**A Synthesis of Program Evaluations of the No Child Left Behind Act**

Name

Course

Institution

**INTRODUCTION**

The No Child Left Behind Act of 2001 (NCLB) was presented for debate in 2001. It was passed into law in the year 2002 by the then president of the United States, George W. Bush. The act was a reauthorization of the Elementary and Secondary Education Act (ESEA). It aimed at ensuring that all children, regardless of their background, had access to education and were proficient by the age of 12 (Woods, 2021). The act aimed at bridging the gap in academic achievement especially for disadvantaged low performing groups of students. There are over ten different titles in the act, and all were aimed at enhancing ESEA to ensure that education achievement improved across the board (Congress.Gov, 2002). The main target low performing groups mainly considered were students with learning disabilities, and student from disadvantaged backgrounds such as children and teens who are homeless.

According to the National center for learning disabilities, the NCLB is founded on four main principles aimed at educational reform. The principles are; improved accountability for academic achievements, increased local control and flexibility, increased options for parents, and increased emphasis on teaching methods and qualifications for teachers ("ESEA/NCLB - NCLD", n.d.). Title I of the act focused on the results and was aimed at improving the academic achievement of the disadvantaged. According to Rudalevige (2006), the Title I resulted in nearly $12 billion annually being channeled to schools to support the education of disadvantaged children. In terms of increased local control and flexibility, NCLB gives local and state schools greater flexibility in terms of how they utilize federal funds. NCLB also made it a requirement for parents to receive local and district report cards in every school year, and also made it a requirement for all teachers to be highly qualified in their roles.

For the intended study, 6 different program evaluations of the NCLB will be synthesized to evaluate the effectiveness of the act in achieving its intended purposes. There will be two subthemes of interest in the evaluation. The subthemes are; The effect of NCLB accountability measures on school performance and students’ academic performance, and impact of NCLB on curriculum and education policies

**LITERATURE REVIEW**

**The effect of NCLB accountability measures on school performance and students’ academic performance**

As earlier indicated, there are four main principles that govern the NCLB. One of those principles is improved accountability for academic achievements. The goal of NCLB is to ensure that every child regardless of their disadvantages performs equally well as their peers. Students in grade3 to grade 8 are required to be tested annually with regards to reading and mathematics, and at least once for students in grade 10 through 12. Science testing must also be carried out once in elementary, middle, and high school. The tests must also be standardized to meet state requirements (Staff, 2012). In addition, as of 2013-2014 year, all states were to ensure that their students reached “proficient” level on all state administered tests while individual schools were required to meet yearly state targets in ensuring that their students were proficient (Rebora, 2004). Schools that fail to meet targets are to be sanctioned with students allowed to transfer from such schools.

Several studies have therefore been carried out to evaluate the effect of the accountability measures associated with NCLB on student and school performance. Dee & Jacob (2011) carried out a study to evaluate the effect of NCLB on student achievement. The study showed that the NCLB regulations were pushing for better performance with a significant improvement in mathematics scores. However, no similar improvement was noted in reading scores. Jennings & Lauen, (2016) also carried out a study to measure the effect of NCLB on student performance. However, the study also focused on other measures of student learning such as audit test apart from the state test. The results of the study indicated that the impact of NCLB varied depending on whether the test was a state test or an audit test. Ahn & Vigdor (2014), on the other hand carried out a study to evaluate impact of NCLB accountability sanctions on school performance. The main finding of the study was that the imposing of sanctions led to a positive impact on overall student and school academic performance. However, the impact varied depending on type of sanction or extent of meeting targets by schools.

There are various criticisms of the accountability measures imposed by the NCLB. Kim & Sunderman (2005) indicate that reliance on mean proficiency score and same goal requirements for all subgroups create disadvantages for high-poverty and racially diverse schools. The disadvantage means that the schools continue receiving sanctions instead of more funding and policies to assist them. Critics also indicate that using test-based accountability measures have several negative unintended consequences for the broad cognitive development of children (Dee & Jacob, 2011). For example, there is a shortage in resources for non-tested but important subjects such as arts and humanities due to overfunding of tested subject areas.

**Impact of NCLB on curriculum and education policies**

The NCLB made it mandatory for schools to reach a certain proficiency level as dictated by individual state requirement. As such, this triggered various schools to change their curriculum and policy changes that went with some subjects. One of the requirements of NCLB is that states must ensure schools are safe and drug free. Otherwise, unsafe schools can be labelled as such with students given the chance to transfer. Ringwalt et al. (2011), carried out a study to evaluate whether NCLB legislation had an influence on the provision of evidence-based drug prevention curricula (EBC) among middle schools in the US. The findings were that there was no relationship between the legislation and provision of NCLB. Furthermore, the study showed that schools of certain demographics were more likely to make adequate yearly progress (AYP) as compared to other schools.

A similar study on the impact of NCLB on curriculum and instructions was carried out by Powell et al. (2009) with the main focus being rural schools. The study found that NCLB resulted in principals main focus shifting to raising test scores and meeting AYP. There were also significant changes in instructional time for some subjects, and non-instructional time for other activities.

**DATA**

**The effect of NCLB accountability measures on school performance and students’ academic performance**

The study by Dee&Jacob (2011) utilized data on student test scores from the National Assessment of Educational Progress (NAEP) at the state-level panel. Data utilized was test scores from states that initially had accountability policies before NCLB and those that did not. On the other hand, the study by Jennings & Lauen (2016) utilized longitudinal administrative dataset from the largest district in Texas, the Houston Independent School District (HISD). The dataset comprised of data of 6th graders through to 8th graders that was obtained between 2003 and 2007.For the HISD dataset, majority of respondents were Hispanic (58%), 29% were black, 9.5% white and Asians were 3%. In addition, approximately 80 percent of students in the HISD sample were considered by the state to be economically dis-advantaged, meaning they were eligible for welfare and free or price-reduced lunches.

The study by Ahn & Vigdor (2014) utilized school-level data and student data as obtained from the State of North Carolina from the 2002/03 school year to 2008/09. The data is obtained from the North Carolina Educational Research Data Center (NCERDC), and is a mixture of anonymized data and public records. The final dataset used consisted of about 8000 observation of school-level data and about 1.7 million individual student data on test gains that was obtained by combining AYP results from five school years with test score results from those years and the following years. On the other hand, the study by Kim & Sunderman (2005) utilized data on student achievement data from six states; Arizona, California, Georgia, Illinois, New York, and Virginia. School-level data from Virginia and California was also used for study.

**Impact of NCLB on curriculum and education policies**

Ringwalt et al. (2011) utilized longitudinal data based on a large representative sample of middle schools in the Unites States. The data was collected in spring 2005 and spring 2008. The final sample was restricted to schools that responded to the survey in both 2005 and 2008, and consisted of 1324 schools which comprised of 76.9% of schools that responded in 2005. Sampled schools completed a survey regarding their provision of evidence-based drug prevention curricula (EBC). On the other hand, Powell et al. (2009) utilized data obtained by use of survey from Missouri. For the study, data obtained was from both teachers and principals where by 76 certified elementary school teachers in rural Maine and 101 rural elementary school

principals in Missouri responded to the survey.

**METHODS**

**The effect of NCLB accountability measures on school performance and students’ academic performance**

The research methodology adopted by Dee & Jacob (2011) was comparative interrupted time series (CITS) approach (also referred to as interrupted time series with a non-equivalent

comparison group). Specifically, the researchers compared the previous deviation in achievement trends of a group that was subjected to NCLB (treatment group) with the deviation of a different group that was less if not at all affected by NCLB (comparison group). For the study, the treatment group were states that did not have accountability policies while the comparison group were states that had accountability policies prior to NCLB. A regression model was used to determine the extent of effect of student scores for the different groups by use of a binary variable, Ts, which represented whether state had prior accountability policies or Not. Another variable included in the model was years since NCLB so as to determine effect of NCLB on test scores based on years of implementation of NCLB.

Jennings & Lauen (2016) research methodology also involved use of various regression models. To carry out the analysis, three models were estimated. The first model was a fixed-effects model. For the model, the primary dependent variable was the gap between the state test (TAKS) and audit test (Stanford) scores while the independent variable was whether the student’s current school failed to meet AYP targets the previous year. Controlling was also done with controls included for student fixed effects, student time-varying controls, school time varying controls, Sit, and year, grade, and year- by- grade fixed effects. The second model was a logistics regression model. The dependent variable was the log odds of risk of failing AYP. The independent variables were all in vector form and included; school- level average of state mathematics, audit reading and mathematics test scores along with squared and cubed terms of each, compositional characteristics

(percentage economically disadvantaged and percentage of balcsk, and squared and cubed

terms of each), subgroup-specific average test scores (averages for Hispanic ,black, and economically disadvantaged at the school-level), and year fixed effects. The regression model three is similar to regression 1 with the addition of High risk and low risk variables as determined based on the logistic regression model.

Ahn & Vigdor (2014) applied regression discontinuity in their study. The regression discontinuity analysis was used to provide an estimate of the average treatment effect of

interventions applied at the AYP threshold, for the set of schools that may be close

to that threshold. Impact of exposure to NCLB sanctions was evaluated by checking on the performance of students. The dependent variable was therefore change in test scores between current year, and previous year before sanctions while independent variables were, effective threshold and subgroup gap.

Kim & Sunderman (2005) utilized correlation analysis in their research methodology. They carried out various correlations to analyze relationships between variables. The first correlation was between School Poverty and Race/Ethnicity in Six States between 2003 and 2004. Descriptive statistics in form of mean test scores for various school poverty levels were computed and compared. Crosstabulation tables were also constructed for demographic characteristics and performance level, and also for subgroups and performance rating.

**Impact of NCLB on curriculum and education policies**

Ringwalt et al. (2011) research methodology involved carrying out logistic regression analysis to assess the likelihood of using an EBC in 2008 for a school not making AYP in 2005. The dependent variable was therefore log odd of EBC 2008 and the dependent variable was AYP status in 2005 while demographic characteristics acted as controls. Chi-square test was used to evaluate demographic factors that have an impact on AYP in 2005 and therefore control for such factors in the logistic regression.

Powell et al. (2009) utilized both descriptive statistics and paired samples t test for their research methodology. Frequencies and descriptive statistics were used for demographic data and survey analysis. Paired samples t tests were used to evaluate difference in time allocations for various subject areas during the school day, mostly for before and after NCLB act

**RESULTS**

**The effect of NCLB accountability measures on school performance and students’ academic performance**

The results of the study by Dee & Jacob (2011) were that there was significant improvement in math scores for fourth graders after NCLB act came into place. Similar results were observed for 8th graders where there was improvement in mathematics achievement especially among traditionally low achieving groups and low percentiles. However, there was no evidence of an increase in reading scores after NCLB. Jennings & Lauen, (2016) also evaluated the impact of NCLB on student learning and performance. The results of the study were that accountability pressure resulted in an overall increase in state mathematics scores. However, there were lower audit math and reading scores. In addition, black students from schools facing high accountability measures showed no improvement in state test scores.

Ahn & Vigdor (2014) analyzed the impact of sanctions on school performance. Schools subjected to initial sanctions of NCLB resulted in improved student performance especially among students that were at or below proficiency. No change was observed for schools facing intermediate sanctions. However, there was improved performance for schools that faced ultimate sanction of restructuring where new management was placed in such schools. In the study by Kim & Sunderman (2005), results showed that NCLB criteria for accountability places high poverty schools and racially diverse schools at a disadvantage by using mean proficiency score measure for assessments. Results show that high poverty schools have shown improved performance but are still considered as failing AYP and thereby receive unwarranted sanctions. The disadvantage on racial schools is the need to meet multiple targets, which is not a requirement for other schools.

**Impact of NCLB on curriculum and education policies**

The results of the study by Ringwalt et al. (2011) showed that there was no significant relationship between status in AYP as at 2005 and provision of EBC as of 2008. Results also showed that making AYP is dependent on the demographics of the school. Schools that are small and rural, and those that serve a majority of white students are more likely to meet AYP as compared to other schools. On the other hand, the results of the study by Powell et al. (2009) showed that there were significant changes in instructional time for both K-3 and grades 4-6 in reading subject with the effect size being medium. However, no similar changes were noted for other subjects such as science and chemistry. There was also significant reduction in non-instruction time such as recess although the effect size was extremely small. In addition, results also showed that principles were concerned with loosing on aspects such as being instructional leaders, and being autonomous in their operations. Principals vision for the future was therefore more guided or concerted with achieving AYP and raising student test scores

**CONCLUSION**

Based on the various evaluations carried out on the NCLB act, the results show that for state test scores, there was a significant increase in mathematics scores as a result of the act. However, no study noted a significant increase in state test scores for reading. The increased mathematics scores cannot however confirm that the NCLB resulted in increased actual proficiency in mathematics. The study by Jennings & Lauen, (2016) showed that after NCLB enactment, audit scores (scores in the Stanford exam) decreased for both mathematics and readings. The results of the study therefore show that the increased mathematics scores may not be due to enhanced proficiency but rather to increased student preparation for the state exams which instructors can predict. There is therefore insufficient evidence that the NCLB accountability has resulted in improved proficiency in student learning.

In terms of school performance, the evaluations show that initial and ultimate sanctions on school lead to better student and school performance. However, intermediate sanctions have no impact on performance. Additionally, the results show that the accountability measures prove detrimental to the performance of some schools. For example, the current NCLB requires that all schools reach a certain proficiency level. However, NCLB does not consider special school demographics such as high-poverty schools and multiracial schools that are negatively impacted by the similar accountability metrics across board. Such demographics means that such schools continue being sanctioned and do not receive necessary funding to keep improvement in proficiency in such schools.

In terms of curriculum and instructions, results show that curriculum and instructions were shifted to focus on AYP and test scores. Principals shifted from traditional teaching methods to focusing on ensuring that test scores improved and AYPs were met. Instruction time also increased especially for reading. This increase is consistent with the observed results as reading scores proved most difficult to improve under NCLB, with no significant improvement noted. However, there was lack of changes in curriculum as fully anticipated for in NCLB. For example, one anticipation was for the drug free schooling with introduction of EBC curriculum. However, results show that this is not included as a metric for improving proficiency by various schools. Schools therefore do not fully meet curriculum requirements as set out by NCLB.

On overall, we can conclude that NCLB has not been very effective in achieving its intended mandate. Accountability measures need revising to make special consideration for different demographics and also increase on other metrics to ensure wholesome cognitive learning for students. Current measures are pushing instructors to focus on just test scores and AYP, but not overall cognitive learning of students. It is therefore recommended that there be a reauthorization of the act to make it more productive and ensure wholesome cognitive learning of students.

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**APPENDIX**

**Table1 : Summary of research Methodologies applied in various studies.**

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|  | Dee & Jacob (2011) | Jennings & Lauen (2016) | Ahn & Vigdor (2014) | Kim & Sunderman (2005) | Ringwalt et al. (2011) | Powell et al. (2009) |
| comparative interrupted time series (CITS) | √ |  |  |  |  |  |
| Logistic Regression Analysis | √ | √ |  |  | √ |  |
| Fixed Effect regression |  | √ |  |  |  |  |
| Descriptive Statistics |  |  |  | √ |  | √ |
| Regression Discontinuity |  |  | √ |  |  |  |
| Correlational Analysis |  |  |  | √ |  |  |
| Chi square test |  |  |  |  | √ |  |
| paired t test |  |  |  |  |  | √ |