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Learning is Not Child's Play: Assessing the No Child Left Behind Act

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ABSTRACT

This research examines the implementation and impact of the 2001 No Child Left Behind Act (NCLB) on education quality. More specifically, it outlines how states defined NCLB provisions, including trajectory selection, reporting techniques, confidence interval use, and methods used to inform the public of outcomes. It also discusses NCLB's impact on education outcomes by assessing changes in fourth grade reading scores under NCLB. This qualitative study includes several demographic variables that will allow the study to control for the impact that NCLB's implementations has caused and its effect on school districts that have taken on this process.

Keywords: performance reporting, sanctions, data manipulation, NCLB provisions, vulnerable populations, transparency

INTRODUCTION

Questions about the quality of education provided by public school systems have raised concerns and led to federal reforms such as the 2001 No Child Left Behind Act (NCLB). NCLB legislation required all 50 states to ensure that 100% of public school students were proficient in reading and math within a designated time frame. This goal placed a significant amount of responsibility on teachers, administrators, and the individual

school districts for any and all academic achievements and failures of their students (U.S. Department of Education, 2006). The failure to meet performance targets and goals had several important results: schools could suffer a loss of funding and be publicly criticized because their performance results were published; students were given the opportunity to attend a higher performing school, and teachers thus experienced a loss of job security. These sanctions were to be implemented over the course of a five-year timeline if the school failed to perform at expected levels (U.S. Department of Education, 2006).

Though NCLB aimed to improve the quality of education that many racial minorities and low-income students receive, many questions remain about how NCLB was implemented and whether or not it has achieved its goals. Stiefel, Schwartz, and Chellman (2007) argued that NCLB has had both a positive and negative effect on education. Studies show that the stronger accountability system tends to result in gains in the test scores of African American and Hispanic students in both the fourth and eighth grade; however, school segregation still plays a role in determining whether the racial test score gap can be reduced, since many schools are still segregated today (Stiefel et al., 2007).

Patrick (2013) pointed out that states have used different methods to implement NCLB. For example, some states have found loopholes in the legislation, allowing them to bypass federal rules and regulations. One such example is the way the public is granted access to performance data about local schools. Some states use the Internet as their primary means of releasing performance results to parents and the general public. Low-income parents who do not have access to the Internet may not receive performance results about their child's school. Other examples include employing a less visible form of print media to inform the public of test results or using a 75% confidence interval to manipulate the way test scores are calculated. Though Patrick's (2013) work highlights some of the ways states manipulated the implementation of federal NCLB legislation, there are many other important provisions and elements of NCLB that are not commonly discussed.

This paper will build on Patrick's (2013) work by further highlighting NCLB elements that were manipulated by some states, thus providing a more holistic view of the NCLB Act. This research will assess whether or not performance management advocates' assumptions that the use of performance reforms in the public sector will improve the quality of services citizens actually receive, and it will address the quality of performance systems developed under federally-mandated reforms by asking, "have states developed meaningful performance accountability systems under the NCLB Act?"

Concerns About the Quality of Education

Both policymakers and citizens have expressed concerns about the quality of the public education system. These concerns are particularly notable in districts that serve low-income and underrepresented students. Cooper (2005) wrote that low-income Latino and African American mothers in urban areas felt that public educators "did not care about their children" and, therefore, did not provide them with a high-quality education. Archbald (2004) and Saporito (2003) produced work that supported Cooper's finding by stating that low-income or high-poverty parents wanted to choose where their children attend school, so that they might receive a better education. Other researchers demonstrated that public education reforms have begun to address parents' and citizens' concerns by shifting from the development of policies that viewed poor families and minority students as a "problem to which schools provide a solution" to a system in which teachers and administrators are viewed as the "problem" (Little & Bartlett, 2010; Patrick, 2013). Federal legislation such as the 2001 No Child Left Behind Act has promoted this shift in perspective.

No Child Left Behind

The No Child Left Behind Act (NCLB) was created to help school districts efficiently and effectively improve academic achievement and meet performance goals. The legislation was

implemented in public school districts to ensure that states were doing their job in educating their students in such a way that the students actually learned the material. This goal would be accomplished by developing specific guidelines that outlined how states would execute their reforms. These reforms included the requirement that school districts demonstrate adequate yearly progress (AYP), which determined how school districts planned on meeting their yearly goals, the funding that school districts used in case of failure to meet those goals, and other state and local education policies (U.S. Department of Education, 2006).

The NCLB Act focused on improving the quality of education in school districts and gathered data through the testing of elementary and secondary school students in the subject areas of reading and mathematics (U.S. Department of Education, 2006). One of the biggest concerns at both the state and local levels of education is the test-taking abilities of the target population (Cooper, 2003). Historically, African American and Latino low-income students' test scores have lagged behind those of their more affluent White counterparts (Stiefel et al., 2007). In order to address this, NCLB legislation required states to segregate low-achieving groups of students into isolated subgroups and to report their test scores separately. Schools had to ensure that 100% of students in these subgroups tested "proficient" or higher in both reading and mathematics by the end of the 2013–14 school year (Saporito, 2003). Although this goal placed underrepresented students who have been traditionally left behind by the public school system at the forefront of the education reform agenda, this subgroup remains of great concern throughout the nation because of its lack of resources (Stiefel et al., 2007).

Over the years, school districts were evaluated to ensure that they reached their AYP within the time frame used to determine their eligibility to receive federal funding (Porter, Linn, & Trimble, 2005). The threat of lost funding served as motivation for districts to improve their test scores, particularly in African American and Latino student populations (U.S. Department of Education, 2006).

With the addition of incentives, teachers gained an additional opportunity to improve the quality of their teaching

(Patrick, 2013). The focus was placed on creating improvements in three specific groups: rural teachers, science teachers, and current multi-subject teachers (Muller & Schiller, 2000). Almost 5,000 school districts in the United States are considered rural; in most cases, teachers instruct more than one subject for which they have not received adequate training (Carnoy, Loeb, & Smith, 2001). Under the new incentives for rural teachers, teachers would have an additional three years to become qualified in the additional subjects they teach (Muller & Schiller, 2000).

Along with the incentives in professional development, intense supervision and structured mentoring were recommended (U.S Department of Education, 2006). In addressing multi-subject teachers, the guidelines allowed states to streamline the evaluation process by developing a method for these teachers to demonstrate that they are highly qualified in each of their subjects and could maintain the same high standards in subject matter mastery (Stiefel et al., 2007). Science teachers could also prove they were highly qualified; some states determined, based on their current certification requirements, how science teachers would demonstrate their qualifications in either a "broad field" science or individual fields such as physics, biology, etc. (U.S. Department of Education, 2006).

Trajectories

The U.S. Department of Education outlined four types of trajectories, or timelines, used to record and map AYP progress over a 12-year span (Patrick, 2013). The four trajectory models included *straight-line*, *stair-step pattern*, *front-load*, and *back load*. Initially recommended by the U.S. Department of Education, the *straight-line* trajectory established equal incremental increases in performance that would ultimately lead to the targeted 100% proficiency goal. Therefore, if half of the eighth grade students demonstrated proficiency in a specific subject at the start of 2002, that state would have to increase the annual measurable objective by 4% each year in order to reach the 100% proficiency goal by 2014 (Porter et al., 2005). A *stair-step pattern* trajectory provided the first increase in performance in either 2004 or 2005, with succeeding increases every second or third year (Patrick,

2013). Given this additional two to three-year time span, states had more time to avoid public criticism and sanctions if the state was determined to be underachieving (Patrick, 2013). *Front-load* trajectories required significant increases early in the NCLB process, with smaller increases in the following years (Patrick, 2013). Frontline states experienced immeasurable pressures in the beginning of the implementation process in comparison to *back-load* trajectories, which measured performance closer to the 2014 deadline (Patrick, 2013). Once President Bush left office, most back-loaded states set their accountability target for the 2007–2008 school term (Porter et al., 2005).

Confidence Intervals

Confidence intervals allow the statistical manipulation of overall and subgroup scores so that schools can more accurately meet AYP requirements (Patrick, 2013). Without the implementation of confidence intervals, states would fail to produce their outcomes (Porter et al., 2005). For example, if 45% of the students in a specific subgroup proved proficient or above in math, and the year's objective was 50% or more proficient, the school would meet still meet the AYP requirement if the confidence interval had a width of 12 percentage points (+45 or -6) (Patrick, 2013).

Without the use of different trajectories, subgroup requirements, and confidence intervals, many schools across the country that have met AYP requirements would not have been able to do so (Porter et al., 2005). This conclusion offers insight on the usefulness of performance reforms that affect the lives of millions of Americans, especially those individuals who come from low-income and underrepresented communities, who greatly depend on government educational services (Patrick, 2013). **Table 1.** shows detailed data on which states implemented the use of trajectory selection as well as a 75% confidence interval to achieve AYP and performance goals.

Sanctions

NCLB has created a timeline of consequences for those districts that do not achieve AYP. The law requires school districts to use annual tests to demonstrate that their students have reached 100% academic proficiency (Carnoy & Loeb, 2002).

STATE	Trajectory Selection, no.1 = incremental)	75% confidence i nterval, no.1= do not use)
Alabama	0	1
Alaska	0	0
Arizona	0	0
Arkansas	1	0
California	0	0
Colorado	1	1
Connecticut	1	0
Delaware	0	1
Florida	1	1
Georgia	0	1
Hawaii	0	1
Idaho	1	1
Illinois	1	0
Indiana	0	0
Iowa	0	1
Kansas	0	0
Kentucky	0	1
Louisiana	0	1
Maine	0	1
Maryland	1	1
Massachusetts	1	1
Michigan	0	1
Minnesota	1	1
Mississippi	1	1
Missouri	1	0
Montana	1	0
Nebraska	1	0

Table 1. Data Assessment Index (Patrick, 2013). *(Continued on next psge).*

STATE	Trajectory Selection, no.1 = incremental)	75% confidence i nterval, no.1= do not use)
Nevada	0	0
New Hampshire	1	0
New Jersey	1	0
New Mexico	1	1
New York	1	1
North Carolina	1	1
North Dakota	1	1
Ohio	0	1
Oklahoma	0	0
Oregon	0	1
Pennsylvania	0	0
Rhode Island	0	1
South Carolina	1	1
South Dakota	0	0
Tennessee	1	1
Texas	1	1
Utah	1	0
Vermont	1	1
Virginia	1	1
Washington	1	1
West Virginia	0	1
Wisconsin	0	0
Wyoming	0	0

Table 1. Data Assessment Index (Patrick, 2013). *(Continued from previous psge).*

It is expected that school districts will close the academic gap between economically advantaged students and students of different economic, racial, and ethnic backgrounds.

No Child Left Behind requires failing districts to develop a Six-Year Plan (**Table 2.**), (Porter et al., 2005). The first year a district misses AYP, the district is granted a probationary year. The second consecutive year a district misses AYP is described as the "First School Year Improvement" and provides parents with the opportunity to transfer their child to a school in the district that has stronger test scores, at no cost. This sanction is designed to apply market pressure to public schools that are classified as "failing"; either the school will improve student performance and meet performance goals, or it will lose enrollment and subsequently receive decreased operational funding.

During the third year, technical assistance is provided to the schools, and the district must make public school choice and supplemental educational services available to the students. This round of sanctions also has financial implications for the failing school. If it continues to fail to meet performance expectations, it must provide the students remaining in the school district with the option to seek supplemental help through an outside service at a cost to the district.

The fourth consecutive year missing AYP, in addition to the above, the school is identified for corrective action, as well as facing further actions. After the fifth year missing AYP, a plan must be prepared for the restructuring of the school. After the final, sixth year, the school may be reopened as a public charter school, with the replacement of some or all of the teachers.

PROBLEMS

One of the biggest issues in American education is the resistance to improve the education system (Carnoy et al., 2001). Some argue that testing used to "improve" schools and student learning does not promote real academic improvement (Carnoy et al., 2001). Facing such sanctions, teachers "teach the test" rather than subject content (Patrick, 2013). Some argue that NCLB does not focus on the learning environment and reduces the students' opportunities to develop higher-order skills (Stiefel et al., 2007). Others argue that state issued tests will increase the dropout rate in disadvantaged student populations (Muller & Schiller, 2000).

Consecutive years of missing AYP	Sanctions
First Year	• Placed on "watch list." • Required to develop a school improvement plan.
Second Year	• Listed as "needs improvement school." • District must provide students attending the "needs improvement school" the option of attending another school that has met annual yearly progress. District pays transportation costs.
Third Year	• Listed as "needs improvement school." • District must provide students the option of attending another school that has met annual yearly progress. District pays transportation costs. • District must offer "supplemental educational services" to any student who qualifies for free or reduced lunch. Option of supplemental services from an outside provider.
Fourth Year	• Listed as "needs improvement school." • District must provide students attending the "needs improvement school" the option of attending another school that has met annual yearly progress. The district pays transportation costs. • The school district must offer "supplemental educational services" to any student who qualifies for free or reduced lunch. One option for supplemental services must be from an outside provider. • The school must change its staffing or make a "fundamental change" such as restructuring the school.
Fifth Year	• Listed as "needs improvement school." • District must provide students attending the "needs improvement school" the option of attending another school that has met annual yearly progress. The district pays transportation costs. • The school district must offer "supplemental educational services" to any student who qualifies for free or reduced lunch. One option for supplemental services must be from an outside provider. • The school must convert into a charter school, turn management over to a private management company, or be taken over by the state.

Table 2. NCLB Sanctions (Porter et al., 2005).

State accountability and assessment have not always been related. Assessments were mainly used to divide students into "academic tracks" or for diagnostic purposes, to determine whether student achievement matched state curricula (Stiefel et al., 2007). Typically, academic progress was considered the responsibility of the community and the home (U.S. Department of Education, 2006). Two main concepts, "alignment" and "capacity building," underlie the standard-based reforms, which define systems of instruction, assessment, grading, and academic reporting (Chatterji, 2002). "Alignment" refers to the school setting clear standards and aligning curriculum and accountability mechanisms with those standards, before focusing on improving the outcomes. "Capacity building" is intended to improve the capacity of teachers and administrators to deliver better education (Carnoy & Loeb, 2002).

Implementation and Sanctioning Problems

Other problems have been found in the way NCLB policies were developed and implemented. The states were given some control over how they implemented the details of the federal legislation, but the teachers who worked closely with the students and understood their needs were sometimes removed from the process (Porter et al., 2005). This created an environment in which educators saw their job security tied to students' performance on standardized exams (Patrick, 2013). This, in turn, created problems in future teacher recruitment.

Subgroup reporting requires school districts to provide evidence that proficiency goals are being met both in the overall student population as well as in vulnerable subgroups. These groups include racial and ethnic minorities, economically disadvantaged students, those with disabilities, and students that speak a limited amount of English (Patrick, 2013). If a school in any district fails to document that these students are meeting performance goals and making progress towards reaching 100% proficiency, that school will then be labeled as "failing" (Patrick, 2013). It is known that students in these subgroups have historically failed on standardized exams; it is therefore challenging for educators to meet 100% proficiency and performance goals.

NCLB did not define who would measure and report the test scores for underrepresented minority subgroups. States had the freedom to determine the lowest mandatory number of enrolled minority students before the school was required to single out the

Minimum Number of Enrolled Minority Students to Require Subgroup	Number of States Using this Minimum to Determine Need for Subgroup
100	1
60	1
52	1
50	3
45	2
42	1
40	14
34	1
30	13
25	2
20	4
11	1
10	3
5	1
None	2

Table 3. Minimum Number of Underrepresented Students Tested in a School for Subgroup Accountability (Porter et al., 2005).

State	NEAP Test Results	State Test Results	Difference
Arkansas	34%	34%	0%
Arizona	27.9%	63%	-35.1%
California	28%	50.8%	-22.8%
Colorado	38.8%	74%	-35.2%
Delaware	36.1%	52.8%	-16.7%
Florida	36.6%	59%	-22.4%
Georgia	29.5%	68.8%	-39.3%

State	NEAP Test Results	State Test Results	Difference
Hawaii	26.7%	20.2%	6.5%
Idaho	40.4%	68.7%	-28.3%
Illinois	31.6%	54.3%	-22.7%
Indiana	38.2%	72%	-33.8%
Kentucky	26.1%	36%	-9.9%
Louisiana	23.9%	55.2%	-31.3%
Maine	38.8%	29%	9.8%
Maryland	38%	51.7%	-13.7%
Massachusetts	48.8%	39%	9.8%
Michigan	37.7%	62%	-24.3%
Mississippi	19.4%	55%	-35.6%
Missouri	31.1%	15.5%	15.6%
Montana	38.3%	62.4%	-24.1%
Nebraska	36.1%	81.8%	-45.7%
Nevada	26.1%	49%	-22.9%
New Jersey	45.4%	62.4%	-17%
New York	36.1%	55%	-18.9%
North Carolina	39.9%	84%	-44.1%
North Dakota	40.4%	65.3%	-24.9%
Ohio	42.5%	60.1%	-17.6%
Oregon	37%	63.5%	-26.5%
Pennsylvania	41.5%	62.9%	-21.4%
South Carolina	35.9%	23.2%	12.7%
Tennessee	27.7%	87.2%	-59.5%
Texas	40%	61%	-21%
Virginia	39.3%	80%	-40.7%
West Virginia	25.1%	70.6%	-45.5%
Wisconsin	40.3%	73%	-32.7%
Wyoming	42.6%	38%	4.6%

Table 4: 2005 NAEP Test v. 2005 State Test Scores in Eighth Grade Math Proficiency (School Matters: A Service of Standards and Poors, (2006), National Education Data Partnership, 2006 National Conference Education Statistics).

minority student test scores and report them (Porter et al., 2005). A Rural School and Community Trust Report encouraged states to set a high minority enrollment requirement to decrease the number of schools required to separate minority test scores from the scores of the total student body. By setting the number high, some rural schools were able to avoid reporting separate scores for their minority students; thus, teachers were not held accountable for addressing the needs of this population (Carnoy et al., 2001). Table 3. provides data on the number of states that have implemented a minimum number of underrepresented students that were tested in a school for subgroup accountability.

The third, and perhaps the most damaging problem, concerned changes in educational quality. NCLB granted states the freedom to create their own examinations to measure student performance. These exams varied in quality and content. **Table 4.** highlights the differences in test scores between state-developed tests and the National Assessment of Education Progress (NAEP) examination. The spread between the state and national exams is telling: for example, Tennessee experienced a 59.5% difference between the state and national test scores. Similarly, North Carolina, Virginia, and West Virginia all reported more than a 40% difference in student test scores between the state and national examinations. Such differences raise concerns about the reliability of state-developed testing.

CONCLUSION

Despite its intention to improve the quality of education in American public schools, the NCLB Act of 2001 resulted in a number of problems, negative changes, and uncertainty about the future. In addition to doing little to assist poorly performing districts and creating great anxiety through the challenge of reaching adequate yearly progress and performance goals, the use of confidence intervals and trajectory selections have provided little evidence that districts are indeed offering the students most at risk better opportunities to learn. Placing the responsibility of implementing NCLB on the states has proven unsuccessful in bringing the standards of public education to a level equal to the needs of the American people.

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