

Does High-Stakes Testing Interfere with
Using Diverse Teaching Methods?

Master's Research Project
in partial fulfillment of the requirements for the degree
Master of Education

by
Shannon Grogan, Mild to Moderate Intervention Specialist
June, 2008

High-Stakes Testing and Teaching Methods

This project has been approved for the Department
of Teacher Education at Ohio University

Marta Roth, Ed. D., Associate Professor, Teacher Education/Special Education

A handwritten signature in blue ink that reads "Marta A. Roth". The signature is written in a cursive style and is positioned above a thin horizontal line.

Table of Contents

Abstract.....iv

Chapter 1: Introduction and Statement of the Problem.....1

Chapter 2: Review of Literature.....4

Chapter 3: Methodology.....11

 Selection of Subjects.....11

 Study Design.....12

 Instruments Used or Developed.....12

 Procedures for Data Collection.....14

 Expected Type of Data Analysis.....14

Chapter 4: Results.....15

Chapter 5: Discussion, Recommendations, Conclusions.....21

 Evaluation of Results and Relevance to the Works of Others.....21

 Limitations of the Study.....23

 Implications and Recommendations for Further Study.....25

Chapter 6: Implications for Practice.....28

References.....30

Appendix A.....32

Appendix B.....34

Appendix C.....37

Chapter 1: Statement of the Problem

Education has developed into an increasingly important factor for citizens of the United States to help them in understanding their world, as well as to prepare them for life beyond school. In 2001, Congress passed the No Child Left Behind (NCLB) Act, a federal law seeking to improve student learning in American primary and secondary schools, and it was signed into law by the president in 2002. NCLB is a reauthorization and revision of the Elementary and Secondary Education Act, legislation passed by Lyndon Johnson in 1965. NCLB requires schools that receive federal funding to determine if their students are making adequate yearly progress (AYP) in order to continue to receive federal education funding. Most states conduct standardized tests on its students as measures of progress, as well as to graduate; this is the most economically feasible way to comply with the NCLB law. If states do not comply with NCLB, they can lose federal education funding (Olson, 2006). In states that conduct standardized testing, students are annually tested at certain grade levels to ensure that all students meet annual statewide progress objectives during their 12 years of schooling. NCLB contains several provisions including increased accountability for states, school districts, and schools; greater choice for parents and students; more flexibility for states and local educational agencies (LEAs) in their use of federal education money; and a greater emphasis on reading. According to the *Executive Summary* (2002), assessment results and state progress objectives must involve all students, including students with disabilities and those with limited proficiency in the English language.

Public school classrooms across the country have the potential to include students whose learning needs are as varied as the backgrounds from which they come. Turnbull, Turnbull & Wehmeyer (2007) state 50% of students with special needs spend 80% or more of their time in regular class. According to Turnbull et al. (2007), “fewer students with disabilities are served outside the general classroom, and the amount of time they spend outside the classroom has decreased,” (p. 40). Teachers must recognize that their classrooms can easily consist of students whose learning abilities differ. Some class members may surpass the ‘average student’, while others struggle to keep up with what is being taught. Students with special needs that have not yet been diagnosed might be present in a general education classroom setting. In addition, the Individuals with Disabilities Education Improvement Act (IDEA; 2004) of 2004 gives students with special needs greater access to the general education curriculum. When planning methods of instruction, teachers need to give consideration to the diverse ways that their students are able to learn and retain the information and ideas presented in the classroom. Tomlinson (2003) argues that it is important for teachers to actively plan their lessons, and that this planning should be consistent. When a teacher incorporates varied ways of teaching information to his or her students, the students should be able to rely on knowing that ideas will be relayed in a variety of ways. Students who are stronger visual learners, for example, should be able to depend on the fact that the teacher will consistently offer this method of instruction. It is vital that teachers include diverse methods of teaching information to their students so this information will be understood by everyone in the class. As a result of both NCLB and IDEA, teachers in general

education classrooms are under more pressure to adjust their ways of instruction to accommodate diverse learning needs in their classrooms.

Under the NCLB Act, states must establish standards based accountability systems to ensure that all public school students reach levels of proficiency during their 12 years of schooling. Teachers need to give a great deal of consideration to how they are teaching information to their students. Tomlinson (2000) suggests that teachers employ differentiated instruction which she explains to be, “the efforts of teachers to respond to variance among learners in the classroom,” (Tomlinson, 2000, p. 1). The extent to which educators provide differentiated instruction is presently not known. Therefore, the purpose of this master’s research project study is to answer the question, what variety of instructional methods, if any, **do** teachers incorporate to ensure that all students in their classrooms will be able to pass the high stakes tests states used to comply with NCLB’s requirement that states prove students are making AYP?

To answer this question, teachers in one elementary school will be surveyed about their perceptions about whether high-stakes testing interferes with their abilities to employ differentiated instruction.

Chapter 2 Review of the Literature

Teachers in today's public schools are working with students with varying learning needs. As a result, teachers employ a wider variety of instructional methodology to benefit the diverse learners in their classrooms. The following chapter outlines a review of the literature addressing the implementation of state mandated testing used to comply with NCLB. The literature looks at the purposes of NCLB, as well as unintended consequences resulting from compliance in meeting the regulations of NCLB. In addition, the articles reviewed look at the best practices for educators in their attempt to effectively instruct a wider variety of learners, and how they adjust their content and instructional methods to meet this need. Various instructional methods are available to educators. This review will first examine the feelings reported by educators about the value of mandatory state testing. This will be followed by how educators perceive the impact of mandatory testing on the effectiveness of the curriculum used in their classrooms. The role of state-testing on teachers' abilities to incorporate differentiated methods of instruction will be considered.

According to the researchers who reported their findings in *Teaching and Learning in a High-Stakes Environment: New and Noteworthy Research on How Testing Affects Day-to-Day Work in Schools* (2003), a narrowing of curriculum has emerged as a result of state testing. Around 75% of those surveyed feel the benefits brought about by testing is worth neither the time nor money that it involves (Teaching and Learning, 2003). Less than 10% of teachers surveyed agreed that state-mandated tests motivated students who were previously unmotivated. The researchers also found that 80% of teachers surveyed

feel that mandated high-stakes tests limit their ability to teach anything beyond what is on the test (Teaching and Learning, 2003). This sense of limitation implies that teachers feel restricted by these requirements, which leads them to only have time to teach to what is on the test. This restriction could easily limit the teacher's ability to employ differentiated instruction because of the need to ensure that all of the material they know will be on the test is covered. Seventy-two percent of the 4,195 teachers who were surveyed feel that state-mandated testing causes some of the teachers at the schools in which they teach to instruct in ways that are contrary to their understandings of good educational practice (Teaching and Learning, 2003). The authors of this article clearly imply that mandated testing draws teachers away from providing education to students beyond what they are expected to know for the mandated tests. Because the results of these tests can impact both the students and educators, the teachers are left with little choice but to teach solely to prepare their students for these mandated tests.

Likewise, in a survey cited by O'Shea (2007) conducted by Debard and Kubow (2002) of both students and teachers, it was found that "both groups felt that proficiency testing did not cause their teachers to teach better," (p. 5). Teachers were asked questions about how they understand NCLB, how standardized testing has changed in their years teaching, how they prepare their students for standardized tests, where they think standardized testing will go in the next five years, and how the direction of standardized testing will influence their roles as teachers. The three teachers who were interviewed were so focused on the consequences of NCLB that they were unable to explore ideas about how to successfully instruct all learners in classrooms of diverse learners. Two of those

interviewed recognized the diversity that exists within a classroom, but neither of them was able to offer different ways in which they could instruct all of their students to ensure that everyone could pass the state-mandated tests

.The findings presented in these articles indicate that the purpose of NCLB, to ensure that all students receive a quality education that can be used to carry them into successful careers, is lost because educators are too busy trying to meet with the mandates that NCLB presents to provide what the teachers view as a quality education. The majority of teachers surveyed indicate that NCLB is something that prevents them from teaching in ways that will benefit all of the students in their classes. Educators interviewed for these studies do not seem to feel that the state-mandated testing that is conducted in compliance with NCLB serves to further the educational advances of their classrooms. In addition, some of these teachers also said that state-mandated testing does not lead them to teach in ways that are more effective in spite of the fact that NCLB mandates that schools demonstrate that students are making adequate yearly progress (AYP).

Under NCLB, states are required to show AYP; AYP is heavily based on test scores, which results in limited instruction (O'Shea, 2007). The way many states have met this requirement is by giving students mandatory testing to demonstrate that students are making AYP. Teachers in some of these states have reported that their curriculum is narrowed as a result of trying to ensure that students will pass these mandated tests (Harvard Graduate School of Education, 2003). Less than 10% of teachers surveyed agreed that state-mandated tests motivated students who were previously unmotivated.

Seventy-six percent of the teachers surveyed felt that many of their students are very nervous about taking these mandated tests (Teaching and Learning, 2003), which may in part be a result of the more inclusive classrooms created by NCLB and IDEA 2004.

NCLB and IDEA 2004 result in classrooms with students ranging from above average intelligence to students with very mild disabilities. Steele (2007) reported that as a result of NCLB and IDEA, most middle school students with learning disabilities (LD), take science in general education class and must participate in the high-stakes science tests mandated by NCLB. Steele (2007) recognizes educators should amend their instruction to address this wide range of abilities, and notes that recent changes to IDEA and the requirements of NCLB emphasize teaching students with disabilities the general education curriculum whenever possible, (Steele, 2007), resulting in students with mild disabilities receiving their education in the general education classroom.

Students with special needs require instruction that is different from their general education peers. For instruction to be successful in classrooms that contain students with special needs, it needs to be modified so these students can benefit from classroom instruction. When students with special needs are in the general education classroom, it is important that teachers can adapt their instructional style and curriculum to meet the needs of these students. Steele (2007) states “students with LD have deficits in basic skills of reading, writing, and/or mathematics” (p. 74). Because today’s general education classrooms often include learners with special needs, it is vital that teachers consider different ways to relay information to their students. Steele (2007) collected

suggestions from different researchers. To address the learning needs of all learners, Steele (2007) proposes teachers identify the most useful ideas, content, and skills so the information won't overwhelm students with LD. Breaking a lesson into small steps, reviewing at each step, making real-life connections, and reviewing at the end of each class and week can benefit all of the students. Teachers can remind students to read the summary, preview the headings so they will know the major topics that will be discussed, and "summarize each section in their own words as they read," (Steele, 2007, p. 75) when approaching their readings. Steele (2007) suggests that the special education and general education teachers can create study guides. Advance organizers distributed before lectures and in preparation for textbook reading and assignments will help students learn new concepts and connect new and old material, define words, explain the purpose of the lecture, and show a visual display of major concepts. Teachers can also introduce students to mnemonics to broaden how they can remember important information. These are suggestions that can be easily incorporated into how instruction is provided and can help not only learners with special needs, but all learners in the classroom.

Lee and Herner-Patnode (2007) present how IDEA aligns with NCLB by providing access to general education curriculum for students with disabilities. Lee and Herner-Patnode (2007) looked at 4th grade teacher, Deb whose classroom included a diverse group of students, some of whom had special needs. They explain how Deb was able to instruct a class full of learners with different learning needs about mathematics vocabulary. Deb started her class by asking the whole class to solve problems involving mathematics vocabulary they had all ready learned. By reviewing in this way, the

students' knowledge was reinforced. When she introduced new vocabulary, Deb provided a definition and illustrated the new concept with examples that the students included in their notebooks. The students could use the rest of the page to include their own notes or drawings to help them construct meaning for the word. The students were then grouped in terms of readiness to learn. By dividing them into these groups, Deb was able to move about the room and provide the same level of support to several students at once. Grouping students in this way allowed Deb to spend more time with students who needed it. The groups would work together to talk about new vocabulary meanings, present their solutions to problems, and then decide upon a final answer for the group. Breaking the class into groups allowed students with processing problems to focus more easily on the information and gave them an opportunity to truly understand the meaning of vocabulary and how to incorporate it into problem solving. Deb was clearly able to instruct her students in ways that allowed the students to learn in ways that are meaningful. It is clearly important that teachers have the time and opportunity to instruct a wide range of learning abilities in ways that allow all of the learners to gain the abilities teachers are charged with teaching.

How Educators in Three States Are Responding to Standards-Based Accountability

Under No Child Left Behind reports findings collected from teachers in Georgia, California, and Pennsylvania, and considers what impact NCLB has had in U.S. schools. These three states were chosen to collect research from because they offer a range of approaches to meeting the requirements of NCLB. One of the key findings reported in this article is that teachers found that they had to amend their instructional styles. A large

majority of respondents also reported that the wide range of student abilities in their classrooms impeded them as educators. Teachers who participated in these findings also reported that they felt there was not enough time for planning or instruction. The research presented in this article provides a larger scope from which to view the intentions and results of NCLB.

Conclusion

NCLB and IDEA 2004 have resulted in a wider variety of learners being present in the general education classroom (Steele, 2007; Lee & Herner-Patnode, 2007), requiring teachers to employ a variety of instructional methods to be able to teach all learners in the classroom. The articles reviewed make clear that it is important that educators take steps to ensure that all students are learning. The intention of NCLB is supposed to benefit all students in public schools in this country, but the articles reviewed in this chapter make clear that NCLB is not meeting its goals in many classrooms of learners with diverse needs. It is vital that educators have the opportunity to provide classrooms with differentiated instruction to benefit all learners. Differentiated instruction includes cooperative learning activities, role-playing, journal writing, and kinesthetic/tactile methods of learning. Teachers who participated in research presented in the articles reviewed in this chapter clearly do not all agree that NCLB has served its well intended purpose. The purpose of this study is to collect data from one elementary school and determine if teachers there feel that NCLB interferes with their ability to incorporate diverse methods of instruction in their classrooms.

Chapter 3: Methodology

This chapter will examine the methods used in the collection and analysis of data gathered from general education teachers at a small rural elementary school. It was stated previously that NCLB mandates that public schools have to prove to the federal government that their students are making AYP in order to continue to receive federal funding. Because state-mandated testing is the most economically feasible way to achieve this, many states across the country have chosen mandated testing as a way to show the federal government that their schools' students are making AYP. The purpose of the current study seeks to determine the teachers' perceptions of how state-mandated testing affects instruction in their classrooms. In addition, the current study seeks to determine whether or not teachers feel that this testing interferes with their abilities to implement differentiated instructional practices to address the wide variety of learning needs in the classroom.

Selection of Subjects

Because the current study seeks to determine whether or not state-mandated testing interferes with teachers' abilities to employ differentiated instruction to classrooms of diverse learners, and because the researcher was granted permission by the administration and had access to these teachers, all general education teachers at a local rural elementary school in a state that meets the AYP requirement of NCLB by giving students mandated tests were selected as potential subjects for the current study.

Study Design

Since this study is descriptive in nature, a survey was chosen as the method to gather data because it would serve as an efficient and effective way to assess the perceptions of teachers. By collecting information in this way, it was possible for the researcher to ask for demographic information about the teacher's background and training.

Instruments Used or Developed

A survey (see Appendix A) was prepared by the researcher seeking to gather data about how teachers perceive the role that mandated testing plays on the kind of instruction offered in their classrooms.

The survey was developed after examining a variety of instructional methods teachers employ in order to provide differentiated instruction so all learners in a classroom have the opportunity to truly learn ideas that are being taught. Tomlinson (2000) states that differentiated instruction includes content, process, products, and learning environment, while Hall (n.d.) says differentiated instruction should consider content, process, and product. This study is interested in learning about teacher's notions regarding the teaching process, and included questions in which the participant could simply place checkmarks for their responses because the researcher determined potential participants would be more likely to participate if the survey could be filled out quickly.

The survey included questions in which participants were asked to place a checkmark next to the answer that applied as to the type of adaptation used. An additional question

in which participants were asked to respond in a Likert fashion from 1-5 (1 being very limited and 5 being not limited at all) about the degree to which they felt state testing and state directed curriculum effected their use of teaching methods was included in the survey.

An additional section of the survey asked for demographic information including their level of education, the number of years teaching, as well as the number of years the participant had been teaching the grade level he or she was currently teaching. These were added so that the researcher could group answers when analyzing the data to determine if any of these variables affected the type of responses. A question was also asked regarding whether or not the subject had attended courses or workshops about meeting the needs of diverse learners. The reason for this question was to learn if the subject had been exposed to ideas about addressing individual learning needs. Franklin (2002) addresses the importance of differentiated instruction to meet the individual needs of each learner in a classroom. In trying to understand the diversity of the subject's classroom, a question was asked about whether each subject's classroom includes students with IEP's, students who live in poverty, and students who the subject considers to be at-risk. Two questions inquire about the kinds of teaching methods the subject employs in the classroom to determine if the subject uses differentiated methods of instruction when teaching. A question was included about whether or not, as well as the degree to which, they feel diverse instructional methods are affected by state-mandated testing if they are used. A final question was included to determine the extent of the resources provided to them by the school to help meet the learning needs of diverse learners.

Procedures for Data Collection

An envelope containing the survey was placed in each general education teacher's school mailbox at the rural elementary school chosen for data collection. The survey was accompanied by a self-addressed stamped envelope for the subject to mail the completed survey to the researcher. Also included was a note advising the participant that the survey was anonymous.

Expected Type of Data Analysis

Of the 26 surveys distributed after approval by the IRB (see Appendix C), 10 were returned. The frequencies of responses on the returned surveys will be calculated and graphed for the purpose of analysis. Variables which may explain responses will be viewed in relation to participants' responses on questions about differentiated instruction. The results of the data analyses follow in the next chapter.

Chapter 4: Results

This chapter will present the data gathered from the current study. The questions included in the current study address the subject's background in terms of education level and teaching experience, resources available to the subject and the subject's use of those resources, a question about the make up of the class, a question about whether or not the teacher's class has to take state-mandated testing, and 3 questions asking about the teacher's use of differentiated instructional methods and the teacher's feelings about the impact of state-mandated testing on their ability to use these in the classroom. Responses to this range of questions provided the researcher with a broader understanding of each subject's experience.

The survey (see Appendix A) for this study questioned teachers about their levels of education. Seventy percent of teachers who filled out surveys hold a bachelor's degree as their highest level of education, while the remaining 30% hold a master's degree. Secondly, they were asked if the grade level they presently teach is required to participate in state-mandated testing. Seventy percent of participants currently teach a grade required to take mandated tests. When asked if their classrooms include students with IEPs, students who live in poverty, and students the teacher considers being at risk, 100% of participants indicated that their classrooms include all categories. A question was included about whether or not the subject had participated in workshops or courses that addressed meeting the needs of diverse learners, and if so, how many. All participants responded yes; sixty percent indicated they had gone to 5 or more, 10% had gone to 3, and 30% had attended 2 workshops or courses about meeting the needs of diverse

learners. Additional data gathered from the surveys is organized into tables and discussed below.

TABLE A-TEST REQUIREMENT AND ROLE OF TEST IN INSTRUCTION

Subject	Mandated Test Required in Grade Taught	Do Tests Interfere With Using Diverse Instruction (1=very limited, 5= not limited at all)
Teacher 1	Yes	3
Teacher 2	No	2
Teacher 3	Yes	3
Teacher 4	Yes	4
Teacher 5	Yes	3
Teacher 6	Yes	2
Teacher 7	No	3
Teacher 8	Yes	2
Teacher 9	Yes	2
Teacher 10	Yes	4

Table A illustrates responses to questions the teachers were asked on the survey about if the grade they teach is required to take state-mandated tests, and how much they feel this requirement interferes with their ability to use differentiated instruction. Eighty percent of the teachers who participated in this survey teach grades that are required to take state-mandated tests to comply with NCLB. Thirty-seven and a half percent of this group rated the interference of state-mandated testing interferes with their ability to use diverse methods of instruction to benefit all learners in their classrooms as a 3, (somewhat limited), 37.5% rated this interference as a 2 (limited), and 25% rated the interference 4 (not very limiting). Twenty percent of subjects teach grades that are not required to take state-mandated testing. Of this 20%, 50% selected the number 3 (somewhat limited) indicating that state-mandated testing does interfere somewhat with their instructional style. When asked how their instructional approach is affected by these tests, the remaining 50% circled the number 2 (limited).

TABLE B-Differentiated Instructional Methods

Instructional Method	% of Teachers Reporting Use of Instructional Method	% of Teachers Using Method Who Say Mandated Tests Affect Ability to Use Instructional Method
Auditory	90%	11%
Visual	90%	11%
Kinesthetic/Tactile	80%	38%
Seminar/Discussion	70%	14%
Group Projects/ Cooperative Learning Activities	90%	56%
Independent Projects	80%	63%
Tutoring/One-on-One	80%	63%
Role Playing	40%	100%
Journal Activities	60%	17%

Teachers were asked about their use of differentiated instruction when teaching and their answers are documented in Table B. Ninety percent of teachers indicated that they incorporate auditory, visual, and group projects/cooperative learning activities as instructional methods used in their classrooms. Of the 90% who use auditory or visual instructional methods, 11% in each category feel that state-mandated testing interferes with their ability to use this method. Fifty-six percent of teachers using group projects or cooperative learning activities feel that state-mandated testing inhibits their ability to use this instructional method. Kinesthetic/tactile, independent projects and tutoring/one-on-one instructional methods are used by 80% of teachers. Thirty-eight percent state that mandated testing interferes with their ability to employ kinesthetic/tactile instruction, and 63% of subjects using either independent projects or tutoring/one-on-one methods feel that mandated testing interferes with the use of these instructional methods. Fourteen percent of the 70% of teachers who use seminar/discussion in their classroom feel that state-mandated testing impacts their ability to use it as an instructional method. Journal writing is a method used by 60% of teachers who filled out the survey. Seventeen

percent of those who include journal writing as an instructional method feel that their ability to use this method is affected by mandated testing. Role playing is incorporated into teaching by 40% of teachers, and 100% of them feel that state-mandated testing interferes with their ability to use this method.

TABLE C-School Resources

Resource	% of Teachers Reporting School Offers Resource
Consultation	40%
Group Planning	40%
School Level Assistance Teams	60%
Workshops	50%
In-Services	100%
Teacher’s Aides	70%
Co-Teaching Options	10%

Table C notes information provided by the teachers when they were asked to share the kinds of resources made available to them by their school to aid them in meeting the needs of diverse learners. In-service was the only resource offered by the school that 100% of subjects agreed is available to them. Seventy percent of subjects noted that teacher’s aides are a resource available to them. Sixty percent of subjects said that school level assistance teams are available, while 50% indicated that workshops are administered. Forty percent of subjects indicated that both consultation and group planning are offered at the school. One subject, or 10% of participants, indicated that co-teaching options are available.

TABLE D- Student Test Preparation Programs

Test Preparation Program	% of Teachers Reporting School Offers Program
Tutoring	100%
Special Preparation Classes	20%
Before/After School Help	70%
Summer School	100%

Table D shares results about when teachers were asked whether four programs were made available to students to help them prepare for state-mandated tests. The purpose of this question was to help the researcher determine if the students had anything other than traditional school time to help them get ready for these tests. One hundred percent of teachers stated that tutoring and summer school were available to students. Seventy percent said that before and after school help was something that students could take advantage of, and 20% indicated that special preparation classes are available to aid students in getting ready to take state-mandated tests.

TABLE E-Teaching Experience

Total # of Years Teaching	Total # of Years Teaching Current Grade
20+ yrs 40%	20+ yrs 30%
15 – 20 yrs 0%	15 – 20 yrs 0%
10 - 15 yrs. 30%	10 - 15 yrs. 0%
7 – 10 yrs. 10%	7 – 10 yrs. 40%
4 – 6 yrs. 10%	4 – 6 yrs. 10%
1 – 3 yrs. 10%	1 – 3 yrs. 20%

A question was asked in the survey about the subject’s overall teaching experience, and the number of years spent teaching the grade level he or she currently teaches; the teacher’s responses are presented in Table E. Table E illustrates that the majority of participants, 40%, had been teaching for 20 years or more, 0% for 15-20 years, 30% for 10-15 years, 10% for 7-10 years, 10% for 4-6 years, and 10% for 1-3 years. Of those

teaching for 20+ years, 75% of them have spent the same number of years teaching at the grade level they currently teach. None of the teachers who have taught between 10 and 15 years have spent the same teaching the grade level they are currently teaching. While 10% of respondents have taught for 7-10 years, 40% of all respondents have taught their current grade level for 7-10 years. Ten percent of participants have spent 4-6 years teaching overall, and 10% of all subjects have taught their current grade level for 4-6 years. Ten percent of subjects have been teachers for 1-3 years, while 20% of them have been teaching their current grade level for 1-3 years. Although the current study looked to find differences in responses as a result of their level of education or the length of their teaching experience, it was difficult to see any notable differences in the subjects' responses based on either.

As stated at the beginning of this chapter, the questions included in the survey for the current study attempted to get a feel for each subject's situation. The survey attempted to develop an understanding of not only how the teacher feels about state-mandated testing, but also knowledge of each teacher's unique situation within the school where the surveys were distributed.

Chapter 5: Discussion, Recommendations, Conclusions

This study investigated whether or not teachers feel that there is a connection between the state-mandated testing many states use to meet the requirements of NCLB and instructional methods they use when teaching their students. . The National Education Association (2004) points out that before passage of NCLB, education reform was all ready occurring in many states and the passage of NCLB had a negative impact on this reform. Brown (1992) points out that state-mandated tests are developed by commercial companies that have been in this business for a long time, which implies that a standard has been created that is applied to teachers and students in all classrooms across the country whose schools use state-mandated testing to meet the expectations of NCLB. By narrowing the measure of a school district's progress to whether or not their students can prove their knowledge on a generic test, the teacher is limited in the curriculum and the variety of instruction that can be included due to time limitations, as reported by The Harvard Graduate School of Education (2003).

Evaluation of Results and Relevance to the Works of Others

Table B illustrates the results of question 7 on the survey (see Appendix A) that all teachers surveyed reported using differentiated instruction in their classrooms. Among the teachers surveyed, of the nine diverse methods of instruction presented, one reported using two of the methods, one employs five, two use six of the methods, one uses seven, three use eight and two reported using all of the methods when instructing students. The results of this question make clear that when planning instruction, teachers include

different ways of sharing information with their classes in an attempt to successfully instruct all learners in the classroom.

Question 8 asked how much the teacher felt that state-mandated tests prevented them from using the diverse teaching methods the teachers indicated they use in the classroom (rated from 1-very limited to 5-not limited at all). No one indicated either extreme. The average of the surveys was 2.8, slightly closer to very limited than not limited at all. Forty percent of the survey participants circled 2, indicating that they feel that state-mandated tests do limit their ability to use differentiated instruction; 40% circled 3, meaning there are also limitations but not as quite as noticeable. The remaining 20% circled 4, saying that the limits affect their classroom minimally. The present study finds that all teachers found at least some limitations as a result of state-mandated testing.

The majority of subjects, 80 %, agree that state testing results in placing limitations on the kinds of diverse teaching methods that can be used when instructing. For example, everyone who uses role playing feels that mandated tests affect their ability to include it when teaching; hence, role playing is the least method used among all the participants. This suggests that role playing is too time-consuming to use in the classroom because of time required to prepare students for mandated testing. The majority of teachers who use independent projects, tutoring, group projects or cooperative learning activities in their instruction feel these methods are limited by state-mandated tests. Teachers reported that mandated testing results in the remaining diverse instructional methods being affected between 11% and 38% based on the number of teachers who use these methods and the

number who report that they feel their use is limited. While the previous studies presented do not offer the degrees to which teachers feel state-mandated tests inhibit instructional methods, the majority of teachers in these previous studies agree on their impact. The study in *Teaching and Learning* (2003) said that 72% of the 4, 195 teachers surveyed feel that state-mandated testing results in teachers teaching in ways that are contrary to what they believe is good educational practice. Because today's classrooms are filled with a variety of learners, providing differentiated methods of instruction results in better teaching. In their survey, Debard and Kubow (2002) found that the majority of those surveyed did not feel that mandated testing caused teachers to teach better.

Results of the current study find that state-mandated testing can interfere with inclusion of diverse teaching methods. When results of question 8 (see Appendix A) were examined, all participants agreed that state-mandated testing interferes with their ability to use differentiated methods of instruction, though the extent to which varies among them. As mentioned previously, findings in two other studies reported that majorities of subjects believed that state-mandated testing negatively impacts teaching practices, but it was not reported to what degree the subjects feel this way.

The current study differs from previous ones addressed in that it was seeking to find if there was a correlation between the subjects' levels of experience and highest degree of education and their feelings about the impact state-mandated testing has in use of differentiated methods of instruction. Results of the current study did not find any correlation; the responses varied within each category regardless of either years of

experience or educational level achieved. These findings lead the researcher to believe that regardless of teaching experience or level of education, teachers have serious concerns about the effect of NCLB on their methodology.

Limitations of the Study

While an attempt was made to gather data based on each teacher's unique experiences as an educator, the data collected in the current study found that the limited number of participants did not provide a wide enough range to reach conclusions based on the participants' education or years of teaching experience. Looking at the data of the group as a whole, subjects in the current study all agree that state-mandated testing does interfere with the use of diverse teaching methods in the classroom. In spite of this, the researcher was unable to note any differentiation in opinions based on the subject's level of education or number of years of teaching experience.

A second limitation of the current study is the number of participants. Of the 24 teachers at the elementary school where surveys were distributed, only 10 potential subjects agreed to complete the survey, resulting in a narrow look into how teachers perceive the impact of state-mandated testing on use of differentiated instruction. Asking teachers who instruct at all levels from elementary through high school would have given a larger range of opinions. The study might have found a wider range of opinions by examining the thoughts of educators who work with students in older grades.

Finally, the fact that data was collected from teachers at one rural elementary school limited the scope to one demographic. Opinions might have been solicited from teachers at suburban schools, metropolitan schools, and schools in small towns whose citizens are not predominantly rural. In addition, the one school that was studied is predominantly Caucasian, low socio-economic status, and rather homogeneous in religious beliefs. The study may have benefited from having perspectives of teachers working with students of other races and religions.

The limitations found after completing this study have served to direct the researcher to look at a wider range of prospective subjects and greater representation of setting demographics for future studies. This will result in conclusions that can be more definitive and applied to larger audience.

Implications and Recommendations for Further Study

Though the sample size for the current study was limited, it provides a look into how educators view mandated testing in relation to how they teach their students. The results of the current study can be examined in the future in relation to similar studies conducted in areas with different demographics. NCLB is a controversial piece of legislation promoted by the current administration as legislation that will lead to the better education of American students. Results from both the current and past studies point out teachers do not feel that educational practices benefit from mandated testing, and it is from teachers that American society can gain the greatest insight into how to best educate our

students. Future research examining the role of mandated testing on educational practices could look further into which forms of differentiated instruction most benefit students and how those forms of instruction are inhibited by requirements of NCLB legislation. Research has found that NCLB has led teachers to have to amend their instructional styles. Future research could also examine how changes to instructional styles to accommodate NCLB leads to students with diverse learning needs becoming lost in the state-mandated test shuffle.

Conclusion

According to ESEA (n.d.), under NCLB students will be at or above grade proficiency level by the school year 2013-2014. Mandated tests are a common way that schools in the United States prove to the federal government that this goal is being met. Skwarchuk (2004) points out that the positive effects of mandated testing have been heavily debated by researchers, parents, school personnel, and government officials. To achieve the lofty goal of bringing all students to the proficiency level at a minimum, teachers must have the time and ability to instruct his or her students in a manner that will benefit all learners in the classroom.

According to the U.S. Department of Education (2004), the purpose of the NCLB act is to eliminate the achievement gap between students in our nation's schools. One goal of NCLB is that by the 2005-2006 school year all students will be instructed by highly qualified teachers (ESEA, n.d.). Providing highly qualified educators in our schools is definitely something parents should expect and their children should experience.

Unfortunately, in reviewing the data collected in the current study, it is difficult to fully understand this goal because teachers seem to be so busy teaching to the test that they cannot incorporate what they know to be good instructional practices so their teaching has the chance to reach learners who have exceptionalities, speak English as a second language, or are below average students.

Boswell (2004) points out that in today's classrooms where learners operate on different ability levels, teachers must have the time to develop multiple-level instructional methods in an attempt to reach all students. One of the key findings reported in *How Educators in Three States Are Responding to Standards-Based Accountability Under No Child Left Behind* (2007) is that teachers found that they had to amend their instructional styles to meet NCLB's expectations. Teachers who participated in these findings also reported that they felt there was not enough time for planning or instruction. It is not fully clear why the expectation of highly qualified teacher exists since educators are denied the opportunity to instruct in ways they know are effective, and they often don't have the opportunity to teach about things students would benefit from learning since they are so busy trying to prove to the federal government that their students are making AYP.

Chapter 6: Implications for Practice

This survey and previous studies like it provide a glimpse into the effect of NCLB. Surveys like the current study could provide a vehicle for exposing how NCLB leads to a downfall in the use of differentiated instruction. The current study shows the diverse teaching methods that are being most affected by NCLB and state-mandated testing. This knowledge could lead to recommendations of how to alleviate the exclusion of these.

Data collected for the current study makes a clear statement about the negative impact that state-mandated testing and NCLB have on teachers' abilities to offer their students a diverse range of instructional methods. Like previous studies, the current study found that teachers feel that state-mandated testing conducted in compliance with NCLB interferes with being able to help all students learn. In their final report about NCLB in which they present states recommendations for improving it, the National Conference of State Legislators (NCSL) reports that states who are frustrated with NCLB have discussed not participating in the program. When one state formally posed the question of taking this course of action to the U.S. Department of Education, it was told that it would lose its Title I funding, and nearly twice that amount in other formula and categorical funds for things such as after school, drug free school and literacy programs (NCSL, 2008).

Further research can be done seeking out ideas about the impact of NCLB and state-mandated testing. Additional research can be conducted similarly to the research reported by Madaus (1992), in which data was collected nationwide from both teachers

and education administrators. By seeking opinions from educators across the country, the data collected carries a stronger weight than the limited scope of the current study. This information could then be presented to national legislators in an attempt to reform or repeal NCLB so teachers are able to teach in ways that are meaningful and long-lasting for all students.

References

- Boswell, S. (2004). *A close look at No Child Left Behind: At schools 2004, clinicians and federal officials probe impact of the law*. Retrieved May 17, 2008, from <http://www.asha.org/about/publications/leaderonline/archives/2004/040921/040921a.htm>.
- Brown, D. F. (1992). *Altering curricula through state testing: Perceptions of teachers and principals*. San Francisco: American Educational Research Association.
- Camilli, G., Wolfe, P. M., Smith, M. L. (2006). Meta-analysis and reading policy: Perspectives on teaching children to read. *The Elementary School Journal*, 107(1), 27-36.
- Franklin, J. (2002). The art of differentiation: Moving from theory to practice. *Education Update*, 44(2). Retrieved May 3, 2008, from http://www.ascd.org/affiliates/articles/eu200203_franklin.html.
- Georgia Department of Education. (2006). *Comprehensive LEA implementation plan (CLIP) for Muscogee county school district 2006-2009*. Retrieved April 20, 2009 from http://www.mcsdga.net/inside/academics/accreditation07/district_plan_improvement/identified_goals.pdf.
- Hall, T. (n.d.). *Differentiated instruction: Effective classroom practices report*. Retrieved May 1, 2008, from <http://www.cast.org/system/galleries/download/ncac/DifInstruc.doc>.
- Harvard Graduate School of Education. (2003). Teaching and learning in a high-stakes environment. *Harvard Education Letter* 19(4), 1-2.
- Lee, H. J. & Herner-Patnode, L. M. (2007). Teaching mathematics vocabulary to diverse groups. *Intervention in School & Clinic*, 43(2), 121-126.
- Madaus, G., et al. (1992). *The influence of testing on teaching math and science in grades 4-12*. Chestnut Hill, MA: Boston College Center for the Study of Testing, Evaluation, and Educational Policy.
- National Conference of State Legislatures. (2008). *NCSL task force on no child left behind report executive summary*. Retrieved May 2, 2008, from http://www.ncsl.org/programs/press/2005/nclb_exec_summary.htm#six.
- National Education Association. (2004). *New NCLB survey: Teachers want reform that makes sense*. Retrieved April 29, 2008, from <http://www.nea.org/esea/teachervoicesurvey.html>.

- Ohio Department of Education. (2008). *District test coordinator newsletter, K-8 assessments*. Retrieved May 4, 2007, from <http://www.ode.state.oh.us/GD/Templates/Pages/ODE/ODEDetail.aspx?page=3&TopicRelationID=135&ContentID=4343&Content=47680>.
- O'Shea, M. (2007). Taking the Pulse of Three California High School Teachers: How Does the No Child Left Behind Act of 2001 Affect Them? *English Leadership Quarterly*, 30(2), 5-8.
- Rand Corporation. (2007). *How educators in three states are responding to standards-based accountability under No Child Left Behind*. Retrieved January 28, 2008, from <http://www.rand.org/pubs/monographs/MG589/>.
- Skwarchuk, S. L. (2004). Teachers' attitudes toward government-mandated provincial testing in Manitoba. *Alberta Journal of Educational Research*,(50)3, 252-282.
- Steele, M. M. (2007). Helping middle school students with learning disabilities pass the federally mandated science test: Science instruction, study skills, and test-taking strategies. *Science Scope*, 31(3), 74-80.
- Steele, M. M. (2007). Teaching calculator skills to elementary students who have learning problems. *Preventing School Failure*, 52(1), 59-62.
- Tomlinson, C. A. (2000). *Differentiation of instruction in the elementary grades*. Retrieved February 2, 2008, from <http://ceep.crc.uiuc.edu/ecearchive/digests/2000/tomlin00.pdf>.
- Tomlinson, C. A. (2003). *Fulfilling the promise of the differentiated classroom*. Alexandria: Association for Supervision and Curriculum Development.
- Tomlinson, C. A. (2000). *What is differentiated instruction?*. Retrieved March 1, 2008, from <http://www.readingrockets.org/article/263>.
- Turnbull, A., Turnbull, R., & Wehmeyer, M. L. (2007). *Exceptional lives* (5th ed.). Upper Saddle River, NJ: Pearson.
- U.S. Department of Education. (2002). *Executive summary*. Retrieved January 23, 2008, from <http://www.ed.gov/nclb/overview/intro/execsumm.doc>.
- U.S. Department of Education. (2004). *What is the purpose of the No Child Left Behind Act?*. Retrieved April 29, 2008, from <http://www.ed.gov/teachers/how/tools/initiative/updates/040513.html>.
- U.S. Elementary and Secondary Education Act (ESEA). (n.d.). *Summary of NCLB performance goals*. Retrieved May 14, 2008, from <http://www.bisd.us/nclb/Performance%20Goals.htm>.

Appendix A
Survey Instrument

High-Stakes Testing and Teaching Methods

Thank you for participating. Please complete and mail this survey within 10 days of receipt.

1. How many years have you been teaching?
1-3___ 4-6___ 7-10___ 10-15___ 15-20___ 20 or more___

2. How many years have you been teaching the grade level you currently teach?
1-3___ 4-6___ 7-10___ 10-15___ 15-20___ 20 or more___

3. What is the highest level of education you have received?
Undergraduate___ Master's___ Doctorate___

4. Have you attended workshops or courses about meeting the needs of diverse learners?
Yes___ No___
If yes, how many? 1___ 2___ 3___ 4___ 5 or more___

5. In the grade level you teach, are students required to take standardized tests to meet NCLB?
Yes___ No___

6. Do you feel your classroom includes children:
with IEPs Yes___ No___ in poverty Yes___ No___ at risk Yes___ No___

7. Please check any instructional methods you regularly employ when teaching:
Auditory___ Visual___ Kinesthetic/Tactile___ Seminar/Discussion___
Group Projects/Cooperative Learning Activities___ Independent Projects___
Tutoring/One-on-One___ Role Plays___ Journal Writing___

8. Please rate how you feel that your instructional approaches are limited by the current focus on state curriculum and testing with (1 being very limited and 5 not limited at all) and check on the list below which methods are inhibited by preparing students for high-stakes testing.

1 2 3 4 5

Auditory___ Visual___ Kinesthetic/Tactile___ Seminar/Discussion___
Group Projects/Cooperative Learning Activities___ Independent Projects___
Tutoring/One-on-One___ Role Plays___ Journal Writing___

9. Please check the following resources your school provides to help you meet the needs of diverse learners?
Consultation___ Group Planning___ School Level Assistance Teams___ Workshops___
In-services___ teachers' aides___ co-teaching options___

10. Does your school provide any of the following to help students pass state level tests?
Tutoring___ Special Preparation Classes___ Before/After School Help___ Summer School___

Appendix B
Tables of Survey Results

TABLE A-Teaching Experience

Total # of Years Teaching		Total # of Years Teaching Current Grade	
20+ yrs	40%	20+ yrs	30%
10 - 15 yrs.	30%	10 - 15 yrs.	0%
7 - 10 yrs.	10%	7 - 10 yrs.	40%
4 - 6 yrs.	10%	4 - 6 yrs.	10%
1 - 3 yrs.	10%	1 - 3 yrs.	20%

TABLE B-School Resources

Resource	% of Teachers Reporting School Offers Resource
Consultation	40%
Group Planning	40%
School Level Assistance Teams	60%
Workshops	50%
In-Services	100%
Teacher’s Aides	70%
Co-Teaching Options	10%

TABLE C- Student Test Preparation Programs

Test Preparation Program	% of Teachers Reporting School Offers Program
Tutoring	100%
Special Preparation Classes	20%
Before/After School Help	70%
Summer School	100%

TABLE D-Differentiated Instructional Methods

Instructional Method	% of Teachers Reporting Use of Instructional Method	% of Teachers Using Method Who Say Mandated Tests Affect Ability to Use Instructional Method
Auditory	90%	11%
Visual	90%	11%
Kinesthetic/Tactile	80%	38%
Seminar/Discussion	70%	14%
Group Projects/ Cooperative Learning Activities	90%	56%
Independent Projects	80%	63%
Tutoring/One-on-One	80%	63%
Role Playing	40%	100%
Journal Activities	60%	17%

TABLE E-Teaching Experience

Total # of Years Teaching	Total # of Years Teaching Current Grade
20+ yrs 40%	20+ yrs 30%
15 – 20 yrs 0%	15 – 20 yrs 0%
10 - 15 yrs. 30%	10 - 15 yrs. 0%
7 – 10 yrs. 10%	7 – 10 yrs. 40%
4 – 6 yrs. 10%	4 – 6 yrs. 10%
1 – 3 yrs. 10%	1 – 3 yrs. 20%

Appendix C
IRB Approval



OHIO
UNIVERSITY

Office of the Vice President
for Research

08E088

Office of Research Compliance
Research and Technology
Center 117
Athens OH 45701-2979

T: 740.593.0664
F: 740.593.9838
www.research.ohiou.edu

A determination has been made that the following
research study is exempt from IRB review because it
involves:

Category 2 - research involving the use of educational tests,
survey procedures, interview procedures or
observation of public behavior

Project Title: Does High-Stakes Testing Interfere with Using Diverse Teaching
Methods?

Project Director: Shannon Grogan

Department: Teacher Education

Advisor: Marta Roth

Robin Stack, C.I.P., Human Subjects Research Coordinator
Office of Research Compliance

Date

The approval remains in effect provided the study is conducted exactly as described in your application for review. Any
additions or modifications to the project must be approved by the IRB (as an amendment) prior to implementation.