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September 9th, 2023

U.S. Standardized Testing in the 21st Century:

Lessons Learned

Introduction

Education is key to progress. Education prepares the next generations with the tools needed to succeed in society, thus contributing to the country as a whole. The United States (U.S.) Department of Education strives "to promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access" to education. (U.S. Department of Education)

Starting with the enactment of the Elementary and Secondary Education Act (ESEA) of 1965, the U.S. government has continued to amend their education policies throughout the 21st century. There are 3 notable pieces of legislation to analyze: No Child Left Behind (NCLB), Every Student Succeeds Act, and More Teaching Less Testing Act.

The first major amendment to ESEA in the 21st century, NCLB, passed in 2002. It was a Republican created act and passed bipartisan. (Congress.gov) The act amended ESEA by establishing a system of high stakes standardized testing and mandating that every state create and meet progress standards to increase proficiency in language arts, mathematics, and science.

The next amendment to ESEA, the Every Student Succeeds Act (ESSA), was passed in 2015, and was a democratic act that passed bipartisan (Congress.gov) as a direct response to NCLB. The act amended ESEA by allowing states to establish its own proprietary systems in regards to standardized tests, easing federal control in the U.S. education system.

A proposed amendment to ESEA, More Teaching Less Acting Act, was introduced to Congress in 2023, proposing to reduce the frequency of mandated standardized testing.

Through the analysis of these federal policies, the findings help guide policymakers in the right direction, to learn from past mistakes and create legislation that will truly move the public education sector forwards. As of July 2023, ESSA has expired and still has not been renewed by Congress, and thus, no longer applies to the U.S. public education system. This is an important opportunity to learn and apply the lessons learned from past legislation and take another step, moving towards a better education system. It is clear that 21st century federal education policy emphasizes using mandated high stakes testing as a tool for achievement. The effects that these policies can have on the K-12 public education system need to be analyzed to drive positive change.

Method:

This literature review focuses on the effects of NCLB, ESSA, and other legislation on standardized testing in the public K-12 education system. The databases PubMed and J-STOR were used, searching with the key words "No Child Left Behind", "Every Student Succeeds Act", "No child left behind + standardized testing", "No child left behind + Impact", "No child left behind + education", "Every Student Succeeds Act + Impact", and "Every Student Succeeds Act + education" to find relevant empirical and scholarly articles. Google Scholar was used to cross-check the contents of the searches.

Database searches occurred in June 2023. Grey literature and non-English articles were excluded.

No Child Left Behind

No Child Left Behind was the first major effort to overhaul the public education system in the 21st century. It was extremely ambitious, hoping to federalize American public education into a streamlined and standardized system across all 50 states, using mandated standardized testing as a metric of success, thus attempting to close equity gaps across the nation. The act mandated schools to create standards that lined up with national standards, measuring progress in achieving these standards in

students using high stakes standardized tests, and after analyzing the test results, punitive actions would be enacted against schools that did not make enough progress, and extra funding be given to schools that achieved the metrics of progress. (Chapman, 8) The U.S. federal government had attempted to use the "carrot and the stick" method to force schools to improve their education. This act had seismic effects on the U.S. public education system, but not in its intended areas (Shin, 68). Instead of improving the quality of U.S. public education across all 50 states, it simply caused standardized testing to be the focus of education instead of, ironically, an education (Black, 1326) NCLB did in fact leave behind students, teachers, and other school staff by failing to resolve the equity issues in the American public school system that lawmakers claimed it would (Smyth, 135).

Students should be at the forefront of education, and naturally, NCLB affected them the most.

Drastic changes in curriculum, mental health, and equity have all been studied by researchers in an effort to analyze the effects this single act had on the K-12 public education system (Smyth, 133) (Heissel, 184)

As a result of this act, the quality of education that students received has decreased, focusing on two important areas: teaching for the test, and narrowing of curriculum (Smyth, 134). Teaching for the test is a teaching method that became far more widespread after the passing of NCLB. The method of teaching involves studying for the exact contents of the test, which narrows learning from a wide variety of ways to learning new content in the format/contents of the test. A great example is "instead of reading books, students in many classrooms read isolated paragraphs and practice answering multiple-choice questions about them." (Russel, 26) Even more drastically, entire subjects have been reduced as a result of preparing students for the test and only the test. This is a result of schools not having enough time and funding to juggle test preparation and subjects outside the scope of yearly standardized tests. Logically, the easiest option for these schools is to focus on test preparation to avoid the punitive measures of NCLB. (Chapman, 13) Most notoriously, the music and art departments have faced major cuts as they are untested fields in the standardized testing regimen under NCLB (Gerrity, 91). For example, 43% of music

programs in Ohio alone have been reduced in some capacity following the result of NCLB. (Gerrity, 92) Narrowing childrens' options in school is not improving the American public education system.

Supporters of NCLB argue that the passage of the act created an environment that helped academic achievement increase. (Wurman, 15) However, studies used to back up these claims were often conducted before the passage of NCLB, or using other countries as an example instead (Wurman, 14). For example, results of a 1990s high stakes exit exam in Canada are not appropriately comparable to a yearly high stakes exam in the U.S.. In policymaking, nuance is very important and there are many differences between the U.S. public education system and other education systems internationally.

Students' education is not the only factor that NCLB nullifies, rather than nurtures. As a direct result of high stakes testing, cortisol levels in students have sharp changes on an average of 18% during testing weeks, in anticipation for these high stakes tests. (Heissel, 184) Sharp increases or decreases in cortisol indicate high amounts of stress due to the body being biologically overwhelmed with the stress hormone, causing performance on high stakes standardized tests to decrease. NCLB fails to outline any preventative measures to help students succeed, meaning states have discretion on whether this issue should be addressed or not.

No child left behind, with its grandiose goal of standardizing education, fails to realize a key factor: education cannot be standardized. By forcing a 98% success rate in standardized tests under the threat of punitive action, NCLB provides a 2% exception to the endless exceptions that exist in real life, which is not enough. Many demographics have ironically been left behind as a direct result of this act. For example, public special needs schools are left behind as a result of a cycle of punitive measures.

Lawmakers held special needs schools to the same standards as other public schools (Smyth, 135). As special needs schools require specialized instruction to meet the needs of their student population, there is simply not enough funding or resources for students to receive the specialized instruction they need, thus these schools are being set up for failure under the state standards (Smyth, 135). One way lawmakers could have rectified the cycle was extra funding. Lawmakers failed to outline any measure to increase

funding, special needs schools were poorly funded, and were labeled as failing under NCLB, facing punitive action.

Another concern lawmakers failed to acknowledge English language learners in the American public system, who comprised 9% of students during 2002-2003. (National Center for Education Statistics, 1) Language takes time to learn regardless of the amount of the support received, and annual testing for English language proficiency under NCLB does not give English language learners the time to learn the language. Many schools are already underfunded, causing a lack of support for language acquisition, exacerbating the cycle of setting students up for failure then punishing the school, indirectly punishing students. NCLB fails to create a legitimate contingency for these students. The 5% exception NCLB grants to schools is not enough (Black, 1327). NCLB attempted to create a universal system in a world that is not universal.

NCLB also failed to create contingencies for low income schools by allowing schools to exploit loopholes in the act. For example, if a state had schools set as failing under the current standards, the state could simply lower its standards and claim that all the students have met the standard in order to appease the act. (Black, 1326) This reaction defeats the point of NCLB's sanctions, which was to force states to support low income schools to close the equity gap, yet in practice states leverage the system in order to spare the effort of actually changing. An act of legislation with goals but without a comprehensive plan to achieve these goals is simply not feasible. NCLB has not supported low-income students that it intended to.

NCLB was an amendment to ESEA that caused seismic shifts in standardized testing, but failed to create the positive results as expected. Political opinion of the act was at an all time low (Black 1332). Once the act expired in 2007, lawmakers understood that it needed to be replaced, rather than extended.

Every Student Succeeds Act

The Every Student Succeeds Act (ESSA) was passed through Congress as a direct response to the criticism that NCLB received. After NCLB received widespread criticism, instead of renewing the act,

Congress instead replaced NCLB with ESSA in an effort to finally succeed in the original goals of the ESEA. Lawmakers aimed to reverse core aspects of NCLB, allowing states to have complete jurisdiction over state standards and testing procedures, as long as the states used yearly standardized testing. Under this act, states were allowed to create their standards and create standardized tests without meaningful federal oversight. The arbitrary phrasing of "challenging state academic standards" allows for states to decide standards without ensuring actual state standards based on evidence-based pedagogy. (Black, 1333) In fact, ESSA enforces state jurisdiction over state standards, as the Department of Education is not allowed to request changes be made to state standards.

Additionally, ESSA removes a vast majority of the punitive aspects of NCLB. Only schools that are in the 5th percentile or below or schools that have a graduation rate below ½ are forced to create improvement plans based on an investigation of root causes of the graduation rate or percentile, focusing on inequity. (Black, 1335) While NCLB forced all schools to improve under the threat of punitive intervention, ESSA swung in the opposite extreme, holding almost no schools accountable for their education or standardized tests results. If there is no enforcement to ESSA's mandates of challenging standards, students are not guaranteed a high quality education. ESSA effectively leaves the quality of education in the hands of states, without oversight from the federal DOE.

Some states have used the flexibility of ESSA well, such as the Florida public school system. Under ESSA, Florida was able to establish a triennial testing system that took less class time to prepare for and delivered more honest results, allowing standardized testing to be used as a diagnostic tool, instead of as a metric for funding like under NCLB. (Frey, 1) However, a system that does not support all states in improving standardized testing practices does not improve the K-12 public education system as a whole. States have no incentive or obligation to correct the problems that were created by NCLB, such as teaching for the test or narrowing of curriculum, or the testing anxiety that arose from the mandates of high stakes testing, nor do they even have an incentive to improve state standards or standardized testing practices, as ESSA does not provide any increase in school funding, nor any other form of incentive for schools to reform their standardized testing policies (Black, 1354).

Not only is the quality of education compromised under the passage of ESSA, there is no effort to increase equality or equity written into ESSA. NCLB attempted to create equality by forcing every student to pass, yet this method did not create meaningful improvement for students who are placed at risk for negative educational outcomes, such as low-income students. The same patterns in state standards also apply to equality. ESSA allows states to have complete control over the management of equality, without any sort of encouragement or punitive measures to ensure that states will put in the effort to close equality gaps in the U.S. public education system, save for the worst performing schools. States have no incentive to distribute federal funding equitably. States have no encouragement to close equality gaps in the US public education system. Again, allowing states to act as they wish without guidelines or contingencies will not create overall meaningful improvement across all 50 states. Students who happen to live in disadvantaged school districts will not see meaningful progress to improve their education under ESSA.

ESSA fails to solve the issues that arose with the passing of NCLB, and long term can even represent a step back instead of improving the education of students in the K-12 public education system. As Congress has no intention of reauthorizing ESSA, new legislation needs to be created to once again address public education.

Proposed Legislation

ESSA has expired and has not been reauthorized through Congress yet. This grants legislators an opportunity to create new legislation without having to fight to repeal the current status quo, as there is no status quo. During March 2023, legislators introduced a new bill proposing to once again amend the ESEA: HR-1741, also titled as the More Teaching Less Testing Act (MTLT), proposes to:

- Regulate testing to:
 - 1 form of testing (whether that be grade wide testing, defined as testing an entire grade of students, or matrix sampling, defined as testing a representative sample of a grade) to occur once per year for grades 3-8.

- Grades 9-12 regulations are up to the state to decide how frequently standardized testing will be conducted.
- Encourage community input when deciding how to administer standardized testing.
- Establish a task force of 5-10 individuals who will create a report regarding standardized testing practices and quality teaching.
- Establish funding of 66 billion U.S. dollars (USD) per year to transition towards these regulations.

While these policies are well intentioned, upon further analysis, MTLT presents many issues. The wording of decreasing the frequency of standardized tests provides a loophole. As MTLT only allows for one test regardless of type per year, states could pile all of the subject tests into one massive standardized test, which has not proven to be beneficial. The bill fails to outline guidelines for constructing standardized tests, and states are free to construct tests in the parameters of the regulations, regardless of whether the construction of the tests is based on empirical research. Another issue with forcing a decrease of standardized testing is that if students are tested less frequently, the tests they are given could have more weight attached to them. Some states have provided feasible alternatives. For example, Florida increased its frequency of testing, creating multiple smaller tests. The intended results are using standardized tests as a diagnostic tool alongside grades as multiple times of testing a year allows for another method of analyzing student performance alongside grades (Frey, 2). Under this act, Florida's method of testing would become illegal. The bill provides no proof that decreasing standardized testing will actually create a better result for students.

Additionally, MTLT does not create a streamlined system across the 50 states, which was a lauded aspect of NCLB that was undone during ESSA (Black, 1324). Continuity between states is very important, as creating 50 different education systems is not conducive to higher education, and often creates learning gaps as different states teach different content (Shin, 60).

Continuing attempts to reform standardized testing policy, MTLT proposes that standardized administration procedures should have community input. While community input is valuable, the wording in the bill fails to convert this idea into feasible action. A "90-day public comment period inviting input"

does not outline what the procedure for such input should be, nor does it clarify enforcement. A simple fix would be to define what counts as community input, and outline guidelines for community input.

In an effort to conduct more research, a national task force is proposed for the express purpose of analyzing standardized testing practices. This is laudable, and could greatly benefit future policymakers, as there are few statistics and empirical studies conducted on these policies, especially ESSA.

MTLT is a valuable attempt at creating a new education policy in place of ESSA now that it has expired. However, this bill does not do enough to ensure improvements in the public K-12 education system. While supporters of the bill can argue that a step in the right direction is still valuable, there is no guarantee that progress can be ensured in a singular step. ESSA was a step in the right direction by undoing NCLB, but still did not make any progress in U.S. standardized testing policy.

Discussion/Areas of Improvement

This literature review mainly focuses on standardized testing and education quality; however there are many issues that were outside the scope of this paper including but not limited to:

- Early education
- Finance in education
- Higher education

Additionally, there is a need to acquire numerical data about standardized testing directly from the students these policies are affecting. The scope of research must also be expanded. Many studies noted a failure to use a representative sample, or use samples from different school districts or states (Eichelberger, 18). Scholars and policymakers alike cannot analyze the effects of educational legislation if the research has not been conducted. Right now, there simply has not been enough analysis of the impacts or lack thereof regarding ESSA, especially due to partisanship in academia. While children have not fully developed, sometimes the simplest solution is best: receiving information from students.

Future

New U.S. public education reform at the federal level is sorely needed in America. ESSA has expired, opening an opportunity to progress American public K-12 education. The analysis of previous bills aids in outlining what works and what does not in policy, and creates takeaways invaluable to future policymaking. Policymakers need to use the flaws of NCLB, ESSA, and MTLT to create better legislation.

There are many ideas that should be applied to future legislation. First, more research must be conducted on standardized testing for students enrolled in the public education system. Lawmakers cannot create truly beneficial policies if no proper research is done on a large scale. Another factor that must be considered is that the feasibility of legislation must be closely monitored, as this is the direct cause of NCLB's system to fail. Funding must be increased, and policymakers need to create feasible plans to support the transition to regulations, instead of just outlining regulations and punishing states for not following them. Second, legislators need to close loopholes and stop arbitrary wording. While creating clear definitions is arduous, it is worth it considering that arbitrary goals and loopholes hurt both NCLB and ESSA. Next, policymakers need to carefully create contingencies for special scenarios based on empirical data instead of universal policies. Finally, politicians need to come together to create legislation that drives action. NCLB was a Republican bill, and has not created the change it intended. ESSA and MTLT are Democratic, and neither have managed to forward the progress they seek to spearhead. With bipartisan effort, there will be potential for a transformative bill to pass and hopefully be able to create the change necessary to support effective education reform.

Conclusion

Education in the 21st century is dominated by division. When NCLB failed due to punitive measures and lack of contingencies, ESSA went in the opposite extreme, failing to establish guidelines for states to follow. The proposed amendment is similar to ESSA in not doing enough to progress education policy. The effects of these policies, on a surface level, have not created any progress, and upon closer inspection, has seismically shifted U.S. public education to misuse standardized testing as a tool to decide

funding, and this dependence on standardized tests has not been rectified at a federal level. As ESSA has expired and MTLT remains in committee, policymakers regardless of political affiliation have an opportunity to create an education policy that can support change for K-12 public education. By bringing education back into the forefront of American politics, policymakers will have an opportunity to truly support children's education, and thus, the country's future.

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