1993). Researchers found that a lot has to do with how teachers view themselves and their effectiveness to whether or not they fairly referred students to special education programs.

Another factor that can play a role in teachers' attitudes towards their students is the severity of the disability. Researchers such as Cook (2001) found that the more severe the disability, or more visible the disability, students were less likely to be rejected by their teachers and more likely to have their needs met. “Because teachers can readily recognize the disabilities of their included students with severe and obvious disabilities (e.g., autism, multiple disabilities), atypical behavior and performance appears to be anticipated, explained, and excused and does not, therefore engender teacher rejection.” (Cook, 2001).

College and professional development courses can assist in the prevention of this problem. For example, if teachers are properly trained on how to successfully teach students with disabilities, they will be less likely to transfer their students into special education programs because they will feel as if they can make a difference in the student’s education. “When teachers feel that they can have an effect, they are more likely to believe that atypical students belong in their classes. Evidently, teachers need both the skills of their profession and the belief that their skills can make a difference.” (Soodak & Podell, 1993).
One study found that how teachers view their students didn't have as much of an effect on referral rates as did external factors to the child such as family mobility and tardiness. This was measured by looking at teacher views of particular students at the beginning of the school year when they had no prior knowledge of the student and comparing that to a time further in the year when the previously mentioned factors were observed. “Families of referred students were more transient than those of non-referred students. Transience has a debilitating effect on children. For one thing, the lack of stability in the home, and therefore in school, inhibits continuity in the learning experience.” (Gottlieb & Weinberg, 1999).

It is evident through research that the teacher’s view on inclusion has a major impact on whether or not they are more likely to refer students for special education classes. Teachers that did not refer students for special education placements were more likely married, and supported inclusion in education. Consequently, there is some evidence that teacher characteristics, their perceptions of classroom conditions, and their beliefs about inclusion differentiate teachers who do or do not refer children to special classes. (Smart, Wilton, & Keeling, 1980).

There are still many unanswered questions to be looked at when considering if teacher biases play a role in the placement of students in special education programs. For example, only a selected few students were considered when looking at teacher viewpoints. “Future research is needed to develop and validate a rating scale that would yield information on teachers’ attitudes towards all students in their class and allow for parametric statistical analyses.” (Cook, 2001). In addition, future research
should look at why they referred students and look closer at teacher-student interactions.

Another major factor that would increase validity of this research would be to look at a greater sample of diverse schools. For example, it would be interesting and beneficial to look at a variety of schools from rural, suburban and urban areas. Also, looking at schools that have diverse views on inclusion and regularly practice and implement those different views would possibly yield different research results. Particularly pertaining to my research question, I would like to conduct future research on schools with a wide variety of numbers of students that receive free or reduced lunches.

In addition to socioeconomic status of a student, gender also seems to play a role in referral rates. One study goes into detail as to why that might be. They study three different possibilities including biological factors, behavioral factors, and the possibility of biases. As in the previous theme mentioned, teacher biases prevailed as the most common factor in referral rates. "When teachers were asked to provide a narrative of their reason for referral, they emphasized behavior problems for the males. When they completed a less subjective indicator, however, the differences between genders disappeared." (Wehmeyer, 2001). Behavior and biology both can be linked to a family's socioeconomic status.

Students classified as having a learning disability can be closely tied to markers for low socioeconomic status. Learning Disability (LD) is the most popular label related to poverty levels among families. The purpose of Blair and Scott's research study performed in 2002 was to estimate the proportion of learning disability
placements associated with variables that can be considered markers for low socioeconomic status. “There are a multitude of mental and physical disorders that have been shown to occur more frequently among persons in lower socioeconomic status environments.” (Blair & Scott, 2002). One possibility is that students who come from low socioeconomic families aren’t exposed to the same experiences. “Inadequate or inappropriate developmental stimulation, and/or physical or mental health problems in children that interfere with normal and appropriate stimulation, may result in disrupted experience-dependent neural connectivity and lead to the types of problems with learning that characterize learning disabilities.” (Blair & Scott, 2002). The idea that environmental disadvantage serves as a catalyst in the expression of learning disabilities has not really been considered. Estimation of low socioeconomic status contribution to learning disabilities raises the possibility that the learning problems of a substantial number of children with a learning disability placement have an origin that is at least partly environmental. (Blair & Scott, 2002).

For that study, certain variables were taken into consideration from birth certificates of the students. Such variables considered were gender, race, maternal education, maternal age at time of delivery, marital status of parents, birth weight of the student and amount of prenatal care.

Two other categories determined by the Individuals with Disabilities Education Act (IDEA) were also looked at in studies relating to poverty levels and the socioeconomic status of a student’s family. In a study conducted by Oswald, Coutinho, Best and Singh in 1999, they examined students who were classified as having a severe emotional disturbance (SED) and/or mild mental retardation (MMR)
in relation to factors including median value housing, median income, percentage of
children below poverty level, percentage of all children enrolled in school who are at
risk, percentage of parents who received a 12th grade education or less and did not
receive a diploma, percentage of children not proficient in English, and percentage of
children who were of African American decent. "Not surprisingly, all of the
environmental variables were significantly related to the probability of being in a
Severe Emotional Disturbance program, and the probability of being in a Mild Mental
Retardation program." (Oswald et. al., 1999).

Increased poverty is found to be associated with an increased risk in learning
disability placements. Reasons include the outcome of families not having enough
resources to pay for medical care and food to name a few. "Data also supports the
position that both individual student characteristics, such as gender and ethnicity, and
communities' sociodemographic characteristics influence the likelihood that a child
will be identified as having a learning disability. Increased poverty, for example, is
associated with increased learning disability identification rates among Black,
Hispanic, and male Asian students." (Coutinho, Oswald, & Best, 2002).

Although there is overwhelming research information on the previous topic,
there are also a wealth of gaps that need to be addressed and possibly further
researched. For example, eligibility requirements need to be further examined
regarding the learning disability classification. Additionally, further research should
consider the variation of learning disability placements and their family or
community influence.
In addition to eligibility requirements, there needs to be a more in depth look at the increase of learning disability classifications in the past twenty years. "Over a 16 year period, a national mean increase of 198% was seen in the number of students as identified as having a learning disability. Obviously, an added emphasis on pre-referral interventions and data-based instructional practices in the early grades would be helpful in addressing this issue." (Coffey & Obringer, 2000). After that, research would have to look at using more restrictive eligibility requirements.

Conclusion

Based on the literature, I have come to the conclusion that there are still many aspects of disproportionate representation that need to be researched. Particularly, the area of socioeconomic status and placement of students in special education programs. In my professional experience through my internship and other fieldwork, I have noticed a large number of students in special education programs who receive free or reduced lunches. Further research needs to be conducted in order to determine if this observation is valid or just a coincidence.

After reviewing the literature and reflecting upon my previous experiences, I have determined that my research question: Do general and special education teacher biases and the socioeconomic status (through knowledge of free or reduced lunches) of students with mild disabilities affect the placement in intermediate special education programs? is yet to be answered. After completion of my research I hope to gain a better understanding of whether or not socioeconomic status plays a role in referring and placing students into special education programs.
Methods

Do general and special education teacher biases and the socioeconomic status of students with mild disabilities affect the placement in intermediate special education programs? Through my research I will be looking to see if how teachers view students who come from low socioeconomic backgrounds effects their likelihood to be referred to special education and/or their placement in special education programs.

Subjects

Questionnaires will be distributed to both general and special education volunteers in a suburban elementary school that work with students with mild disabilities on a daily basis. All subjects are Caucasian and include both males and females. The elementary school in which the subjects work is a kindergarten though fifth grade school. In addition, information that is public knowledge will be taken from the District Report Cards provided by New York State. Report cards that will be viewed during this study will include one urban district, one rural district, one suburban district, and the elementary school in which the questionnaires will be distributed. All information provided on the district report card is in the form of numbers and percentages, so no individuals will be identified.

Instruments

The researcher has created an unpublished instrument in the form of a questionnaire for the purposes of this study. The questionnaire includes various types of questions that have to do with how teachers view students who come from low socioeconomic backgrounds (see Table 1). In addition, the researcher will be
collecting public information from the New York State District School Report Card Comprehensive Information Reports for the three districts and one individual school. (www.emsc.nysed.gov/repcrd2003/links/nydist.html). Reliability and validity measures will be taken as part of the research procedure.

Procedures

The researcher is planning to distribute the questionnaires in one week's time. Questionnaires will be distributed in teacher mailboxes along with a cover letter explaining the directions, importance for anonymous information and deadline for returning the questionnaire. In addition, teachers will be given an envelope with the researcher's name on it to be placed in the researcher's mailbox when completed. Questionnaires will be accumulated and analyzed by the researcher. Planned statistical analysis includes descriptive statistics such as mean, standard deviation, and percentages. In addition, inferential statistics will be performed such as Paired-Sample t-Tests, and a Pearson product-moment correlation. The paired-sample t-test will determine if there is a significant difference between sets of questions on the questionnaire. For example, the researcher will be looking to see if a significant difference exists between the number of certifications a teacher has and whether or not they think a student's SES (socioeconomic status) plays a role in their placement, or if they feel that students who come from low SES families have more difficulties in school. Also, the researcher will be looking to see if a significant difference exists between how many students with disabilities a teacher works with and how many of those students receive free and reduced lunches. The Pearson product-moment correlation will determine if there is a correlation between the number of students
who receive free and reduced lunches and how teachers view students who come from low socioeconomic backgrounds. The researcher will be using Statistical Package for the Social Sciences (SPSS 12.0) when determining statistics and reliability. Validity will be determined by having two experts review the contents of the questionnaire to ensure that the questions will accurately measure what the researcher is intending to measure.

These are the subjects, instruments, and procedures that are planned. Findings will be displayed in the results chapter. Any changes that occur throughout the study will be explained in the results chapter.
Results

The research question I am exploring is: Do general and special education teacher biases and the socioeconomic status of students with mild disabilities affect the placement in intermediate special education programs? The planned analyses I carried out as listed in the methods chapter are descriptive statistics and paired-sample t tests. After review of raw data, it was apparent that I was unable to perform a Pearson product moment correlation. I made an assumption that I could compute percentages of students with disabilities at particular districts from the New York State District School Report Card Comprehensive Information Reports. However, I was unable to collect that information and therefore I did a qualitative analysis (see Table 1).

Qualitative Results

On the questionnaire, participants were asked what factors most influence their decision to refer students to special education programs, what factors most influence their decision not to refer students to special education programs, and if whether or not a child who comes from a lower socioeconomic background influences their decision for referral. Results can be found in Table 2.

Descriptive Statistics

Mean, standard deviation, and percentages (N=12) were computed using Statistical Package for the Social Sciences (SPSS 12.0). The results are shown in Table 3. In addition, percentages are shown for the number of students receiving free or reduced lunches in one urban school district, one rural school district, one
suburban school district, and the suburban school where the questionnaires were
distributed (see Table 4).

**Inferential Statistics**

The Pearson product moment correlation planned was not computed due to
lack of information from the New York State District School Report Card
Comprehensive Information Reports. The researcher was unable to collect all the
necessary public information to run the correlation analysis. However, the researcher
was able to complete three paired-sample t tests using SPSS 12.0. The results can be
found in Table 5. The first t test determined that a significant, positive discrepancy
exists between the number of certifications a teacher has and whether or not they feel
that the socioeconomic status of a student plays a role in their placement in special
education programs ($t = 4.667, p = .001$). In addition, a paired-sample t test showed
that a significant, positive discrepancy exists between the number of certifications a
teacher has and whether or not they feel that students who come from lower
socioeconomic families tend to have more difficulties in school ($t = 4.180, p = .002$).
Lastly, a paired-sample t test determined that a significant, positive discrepancy exists
between the number of special education students a teacher works with in one day,
and the number of those students who receive free or reduced lunches ($t = 2.389, p =
.044$). The results will be discussed in the conclusion chapter.
Conclusions

The research question I am exploring is: Do general and special education teacher biases and the socioeconomic status of students with mild disabilities affect the placement in intermediate special education programs? Through my past experiences working at various schools and in my internship I have noticed that there are a lot of students in special education programs that receive free and reduced lunches. I became concerned and wanted to learn about whether my observations proved to be true or just a coincidence. I wanted to see if the way teachers view socioeconomic status of students actually played a role in referring and placing students in special education programs. I developed a questionnaire to distribute to both general and special educators within a suburban school. The purpose of the questionnaire was to examine teacher perceptions of the role that socioeconomic status plays in student referral rates and placement in special education programs.

Limitations

The researcher found limitations in the research process. First, the sample size of volunteers proved to be small, and in the future, it would be ideal to distribute questionnaires to various schools in various types of districts. In addition, there is caution to be taken when using volunteers in research. There is always the question of how honest the volunteers are when answering the questionnaire. Bias is always somewhat present, and therefore, we are limited to the accuracy of the responses. Lastly, the researcher was unable to obtain up-to-date information from the New York State District Report Cards. The last updated information is from the 2000-2001 school year, limiting the research to three-year-old information. I did not
complete a Pearson product moment correlation because I was unable to find all of
the public information to do so. In addition, I decided to report qualitative findings to
show in-depth responses from the questionnaire.

Significance

The results of this study concur with Blair and Scott (2002) that students
classified as having a disability can be closely tied to markers for low socioeconomic
status. This study showed that there was a significant discrepancy between the
number of students receiving special education services and the number of students
receiving a free or reduced lunch. However, if you look at Munn Elementary
School's percentage of students receiving a free or reduced lunch it is quite small
(See Table 4). This study additionally concurs with Blair and Scott that there are a
multitude of mental and physical disorders that have been shown to occur more
frequently among persons in lower socioeconomic status environments. The
possibility that this is partially due to the lack of educational experience shows true in
this study. When teachers were asked whether or not a student who comes from a
lower socioeconomic background impacts their decision for referral, many responded
by saying that socioeconomic status plays a role in family involvement and that a
child may lack background experiences and support from home.

In addition, the results of this study concur with Soodak & Podell (1993) that
teachers need both the skills of their profession and the belief that their skills can
make a difference to be successful. When looking at the results from the paired-
sample t tests (See Table 5), it shows that the number of certifications a teacher has
plays a role in how they feel regarding students who come from low socioeconomic
families and their role in placement into special education programs and if they feel that lower socioeconomic students have more difficulties in school. When a teacher has more than one certificate it usually means that they have had extensive training in more than one area of education. Concurring with Soodak & Podell (1993), college and professional development programs can assist in preventing the problem of overrepresentation among students who come from low socioeconomic families.

Contradictory to Wehmeyer (2001), the results from this study show that when teachers were asked what factors most influence their decision to refer students to special education programs, they responded by saying academic performance, achievement in the classroom, and level of progress. Only one participant responded by saying that behavior played a role in their decision to refer students.

**Future Research**

Although this study attempted to look at *why* teachers referred students to special education programs, it did not attempt to look at teacher-student interactions. In the future, I feel it would be beneficial to examine teacher-student interactions to determine whether relationships play a role in referral rates and placement decisions. In addition, future research should look at a larger sample size of schools and districts. Questionnaires should be sent out to various schools to get a more global picture of socioeconomic representation among schools with differing views on inclusive education. Lastly, future studies may want to look at ways to provide meaningful experiences to those who lack educational experiences outside of school, such as early intervention practices to aid in eliminating future learning disability classifications.
Summary

Disproportionate representation is a growing problem in the field of special education. As educators, it is our duty to research these problems and create awareness in the field. This study is extremely important in striving to reduce disproportionate representation. By showing the numbers and presenting the findings, teachers can more closely examine their biases and the role it plays in their student’s education.

This study taught me that there is a problem of overrepresentation among students who come from lower socioeconomic families in schools today. I am closer to understanding the reasons why this problem exists, nevertheless, I am excited to continue to work on a better understanding and future research. The problem is evident, however, the solutions to work towards ending this problem are a bit unclear. It is important that all educators realize that overrepresentation occurs, and work towards eliminating bias to ensure that all students receive an appropriate education in the least restrictive environment.
References


Table 1

Questionnaire

1. How many education certifications do you have?
2. On average, how many special education students do you work with in a day?
3. To the best of your knowledge, how many of those students receive a free or reduced lunch?
4. Do you think a student’s socioeconomic status plays a role in their placement?
   a. What factors most influence your decision to refer students to special education programs?
   b. What factors most influence your decision not to refer a student to special education programs?
   c. Does whether the child comes from a low socioeconomic background impact your decision for referral? Why or why not?
5. Do you feel that students who come from lower socioeconomic families tend to have more difficulties in school?
Table 2

Qualitative Results from Questionnaire

<table>
<thead>
<tr>
<th>Participant</th>
<th>Question 4a: What factors most influence decision to refer students?</th>
<th>Question 4b: What factors most influence decision not to refer students?</th>
<th>Question 4c: Does whether a child come from a low SES background impact decision for referral?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-Academic performance -Socialization -Performance at grade level -OT* issues -Attentional issues</td>
<td>-Performing near grade level -No OT/PT* issues</td>
<td>No- Try to look at whole child aside from socioeconomic background</td>
</tr>
<tr>
<td>2</td>
<td>-Level of progress in the classroom</td>
<td>-Child has needs -Child has already been referred and services weren’t needed</td>
<td>No- Not the only thing that affects disabilities</td>
</tr>
<tr>
<td>3</td>
<td>-Achievement far below grade level -Evidence of LD*</td>
<td>-Students shows ability in some content areas -No symptoms of disability</td>
<td>Push for placement if child does not appear to have family resources to improve achievement. Is a parent able to work extensively with a child outside school?</td>
</tr>
<tr>
<td>4</td>
<td>-Severity and longevity of problem</td>
<td>-Impact on family -Are there alternatives?</td>
<td>No- Where you are from does not always tell who you can become.</td>
</tr>
<tr>
<td>5</td>
<td>-Not working to their ability</td>
<td>-Ability and attitude</td>
<td>It is based on performance.</td>
</tr>
<tr>
<td>6</td>
<td>-Difficulty learning that is beyond simple developmental difficulty -Performing significantly below grade level</td>
<td>-Child is progressing at or near grade level</td>
<td>Not that factor alone; it really is much more an issue of learning difficulties.</td>
</tr>
<tr>
<td>7</td>
<td>-Low academic performance</td>
<td>-Psychological issues of child/family</td>
<td>Not necessarily</td>
</tr>
<tr>
<td>8</td>
<td>-Academic and social struggles -Discrepancy between ability and academic achievement</td>
<td>-Positive role model -Little or no discrepancy between academic achievement and ability.</td>
<td>No- Referral is based purely on student’s individual educational and social needs.</td>
</tr>
<tr>
<td>9</td>
<td>-Instructional level performance/ability -Ability to follow directions</td>
<td>-Performance -Self-confidence</td>
<td>No- All students are at risk, must consider all students despite SES.</td>
</tr>
<tr>
<td>No.</td>
<td>Lack of confidence</td>
<td>No discrepancy between where they should be academically and where they are functioning.</td>
<td>No- It has nothing to do with it.</td>
</tr>
<tr>
<td>-----</td>
<td>------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>10</td>
<td>-Failure to achieve academically</td>
<td>-No discrepancy between where they should be academically and where they are functioning.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Always need help to accomplish academic tasks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>-Academic achievement</td>
<td></td>
<td>No- Sometimes (not always) SES plays a role in family involvement which directly impacts academic progress.</td>
</tr>
<tr>
<td></td>
<td>-Social progress</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Behavior</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>-Academic performance is far below grade level in reading and/or math skills</td>
<td></td>
<td>No- Children from a low socioeconomic background may lack experiences and support from home, but that doesn’t mean they can’t achieve when given the opportunity.</td>
</tr>
<tr>
<td></td>
<td>-Gap between verbal and written expression</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-When a child is putting effort but is still struggling to progress.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* OT: Occupational Therapy  
PT: Physical Therapy  
LD: Learning Disability
Table 3

Descriptive Statistics (Mean, Standard Deviation, Percentages)

<table>
<thead>
<tr>
<th>Questions from Questionnaire</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of certifications</td>
<td>12</td>
<td>1.67</td>
<td>.651</td>
<td>1 41.7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 50%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3 8.3%</td>
</tr>
<tr>
<td>Number of special education students</td>
<td>12</td>
<td>5.67</td>
<td>5.105</td>
<td>0 8.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 8.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 16.7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3 8.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 8.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5 16.7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8 8.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10 16.7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18 8.3%</td>
</tr>
<tr>
<td>Number of special education students receiving free or reduced lunches</td>
<td>9</td>
<td>2.28</td>
<td>1.202</td>
<td>0 8.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 8.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 16.7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3 33.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 8.3%</td>
</tr>
<tr>
<td>Does a student’s SES play a role in placement? (1=Yes, 0=No)</td>
<td>11</td>
<td>.36</td>
<td>.505</td>
<td>0 58.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 33.3%</td>
</tr>
<tr>
<td>Do students who come from lower economic families have more difficulties in school? (1=Yes, 0=No)</td>
<td>12</td>
<td>.92</td>
<td>.289</td>
<td>0 8.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 91.7%</td>
</tr>
</tbody>
</table>
Table 4

Number of Students Receiving Free or Reduced Lunches
(Numbers were taken from the 2000-2001 school year)

<table>
<thead>
<tr>
<th>District/School</th>
<th>Free Lunch</th>
<th>Reduced Lunch</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rochester City School District (Urban)</td>
<td>67.2%</td>
<td>9.4%</td>
<td>76.6%</td>
</tr>
<tr>
<td>Albion Central School District (Rural)</td>
<td>25.8%</td>
<td>5%</td>
<td>30.8%</td>
</tr>
<tr>
<td>Spencerport Central School District (Suburban)</td>
<td>6.8%</td>
<td>5.7%</td>
<td>12.5%</td>
</tr>
<tr>
<td>William C. Munn School in Spencerport</td>
<td>11.7%</td>
<td>7.3%</td>
<td>19%</td>
</tr>
</tbody>
</table>
Table 5

Paired Samples Test

<table>
<thead>
<tr>
<th>Pair</th>
<th># Of Certifications – Role in Placement</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Role in Placement</td>
<td>1.273</td>
<td>.905</td>
<td>4.667</td>
<td>.001</td>
</tr>
<tr>
<td>2</td>
<td>More Difficulties</td>
<td>.750</td>
<td>.622</td>
<td>4.180</td>
<td>.002</td>
</tr>
<tr>
<td>3</td>
<td># Of Special Ed. Students – # Of Free/Reduced Lunches</td>
<td>3.944</td>
<td>4.953</td>
<td>2.389</td>
<td>.044</td>
</tr>
</tbody>
</table>
Vita

Elissa Lizzette Dailey was born in Rochester, New York on .

She attended the State University of New York College at Fredonia from 1999 to 2003 and received a Bachelor of Science in Education with a concentration in Social Studies. She began work towards a Master of Science in Education at the State University of New York College at Brockport in the summer of 2003. Elissa is currently pursuing a career in Special Education.