High Stakes Testing Effects Dropout Rates

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High Stakes Testing Effects Dropout Rates

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the Graduate College of
Marshall University

In partial fulfillment of
the requirements for the degree of Educational Specialist
in School Psychology
by
Ann Dodd

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Abstract

Since the inception of No Child Left Behind, it has been argued that high stakes testing leads to a higher dropout rate. High stakes testing can cause anxiety, stress and fear in students when the results determine whether or not they are able to be promoted to the next grade or to graduate from high school. The dropout rates for the two years before and the three years after the high stake test (WESTEST) was implemented in West Virginia were examined to establish if there had been any effect on these rates. Results indicate no significant difference in dropout rates between pre and post high stakes test. Implications of these findings for future research are discussed.
Acknowledgments

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Table of Contents

Abstract ...........................................................................................................ii
Acknowledgements .....................................................................................iii
Table of Contents .......................................................................................iv
Nature and Scope of Study .................................................................1
Statement of the Problem ........................................................................6
Purpose of the Study ..................................................................................6
Significance of Problem ............................................................................7
Definition of Terms ....................................................................................7
Limitations and Delimitations .................................................................8
Literature Review ......................................................................................9
Research Design .......................................................................................12
Results .......................................................................................................13
Discussion ..................................................................................................14
References .................................................................................................18
No Child Left Behind was signed into law by George W. Bush on January 8, 2002. This act revises the Elementary and Secondary Education Act of 1965 (ESEA), by providing assurance that all school children in America will have the opportunity and the means to achieve academic success. This act required state academic achievement standards and state assessments. It requires states to meet adequate yearly progress (AYP) to guarantee school accountability for student success on state tests (Abrams & Madaus, 2003). Accountability comes in the form of state-wide tests, which become high stakes testing when students are required to pass in order to be promoted to the next grade and to graduate from high school (Jones, Jones & Hargrove, 2003). All states must annually test students in reading and mathematics from grades 3-8 and once during their high school years (Hoff, Hendrie & Samuels, 2005). The same assessments must be used for all students who are expected to be proficient on state tests by the year 2014 (Olsen, 2005).

State Flexibility

Recent revisions of the No Child Left Behind Act include flexibility in meeting federal directives. Individual states will be able to set their own standards for special education students with permanent academic difficulties (Hoff, Hendrie & Samuels, 2005). Schools will be given credit for increasing achievement in academically challenged students even though they are unable to meet the standards of the federal law (Hoff, Hendrie & Samuels, 2005). Alternative
assessments can be used with students experiencing disabilities and their scores will be included in the school’s AYP reports, but those scores are restricted to no more than 2% of the populace being tested.

School Rewards and Punishments

Schools face increasing degrees of sanctions based on failure to meet state standards. As a result, the state wide testing has significant implications for each school, individually, the LEA, and the state. If a school district fails to make AYP for two consecutive years, a school improvement plan must be developed. Actions that take place in years 1-5 of school improvement include technical assistance, parent choice, supplemental educational services, corrective action, and even restructuring. Parents must be notified of the school system’s progress towards AYP through a published “report card”. The “report card” must explain the state’s accountability system and provide student achievement data based on the state wide assessment, graduation rates (high school) and attendance rates (elementary school) and delineate the progress the school is making towards AYP. If a school identified for improvement or greater consequence makes AYP for two consecutive years, the school is removed from school improvement status (Jones, Jones & Hargrove, 2003).

High-stakes testing involves rewards and punishments to increase scores (Jones, Jones & Hargrove, 2003). Schools are in competition with each other to gain the highest test scores and to be among the top schools rewarded for their accomplishments (Firestone & Mayrowetz, 2000). Jones, Jones & Hargrove (2003) maintain that high-stakes testing involves the use of intimidation and bribery. Teachers and schools receive bonuses for higher test scores while students can receive food, tickets to sporting events and/or other benefits. Schools are threatened
with loss of funding, and students with grade failure or denial of a high school diploma if they are not successful.

Exclusion of Low-Scoring Children

Strategies such as suspension, expulsion, and reclassification are being used in some schools to prevent at risk students from taking the high stakes test (Amrein & Berliner, 2003). A number of students may be encouraged to drop out or transfer to another school so that schools can achieve a high rating (Bushweller, 2004). “Results show that in schools with proportionately more students of low socioeconomic status that used high stakes minimum competency exams, early dropout rates, between the eighth and tenth grades, were 4 to 6 percentage points higher than in schools that were similar but for the high stakes test requirement” (Shriberg & Shriberg, 2006).

Anxiety Interference

Elevated stress and anxiety levels in students have been reported due to high-stakes testing (Jones, Jones & Hargrove, 2003). This elevated stress may increase the likelihood that students will drop out of school. Studies show that students experience nervous tension and angst related to taking high-stakes tests. Emotions ranging from fear to boredom are experienced by students confronted with high-stakes testing (Amrein & Berliner, 2003). Some experience headaches, stomach aches, become irritable and even aggressive (Jones, Jones & Hargrove, 2003).

Ninth Grade Bulge

There is an increase in the number of students in the 9th grade when compared to other grades in a school system, referred to as “the 9th grade bulge”. Research shows that there is an increase in students in the 9th grade that has nearly tripled since the 1960s (Viadero, 2005).
Schools are retaining 9th grade students and students are often being pushed out if they are deemed likely to fail high-stakes exams (Viadero, 2005). Research shows that if a student fails the 9th grade, the odds are high that he will not graduate from high school (Viadero, 2005). An increased probability of dropping out prior to tenth grade is associated with the existence of an 8th grade promotion test, now required by the No Child Left Behind law (Haney et al. 2005). Charges of pushing students out have emerged in New York City and Birmingham, Ala. (Viadero, 2005). Graduation rates have been misrepresented (Nichols & Berliner, 2005), and according to research have not changed much, at all, in the last several years with the exception of minority students, whose graduation rates have decreased (Haney et al. 2004).

Effects of Exit Exams on Minority Students

A report conducted at Ball State University shows that high-achieving white students required to take exit exams fell behind when compared to students from states not requiring exit exams by a 13 to 16% margin (Viadero, 2005). Minority students, English language learners, disabled students, and those from lower socioeconomic backgrounds are more likely to obtain lower scores on standardized tests. Lower achieving students taking the high-stakes tests were 25% more likely to drop out of high school than their peers in states that do not have the test (Marchant & Paulson, 2005).

Regional Influences

Most states that already have high school exit exams are located in the South where there is a larger concentration of poor and minority students (Viadero, 2005). In a recent study, 18 states that require high school students to pass an exam in order to graduate were compared to students in 33 states where such testing was not required. Students from the exit-exam states tended to have lower scores on their SAT tests as well as lower graduation rates (Viadero, 2005).
High Stakes Testing Effects Dropout Rates

Studies show that schools that already have high-stakes testing in place have lower graduation rates and higher dropout rates (Viadero, 2005). 88% of states requiring high school graduation tests report a higher dropout rate than those states not requiring testing (Amrein & Berliner, 2003).

Effects on Curriculum

Curriculums are narrowed as teachers are focusing on teaching accountability subjects, (i.e., reading, writing, and mathematics), and are spending less time teaching subjects such as Science, Social Studies, and Art (Jones, Jones & Hargrove, 2003). Rates of students taking the GED exam have increased since high-stakes testing has been implemented. Students under the age of 20 taking the GED have increased by 73% between 1986 and 1999 (Amrein & Berliner, 2003). One study shows that there are a small number of states with graduation rates up to 80% but other states show graduation rates as low as 55%. The average range is in the mid-low 70 percentile (Swanson, 2003).

Vocational and Career Education

According to a report by the Harvard Civil Rights Project, the dropout rate in California schools is distressing (Lewis, 2005), and the head of the High Schools That Work Program of the Southern Regional Education Board reports that the dropout rate in states where vocational and career education has been eliminated and substituted with college preparatory curricula has increased (Lewis, 2005). An article in USA Today (Neill, 2006), reports that recent studies support the conclusion that graduation tests increase the dropout rate. “Across the USA, high-stakes tests push at least 40,000 young men and women out of school each year” (Neill, 2006).
West Virginia Experience

West Virginia has only recently begun administering high stakes testing in accordance with the NCLB law. In the 2002-03 school year a trial of the West Virginia Educational Standards Test (WESTEST) was implemented, while 2003-04 was the first school year that the WESTEST was actually given. The WESTEST is a criterion referenced (measures how well student knows specific criteria) and norm referenced (measures how student compares to other students) test designed for West Virginia students in grades 3-8 and 10 (WVDE, 2005). The WESTEST offers alternative assessment for students who exhibit severe disabilities (WVDE, 2005)

Statement of the Problem

As delineated in the review of literature, there is considerable evidence that demonstrates there may be a higher dropout and lower graduation rate among students who are required to take high-stakes tests in order to be promoted or to graduate. The perceived causes for these higher dropout rates range from stress related to the test to teachers requesting students at risk of failing the test to stay home the day of testing. The question is do high-stakes testing increases the dropout rate for students between the 9th and 12th grades?

Purpose of the Study

The purpose of this study is to explore the problems associated with high-stakes testing and to determine whether or not we can accurately predict that high stakes testing increases dropout rates among school students from the 9th to the 12th grade.

The research hypothesis for this study is: High-stakes testing effects dropout rates. The null hypothesis is: There is no relationship between high-stakes testing and dropout rates.
Significance of the Problem

Since the No Child Left Behind Act was signed into law by President Bush in 2002, there has been a great emphasis on statewide testing as a method of determining academic achievement status.

The Individuals with Disabilities Education Act (IDEA) states that students with disabilities must be given equal access to educational services, including the ability to earn a high school diploma. The use of standardized tests to make high-stakes decisions to determine whether a student is promoted or retained is quite disconcerting considering the fact that minorities and students with disabilities are already inclined to fail at higher rates than other students, particularly on exit exams that tend to focus only on basic minimal skills (Jones, Jones & Hargrove, 2003).

Definitions of Terms

The following are definitions of terms and will be used to analyze the research question of this study.

1. No Child Left Behind: The revision of Elementary and Secondary Education Act enacted in 2001 and signed by President George W. Bush in 2002 designed to reduce the achievement gap through increased accountability.

2. High Stakes Testing: High-stakes tests are those tests which are used to make significant educational decisions about students such as passing/failing a course or grade, graduating, or participating in programs/services. These tests are considered high stakes because of the potentially serious consequences for students who perform poorly on them. These are standardized tests that are mandated by the federal government and administered by the state.
3. IDEA: Individuals with Disability Education Improvement Act of 2004 (Public Law 108-446). This Act strengthens academic expectations and accountability for the nation’s 5.8 million children with disabilities and bridges the gap that has too often existed between what children with disabilities learn and what is required in general education.

4. SAT: Scholastic Aptitude Test: A test for college admission.

5. WESTEST: West Virginia Educational Standards Test

Limitations and Delimitations

In this study, limitations, which are not within the power of the researcher, consist of students between the 9th and 12th grades who transfer out of, or leave the school district for one reason or another. Delimitations of the study under which the researcher exercises control include the grade level of the participants, the length of the study, the number of schools involved in the study and the methodology of the testing.
Chapter 2

Literature Review

This literature review will describe high-stakes testing and examine the studies that illustrate the negative consequences that arise from high-stakes testing. It exemplifies how the use of high-stakes testing tends to cause retention, increased dropout and decreased graduation rates among schools who implement high-stakes testing.

High-Stakes Testing

High-stakes testing is the result of a No Child Left Behind, signed into law by President George W. Bush in 2002. It is a form of accountability requiring all students to pass exams in order to be promoted and to graduate from high school (Abrams & Madaus, 2003). States are required to test students annually in core subjects such as reading and mathematics through grades 3-8 and in grade 10 (Hoff, Hendrie & Samuels, 2005). By the year 2014, all states will be obliged to show student proficiency on state tests (Olsen, 2005).

Due to high-stakes testing, students are often retained, and according to (Jones, Jones, & Hargrove, 2003), studies show that students who are retained do not do any better when repeating the same grade, and many do worse, and that one grade retention almost doubles the risk of dropping out of school. Two grade retentions increase the risk by over 90% almost assuring that the student will not graduate from high school. Stress, anxiety, boredom and fear are all factors in the student dropout rate attributed to high-stakes testing (Amrein & Berliner, 2003).

A recent study (Amrein & Berliner, 2003), found that those states that adopted high-stakes testing policies had increased dropout rates and decreased graduation rates. A 2005 study
High Stakes Testing Effects Dropout Rates

published by Education Policy Analysis Archives claims that states that required high school students to pass an exit exam in order to graduate, showed lower scores on the SAT, and lower graduation rates, compared to states without those requirements (Marchant & Paulson, 2005).

There is a large increase in 9th graders due to retention, and research shows that the chances of graduating are particularly low for a student who fails the 9th grade (Viadero, 2004). Dropout rates are increased, as well, for students who must take an 8th or 9th grade promotion test (Haney et al. 2004). Students with disabilities, minority students, English language students, and students from lower-socioeconomic backgrounds are more likely to receive lower scores on standardized tests and are less likely to graduate (Viadero, 2004). A large number of African American and Hispanic students, along with students from low income families fail these tests (Bushweller, 2004).

Jones, Jones & Hargrove (2003) assert that standardized tests create a system that is unfair as well as destructive to learning because the emphasis on tougher standards and accountability is exceptionally harmful to low-income and minority students. There have been charges that schools are “pushing out” students who are likely to fail high-stakes exams (Viadero, 2004), and in some schools, teachers are asking students at-risk of failing the test not to come to school the day the test is administered (Jones, Jones & Hargrove, 2003). Schools tend to hold students back in order to increase the amount of students who pass the competency exams; and evidence shows that holding students back increases their risk of dropping out (Shriberg & Shriberg, 2006).

In the early 1990s a national education goal of 90% graduation rate was set. According to research, the graduations rates have been declining each year, and in the year 2000-2001, the rate of high school graduates was less than 75% (Haney et al. 2004). In the 1988-89 school year,
West Virginia showed a 76% graduation rate. Following these statistics over an 8-year period, West Virginia has never surpassed the 70% range and the 2000-01 school year reports a 76% graduation rate (Haney et al. 2004). Rates of graduation have gone down in states such as Alabama, who went from a 72% graduation rate to 65% graduation rate in the 8-year period (Haney et al. 2004). In reviewing the statistics, nearly all 50 states stayed in the same percentage bracket in the 8-year study, with some only showing slight improvement. Some states purport graduation rates as high as 80%, while others have rates as low as 55%. Graduation rates for minority students are much lower even in high-performing states (Swanson, 2003). According to (Shriberg & Shriberg, 2006), the nation’s graduation rate has dropped since 1984 and has plummeted even further since the 1990s, when many states began implementing high-stakes testing as a requirement for graduation. Evidence shows that many students are dropping out earlier in their high school years than near the end (Shriberg & Shriberg, 2006).

In summary, research shows that high-stakes testing tends to increase dropout rates and lower graduation rates in schools around the country (Haney et al. 2004). The literature shows that the negative results of high-stakes testing are numerous. Narrowing the curriculum can cause students to become bored. Pressures of high-stakes testing bring about stress and anxiety among the students, causing many to drop out of school (Jones, Jones & Hargorve, 2003). Too often, students with disabilities, minority students, and students from lower socioeconomic levels are unable to pass the tests and graduate from high school (Marchant & Paulson, 2005).
Chapter 3

Research Design

The type of research implemented in this study was quasi-experimental because the independent variable, the high-stakes test, cannot be manipulated. Quasi-experimental research cannot show cause and effect however, it can show the relationship between high-stakes testing (the independent variable) and the dropout rate among students between the 9th and 12th grades (dependent variable). To discover whether high-stakes testing has increased the dropout rate in West Virginia, the dropout rate for the years before the high-stakes testing was implemented was calculated and compared to the dropout rate occurring after the WESTEST was given using the t test for independent means.

Population

The population in this study consisted of students who attended high schools in West Virginia between the school years of 2000-2006, focusing on those students who dropped out of school during this period.

Instrumentation

Dropout rates in West Virginia are reported by the County School System (LEA) to the West Virginia Department of Education. The data was collected including all students who dropped out of high school in the years 2000 to 2003, before high-stakes testing was implemented and the trend was compared to the number of students who dropped out of school after high-stake testing in West Virginia was initiated. Confidentiality was maintained and student names, grades, and test scores were not used for his study. Data was reported only in the combined number of dropouts and the percentage of students who did not graduate.
Data Collection

Dropout records were examined for West Virginia through the 2000-2006 school years. In the years 2000-2001 and 2001-2002, the graduation rate data was reported by the number of students. In the school years 2003-2004, 2004-2005, and 2005-2006, the graduation rate data was reported by percentages.

The dropout rate for the years before the WESTEST was administered were observed and compared to the dropout rate after the WESTEST was administered using the t test for independent means to determine whether the data supports the hypothesis that high-stakes testing increases dropout rates.

Results

A t test for independent means was performed using the statistics for the two years before the WESTEST was given and was compared to the statistics for three years after the WESTEST was put into practice. The t-test for independent means is used when comparing the mean of two groups in order to see if there is a significant difference between the means. A two-tailed test was used because there was no direction to the research hypothesis.

<table>
<thead>
<tr>
<th>Group</th>
<th>School Term</th>
<th>Number of Dropouts/Total Enrollment</th>
<th>Dropout Rate Percent</th>
<th>Mean Dropout Rate for Each Group</th>
<th>Std Dev</th>
<th>t-test Results</th>
<th>Significance (two-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No High Stakes Testing</td>
<td>2000-2001</td>
<td>2454/84609</td>
<td>2.9%</td>
<td>2.90%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2001-2002</td>
<td>2392/82472</td>
<td>2.9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Stakes Testing</td>
<td>2003-2004</td>
<td>2376/81935</td>
<td>2.9%</td>
<td>2.83%</td>
<td>0.00</td>
<td>0.775</td>
<td>0.495</td>
</tr>
<tr>
<td></td>
<td>2004-2005</td>
<td>2381/82102</td>
<td>2.9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2005-2006</td>
<td>2244/83093</td>
<td>2.7%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As can be seen by the results reported above, there is no significant difference between the number of students who dropped out of high school before the implementation of high stakes testing or after high stakes testing was realized (probability obtained 0.495). Therefore, the null hypothesis must be rejected and according to this data, the results indicate that high stakes testing has no effect on the dropout rate in West Virginia.

Discussion

This study was performed to determine if high stakes testing had an effect on the dropout rate in West Virginia. Based on the literature review it is believed that the stress and anxiety of having to pass an examination in order to graduate may have an impact on the number of students who dropped out of high school. The results of this study indicate that the WESTEST did not affect dropout rates of West Virginia students. This surprising result led this researcher to seek an explanation for this result. The West Virginia Department of Education reported that in fact there are no consequences for students who do not successfully pass the Westest when it is administered in high school. Thus, the Westest is, in fact, not a high stakes test. In an email received from Kenna Seal, Director, Office of Education Performance Audits at the West Virginia Department of Education, she stated that:

There are no state sponsored or required consequences for students who score less than proficient on the WESTEST. Policy 2320 of the West Virginia Board of Education outlines the consequences for schools not meeting Adequate Yearly Progress which is based partly on the WESTEST scores. The policy can be accessed at [http://oepa.state.wv.us](http://oepa.state.wv.us). There is no policy that holds teachers accountable for scores either. Only the school and the school district have state and federally mandated sanctions for low student scores. It may be possible for a
principal to review scores for a grade level or an individual teacher who provided the instruction to determine the effectiveness of instruction. Policy 5310 does not sanction such an analysis, but the scores could be used as a screen to determine student achievement, then conduct observations to determine which, if any, performance criteria may not be provided by the teacher that may result in poor student performance. Policy 5310 is available at http://wvde.state.wv.us (Kenna Seal, 2006).

Therefore, the results of this study are not surprising given the fact that there are no consequences to students who do not score as proficient on the WESTEST. However, the results of this study do provide a significant base line for future studies which could compare the West Virginia proficiency test with a state that uses its proficiency test as a graduation requirement.

This examiner researched several states to examine how their assessment and accountability systems compared to that of West Virginia. California, Maryland, New York, Ohio and Pennsylvania were states that were reviewed. In Ohio, students are given the Ohio Graduation Test (OGT). There are 5 sections to this test and the student must pass all 5 sections in order to graduate (ODE, 2007). Maryland offers the High School Assessments (HAS) exam and students are not permitted to graduate without a passing score (MDOE, 2007). In New York, they administer Regent’s Exams throughout high school beginning in the 9th grade. If a student fails any or all of these tests, they do not graduate (NYDOE, 2007). Pennsylvania is a locally controlled state and graduation requirements are set by the local school districts. There are two high stakes tests that are offered in Pennsylvania. One is the state test or the Pennsylvania System of School Assessment (PSSA). If the school district chooses to give the PSSA, the student must pass in order to graduate however, if the district decides to administer the local
assessment, students do not have to pass in order to graduate (Bowman, 2007). In states such as Ohio, the state high school assessment test is, in fact, called the Ohio Graduation Test and is, by definition, a high stakes test. It is recommended that a replication of this study be done comparing the results of this study (a non-high stakes test) with a state such as Ohio which does, in fact, have a high stakes test.

A further difficulty in this study concerned the manner in which the West Virginia Department of Education reports dropout rates. A call was made to the West Virginia State Department of Education in order to clarify how the number of dropouts was calculated and it was unclear. It is hard to look at the data and see just where the numbers come from. In the school years 2000-2001 and 2001-2002, they gave raw numbers for the graduation rate, while in the school years 2003-2004, 2004-2005, and 2005-2006, they gave percentages for the graduation rate. Therefore, we don’t know if 2.9% was rounded up or down. This study was complicated because it was difficult to find out how these numbers were derived. At any rate, there is such a similarity between dropout rates that the small difference in these numbers would not effect the results of this study. Initially (in the first two years of this study) the actual number of students who dropped out of school was reported. In the remaining three years, the dropout rates were reported as percentages, which ironically were 2.9% each year. It was difficult for this examiner to determine how these percentages were derived, as well as to determine whether 2.9% was the actual figure or whether or not it was rounded up or down. Research in this area was hindered by difficulties in how West Virginia calculates their dropout rate. Ms. Kenna Seal, from the West Virginia Department of Education, reports that West Virginia no longer calculates a dropout rate. She explained that with the inception of NCLB, they are now required to implement a graduation rate that she referred to as a “completer rate”. Ms. Seal states: “We
selected a completer rate which is the number of 4 year graduates divided by the number of graduates plus the dropouts from 9th, 10th, 11th, and 12th grades.” She goes on to say that students who obtain a GED are not counted as graduates. Students who move out of the district, any student who does not graduate from high school (who was not officially transferred), or any student who is deceased is considered a dropout (Kenna Seal, 2007).

A recent editorial in the Parkersburg West Virginia News and Sentinel, date May 15th 2007 contradicts Ms. Seal’s explanation and reported that the dropout rate is calculated only on the students who graduate and does not take into account those students in the 9th -11th grades. This editorial accuses WV, as well as other states of falsifying their reports in order to appear more successful than their actual numbers justify.

In summary, due to the fact that there are no consequences for failing the WESTEST, the reasons given why students tend to drop out of high school related to high stakes testing do not exist in West Virginia, and therefore, explain why the results of this study show no difference in the dropout rate for the years before and after the WESTEST was implemented. Although it is difficult to actually obtain dropout rates over a number of years, in which the dropout rates are calculated in a consistent manner, it is recommended that the pursuit of this question should not be discontinued. It is recommended that a comparative study be done between a non-high stakes test state and a high-stakes test state such as Ohio vs. West Virginia be pursued.
References


R. Bowman (personal communication, June 15, 2007).


K. Seal (personal communication, December 7, 2006 and June 14, 2007).


