The State of Special Education in the United States: How Best to Serve Students

Charlotte Reames

Worcester Polytechnic Institute

Interdisciplinary Qualifying Project, 2016

Advised by Professor John Goulet
Introduction

Though there has recently been a slight decline in the numbers of students seeking special education services, schools still struggle to provide for their special education populations, with limited budgets that must be divided between special education, career education, athletics, free or reduced-price lunch, arts programs, etc. The problem of how to meet disabled students’ educational needs is a complex one, and must take into account such diverse factors such as national, state, and local allocation of funds; under- or over-diagnosis of disabilities in certain groups; and the lack of research-based education methods in schools. This paper will discuss the variety of factors limiting the educational success of special education students and propose potential solutions that can be applied on a variety of levels, from personal changes for teachers to broad changes for lawmakers. Two case studies will be discussed: Templeton Unified School District in central California, and Worcester School District in central Massachusetts. These case studies will be used as examples of the general principles discussed in this paper.

Background

In 2012\(^1\), roughly 13% of students enrolled in public schools were served under the Individuals with Disabilities Education Act. This number represents a decrease from 14% in 2004, when numbers—after a steady climb from 11% in 1990—began to decline (Institute of Education Sciences). Despite this relatively small decrease overall, more students with autism are now in special education programs countrywide, and students in special education programs continue to be underserved. A 2002 study found that 80% of students who are in need of mental health

---

\(^{1}\) Most recent year data is available.
services do not receive them (Kataoka). Additionally, even when students get help, their parents are often unsatisfied with the quality of the services they receive (White, 2014).

One of many factors at play in the special education system is disproportionate representation of minority students, which is discussed thoroughly by W. J. Blanchett in a 2006 article, with a focus on African-American students. African-American students are disproportionately likely to be identified as having mental retardation or learning disabilities, and once diagnosed and placed in a special education program, their outcomes—such as graduation rates, etc.—decrease considerably. As Blanchett points out, the process resulting in such diagnoses is subjective and referral-based, resulting in a much greater inequity in these diagnoses than in diagnoses of more obvious or objectively diagnosable conditions, such as blindness.

Blanchett identifies four different “subsystems” of schooling in America. The first subsystem serves students who are predominantly white and perceived as “normal,” or lacking disabilities. The second serves largely students of color who are perceived as lacking disabilities. The third subsystem serves students who are white and identified as having disabilities, and the fourth serves students of color who are identified as having disabilities. The distribution of resources between these four subsystems is profoundly inequitable, and the students in the fourth subsystem—those students of color in special education—are much less likely to have qualified teachers or to graduate with a high school diploma (Blanchett, 2006).

A failure to spend enough on education exists throughout the various levels of the U.S. government. According to one analysis, only 3% of the federal government’s yearly spending goes to education (Delisle, 2013). Federal funding is also often attached to programs like the Race to the Top initiative started by President Obama, which uses the money as a reward for improvement. While such an initiative creates good incentives for states to improve their
education systems and has led to significant improvements (U.S. Department of Education, 2015), some problems can’t be solved without a simple increase in funds, and schools that already have the money to make improvements to their schools are the ones that are rewarded.

This occurs at the state level as well. In May 2015, the Indiana state legislature passed a budget that perpetuates the existing inequities in schools: all of the top 25 schools in Indiana received increased funding, while more than half of the bottom 25 schools received decreased funding, either school-wide, per-student, or both (Cavasoz and Elliot, 2015). This shows evidence of the same fundamental problem: rewarding “good schools” (schools that already have the funding and other resources to help students succeed) and punishing “bad schools” by attaching money to performance.

In addition to the society-wide problem of racism and the governmental problem of funding, some of the problems in special education occur at the individual level: with students and teachers themselves: in particular, with teachers that are not fully equipped for the job. In a comprehensive paper on adolescents with learning disabilities, Donald D. Deshler discusses common pitfalls that special education teachers face. Significantly, he notes that teachers who work closely with students with learning disabilities often fall into a tutoring role with students when they should be teaching strategies that could help foster independence in the classroom (Deshler, 2003).

This failure to teach actual learning strategies could be significant not just for students with disabilities, but for all students. Learning disability activists have long pioneered the best practices for teaching; for example, it was those associated with learning disabilities who pushed for a systematic, phonetics-based method of learning to read—and this method was validated later on (Lloyd and Hallahan, 2005). This is one of many examples in which what is best for students with learning disabilities has been shown to also be best for the rest of the classroom.
Other problems persist, and some are of a variety that can only be observed on an individual level. An article by a special education teacher in New York City details two types of cases that demonstrate the failures of the system: first, some students have such an abysmal lack of parent involvement that they are never able to get a diagnosis; and second, some students are given accommodations that don’t match their needs (Klein, 2012). One of the cases that Klein cites involves a student with the capacity for high achievement who was classed as “emotionally disturbed” and, as such, only required to meet 40% of state standards in order to progress to the next grade.

At the opposite end of the spectrum from students who are unable to get a needed diagnosis are students that may be diagnosed when it’s not necessary. As Jay P. Greene points out, the diagnosis of learning disabilities in particular is an extremely subjective process, and one of the main criteria (mismatch between ability and achievement) can be caused by other factors that schools have a disincentive to point out, such as bad teaching (2007).

The problems that plague special education across the country are numerous and wide-ranging, and it is near-impossible for any single reform program to address all of them. The problem must instead be addressed by many people and groups at many different levels.

Case Study #1: Doherty High School in Worcester, MA

Worcester School District is a large, diverse urban school district. A survey (Appendix A) was distributed to several special education teachers. The survey was intended to gauge perception of the special education program by the people who spend their lives working within it. The survey is not intended to provide quantitative data, and therefore was not distributed to a random sample of teachers. Instead it was given to teachers who seemed willing to participate. Two teachers in
the special education program responded to the survey. All identifying information has been kept confidential.

The responses to the survey reflected largely positively on the special education program at Doherty High School, which serves large numbers of students from the inner city. Both teachers responded positively to the question “How well do you think the special education program at your school serves its students?” In particular, they both expressed great faith in the teachers in the program. One said that in their lengthy time at Doherty, “I don’t think we have ever been unable to serve the special education needs of any student.” Another said, “I believe the special education program at this school serves the students the best we can.”

The teachers were also asked about any problems that they have with special education, and were articulate in expressing their concerns. Both of the teachers pointed out a simple problem of limited resources: special education classes are taught in small groups, but only a few classrooms are available and classes must be taught in subdivided classrooms. This means that several lessons are being taught at the same time in the same room, and noise from the other lessons can carry over. “This is very distracting for the teacher and for the students,” said one teacher. Another points out that many of these students have disabilities such as ADHD that already make it more difficult for them to concentrate. “For kids who need less distractions and more separate settings,” they say, “it is not an ideal environment.”

The Worcester School District spent slightly under fourteen thousand dollars per student in the 2013-14 school year (Massachusetts DOESE). This makes it one of the poorest districts in the state of Massachusetts (MassBudget). A report commissioned by the Massachusetts Department of Elementary and Secondary Education, in showing that low-income students are more likely to be educated in separate classrooms, found such high numbers of low-income students and
students in special education in the Worcester school district that, in some analyses, it was identified as an outlier and removed from the data (Hehir et al., 2012). This combination of low per-student spending and high special education rates makes for a situation in which the special education department is not receiving the resources it needs, as the interviewed teachers report.

Worcester is a prime example of the disproportionate representation of students of color in special education. Hispanic, Native American, and multiracial students are all overrepresented in the special education program, as shown in Table 1. A chi-squared analysis of the data was performed in order to determine the significance of the difference in distribution. The chi-squared test compared the actual racial distribution of the special education program in Worcester with the numbers that would be expected given the distribution of the general population. The p-value of the chi-squared analysis was a staggeringly low $1.73 \times 10^{-69}$, showing that it is extremely unlikely that this difference in distribution could have come about by chance.

<table>
<thead>
<tr>
<th></th>
<th>African-American</th>
<th>Asian</th>
<th>Hispanic</th>
<th>Multi race, not Hispanic</th>
<th>Native American</th>
<th>White</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>In special education</td>
<td>13.1</td>
<td>2.4</td>
<td>49.6</td>
<td>4.6</td>
<td>0.3</td>
<td>30.1</td>
<td>4957</td>
</tr>
<tr>
<td>Total</td>
<td>14.9</td>
<td>7.5</td>
<td>39.6</td>
<td>4.1</td>
<td>0.2</td>
<td>33.6</td>
<td>25699</td>
</tr>
</tbody>
</table>

**Table 1**: Table of numbers of students of different races in the Worcester school district: in special education, and in total. All numbers except those in the final column are percentages.\(^2\)

The proposed budget for fiscal year 2016 shows an addition of twenty new special education positions in Worcester. The impact of this is unclear: though increased staff can only be a positive development, the report indicates that the additional staff is making up for more expensive outside services (Boone et al., 2016), and therefore may not reflect an increase in services for students in

---

\(^2\) Data from Massachusetts Department of Education.
special education. Additionally, an increase in staff without a corresponding increase in class space would only exacerbate the problems with overcrowding that have been reported by the teachers at Doherty High School.

Case Study #2: Templeton School District in Templeton, CA

The second case study discusses an extremely different district. Where Worcester is a diverse urban district, Templeton is a rural school in which a vast majority of students are white. However, a statistical analysis of the racial makeup of the Templeton special education program yields less useful information than that of Worcester. First, the low number of students enrolled in schools in the Templeton Unified School District means that the chi-square test used for the Worcester data is not applicable: many of the racial categories shown below in Table 2 include fewer than five students in the special education program; at such low numbers, random variance can have huge effects on the analysis. A chi-square test, as expected, yields an inconclusive p-value of 0.26: there is not enough evidence to provide evidence of racial bias.

<table>
<thead>
<tr>
<th></th>
<th>African-American</th>
<th>Asian</th>
<th>Hispanic</th>
<th>Multi race, not Hispanic</th>
<th>Native American</th>
<th>White</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>In special education</td>
<td>0.7</td>
<td>2.6</td>
<td>24.5</td>
<td>2.6</td>
<td>1.3</td>
<td>82.1</td>
<td>151</td>
</tr>
<tr>
<td>Total</td>
<td>0.7</td>
<td>1.6</td>
<td>20.9</td>
<td>4.0</td>
<td>0.7</td>
<td>70.7</td>
<td>2545</td>
</tr>
</tbody>
</table>

Table 2: Table of numbers of students of different races in the Templeton school district: in special education, and in total. All numbers except those in the final column are percentages.\(^3\)

Templeton seems to defy the numbers: though it spent $6903 per student in 2011, less than half of what Worcester spends, it finds itself in the top 25% of California schools in terms of test

---

\(^3\) Students in the Native Hawaiian/Pacific Islander group were excluded because only one student in the district is a member of that racial group. Vineyard Elementary School was excluded from the total percentages because the currently available 2015 data was inaccurate, citing percentages over 100, etc.

\(^4\) Data from Templeton Unified School District, 2015, and SARC, 2015.
scores even while being in the bottom 25% for per-student funding (California Watch, 2011). It also maintains an 84.62% graduation rate for special education students (Templeton Unified School District, 2015).

Templeton is among school districts that will be bound by any ruling made in a law suit which is currently in progress at time of writing, *Morgan Hill Concerned Parents Association v. California Department of Education*. In February 2016, a judge ordered the release of data on every student in California schools since 2008 (Forstner, 2016), as part of the progression of the case. The case alleges widespread failure throughout the state of California to meet the needs of students in special education (Noguchi, 2013). Though the case has been filed against the state department of education by parents of disabled children in a different district, the case affects the Templeton school district and speaks to a state-wide problem.

**Current Research and Strategies**

One of the most critical reforms at the teaching level is the use of scientifically backed teaching methods for students with disabilities (Lyon, 2005). Though he rightly calls for increased scientific research, the information that is already available is not being used as well as it could be.

Donald D. Deshler discusses “intensity” of instructional time as a critical factor in how useful that instructional time is for students, particularly students with learning disabilities. He describes specific aspects of instruction that can contribute to intensity, including “progressive pacing, frequent question-answer interactions, and frequent activities that require a physical response (e.g., pointing, writing, raising hands, repeating)” (2005). In an earlier, collaborative paper, Swanson and Deshler (2003) recommend several instructional practices that can help
enhance learning in students with learning disabilities. First, they suggest content enhancement, described thus:

1. selecting the central concepts that make the details and facts hang together, and identifying relationships among the concepts;
2. selecting and constructing instructional devices that will make the content more understandable and memorable; and
3. presenting the content in a way that actively involves students while enhancing their learning.

Additionally, they provide a series of steps that must be followed in order for students to become comfortable with learning strategies:

1. verbal practice, designed to help students understand and talk about the intent of each step of the strategy and to learn each strategy step to a mastery level so that it can be automatically applied to respond to a curricular demand;
2. controlled practice and feedback, designed to give students practice using the strategy in controlled materials (i.e., ones written at the students’ instructional level) so that they focus on applying the strategy to materials that are not overly difficult;
3. advance practice and feedback, designed to give students practice using the strategy on materials that approximate actual grade-level difficulty materials; and
4. generalization, designed to give students practice applying the strategy to a broad array of new materials and circumstances.

In addition to teaching strategies, an important area of research is the school-wide or district-wide reforms that have been explored in some areas in order to improve special education. A program of interest has been implemented at Brookline High School in Massachusetts. This school implemented a revolutionary system to help students that needed assistance, but not
necessarily specialized instruction: they developed a system called “the Tutorial,” which allows students to seek help without being taken fully into the special education program (Mowschenson and Weintraub, 2009). Since the implementation of this program, many students have been moved from the special education program into the Tutorial program, which is more suited to their needs and allows for nearly full inclusion in the “mainstream” classrooms. The program also saves a significant amount of money for the district, prevents overdiagnosis of learning disabilities, and provides content-specific instruction. Unfortunately, though the initiative has provided savings in the long run, starting the program required startup capital that was provided by the BHS 21st-Century Fund, a type of resource that many schools don’t have access to.

A series of potential solutions to problems in special education are proposed by Jay P. Greene in a 2012 paper. The largest portion of the paper is devoted to his suggestion of a voucher system, in which students with disabilities are given a voucher for the entire cost of their education, which they can take to any public or private school. Theoretically, this system would mean that schools no longer have an incentive to overdiagnose, and that students and their families would have leverage: if not treated well at their schools, they could take their money elsewhere. Though similar to many incentive programs, this differs in that it empowers the student and their family to make the choice to move themselves. A program like this has been implemented in Florida, and many students with disabilities have found places in private schools. The students report significantly less bullying, and parents report that the private schools are able to meet their students’ needs much more successfully than their previous public schools.
Recommendations

For schools:

1. **Consider a program like the one at Brookline High School.** A learning center designed for students who do not need as much intervention can reduce costs and improve levels of service (Mowschenson and Weintraub, 2009).

2. **Make as many resources as possible open even to students without diagnosed learning disabilities.** Many learning disabilities go undiagnosed, causing direct harm to the students who have them (Orenstein, 2000). Making resources available to students without diagnoses can help improve education for all students, reduce the pressure to overdiagnose, and possibly even help reduce the stigma associated with needing extra help in school.

3. **Pursue teacher enrichment programs based in scientific research.** All teachers, not just those in the special education program, should be empowered to teach students with the best methods available.

For government agencies:

1. **Provide money to the schools that need it, not the ones that already have it.** Incentive-based funding ensures that wealthy schools get more money and poor schools get less.

2. **Reduce the amount of paperwork for special education teachers.** Time spent on paperwork is time not spent teaching, and teachers are becoming increasingly frustrated.
For teachers:

1. **Learn to tell whether a student needs study skills development or simple tutoring.** Students who are really in need of one can flounder when presented with the other instead.

2. **Push students to achieve to the best of their ability.** Some students, especially those who are given accommodations that aren’t particularly individualized, can achieve much more than the bare minimum required by their education program. Teachers can make the difference.

3. **Focus on proven teaching methods.** Even if the school is not pushing scientifically backed teaching methods for students with disabilities, teachers should focus on them as much as possible.

4. **Advocate for students who are not being served by their educational plans.** If a student seems to subject to discrimination, or is not getting their needs met in another way, they may have limited resources—especially if their parents are unwilling to get involved. Systematic oppression can’t be changed by one person, but advocacy for individual students can make a difference in their education.

**Conclusion**

The problems affecting special education in the United States are wide-ranging and can’t be addressed in a single program or at a single level. One individual, one group, or even one government agency can’t attack all these problems at once. Real special education reform calls for committed people at all levels to work together, from teachers to parents to lawmakers to activists. This paper outlines many of the problems and the potential solutions to those problems, and can be used as a summary and one of many resources as special education reform is sought. The way
that disabled students are treated needs to change, and reform at all levels is necessary to achieve these goals.
References


Appendix A

Survey Distributed to Special Education Teachers

I am conducting research on special education programs across the country. As part of that research, I will be using Worcester as one of two case studies. The finished paper may be searchable on the web and may be shown to WPI students who intend to student teach at Worcester schools. Any identifying information provided (by use of a personalized email address, etc.) will remain confidential.

1. How well do you think the special education program at your school serves its students?

2. How well do the special education and regular education departments work together at your school?

3. How responsive do you feel the administration is to issues/needs within the special education department?

4. In what ways do you think special education (at your school or in general) could be improved?

5. Any other comments on the state of special education—at your school, in your state, or across the country?
Appendix B

Statement of Research Methods Submitted to the WPI Internal Review Board

Subjects are recruited via my previous acquaintance with them or by requesting those I know to recruit others. Subjects will not represent a random sample and no attempt will be made to generalize any conclusions drawn from these interviews via statistical analysis; interviews will instead be used to develop a more complete understanding of the special education program at their schools, and gain insight into how theoretical models of special education work in action.

Subjects will be interviewed via telephone, by email, or in person. Any identifying information that I learn during this process will remain confidential.