



Prescher, Thomas; Werle, Sebastian

# Comprehensive and sustainable? U.S. education reform from a neo-institutional perspective

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# TERTIUM COMPARATIONIS

Journal für International und Interkulturell Vergleichende Erziehungswissenschaft

Knut Schwippert (Ed.)

Bernd Wagner

Sachlernprozesse von Kindern in interkulturellen Begegnungssituationen

Manfred Kaluza

Are you experienced?

Neuere empirische Forschung zum Auslandsstudium

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Thomas Prescher und Sebastian Werle

Comprehensive and sustainable?

U.S. education reform from a neo-institutional perspective

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# Comprehensive and sustainable? U.S. education reform from a neo-institutional perspective

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#### Abstract

This article evaluates the major U.S. education reform initiatives of President Obama ('Race to the Top'; RTTT) and former President Bush ('No Child Left Behind'; NCLB). By drawing on the theory of neo-institutionalism, we develop a matrix to evaluate these two education reform initiatives as well as the resistance they faced on the local and state level. By categorizing RTTT and NCLB, we argue that both reform initiatives are based in large part on economical thinking leaving behind disadvantaged students and schools, and, are implemented in a strict top-down manner, excluding local level actors (e.g. teachers' unions) from reform implementation processes. Thus, RTTT and NCLB are neglecting local norms and interests that are necessary for building a legitimate and sustainable foundation for education reform.

# 1. The problem Obama defines

The United States has lost its status as a global leader in education. That is what Barack Obama was trying to clarify when he met with state governors at the White House on February 22, 2010. Referring to the 2007 *Trends in International Mathematics and Science Study* (TIMSS), the President pointed out that "American eighth graders only rank 9th in the world in math and 11th in science" (Baker & Dillon, 2010). Furthermore, Education Secretary Arne Duncan called the 2009 *Programme for International Student Assessment* (PISA) results "an absolute wake-up call for America", a "brutal truth" and "extraordinarily challenging" (Armario, 2010; OECD, 2009a). Out of 34 countries, the U.S. ranked 14th in reading, 17th in science and 25th in math (OECD, 2009a).

Two years later, the international ranking of the U.S. has improved in a modest way based on international studies such as TIMSS.<sup>2</sup> However, the unsatisfactory

academic performance does not only exist in terms of an *international* comparison; ever since the 2002 implementation of *No Child Left Behind* (NCLB)<sup>3</sup> under George W. Bush, a *national* achievement gap has also become widely recognized by political actors.

Referring to *National Assessment of Educational Progress* (NAEP), the Obama administration is problematizing the achievement gap between Black and White students (as well as between White and Hispanics/American Indian). In 2011, on a scale of 500 points, White fourth (and eighth) graders scored 25 points higher than their Black peers in reading and 25 (31) points higher in math (NCES, 2011a, b).<sup>4</sup> Although the achievement gap between Black and White students has been shrinking compared to NAEP results of the 1990s, the Black and White performance gap of fourth graders in math stayed roughly the same in the last eight years.<sup>5</sup> And, interestingly, some categories have even shown slower progress since the implementation of NCLB compared to the year before the Bush-era reform.<sup>6</sup>

To address these two achievement gaps, the Obama and the Bush administration pursued a rather similar way of reform. NCLB – the Bush reform initiative – and RTTT – the Obama education reform – are both relying on rather quantitative measuring methods (e.g. standardized tests for students and consequently teachers). There is a market based approach to these initiatives that rewards the better performing and (financially) penalizes low-performing students, teachers, schools and states based on these quantitative measures, and, in general drawing on a top-down approach requiring states to push through reform measures regardless of resistance on the local level (i.e. schools, teacher and political associations of the respective state).

We identify two main problems with the recent education reform initiatives (NCLB and RTTT) initiated by federal political actors: Firstly, in running a proverbial 'Race to the Top', the U.S. risks losing a large cross-section of 'low-performing' students that are disadvantaged in terms of socio-economic factors<sup>7</sup>. An indicator is the share of resilient students<sup>8</sup> among disadvantaged students in the U.S. that is below international average (only 29 % compared to PISA average of 31 %). To put it plainly, only 29 % of U.S. disadvantaged children<sup>9</sup> perform in the top quarter based on the results of the 2009 PISA study (OECD, 2009b). Thus, the U.S. only ranks 27th out of 66 countries in this category.

A second problem is related to the way the education reforms are conducted in the U.S., namely in a strict top-down manner. This way of reforms provoked resistance at the local level in general and specifically from teachers' unions. For example, the extensive political deadlock in negotiations between state officials and the teachers' unions of New York City – the largest school district in the U.S. – over the teacher evaluation system or the 2012 teachers' unions strike in

Chicago – the third largest school district of the U.S. – where teachers refused to implement a teacher evaluation system that is based on student tests scores (as demanded by the Obama administration) and demanded more social programs for disadvantaged students are only two examples showing resistance of the local level against the implementation of the top-down test-based education reform (McCune, 2012). Also, the 2009 and 2011 MetLife teacher surveys show a downside of the implemented top-down and strictly test-based reform initiatives: Nearly 70 % (of surveyed teachers) said that their voices were not heard in education debates (regarding the implementation of test regimes for students and teachers in the process; MetLife survey 2009/2011, see Markow & Pieters, 2012).

By unfolding these two main problems, we are expressing doubts that the recent education reform initiatives are built on a solid foundation. It should be taken into account that not only top-down measures are required (i.e. the accountability system or a reward system for high-performing students, teachers, schools and states) but also bottom-up initiatives (e.g. suggestions of teachers' unions in education reform debates at the state level) that would secure a more legitimate and sustainable education reform. The purpose of this article is to develop recommendations directed at the current reauthorization process in which congressional legislators and the public as a whole are debating on how to reconfigure the former education reform policy in an adequate manner.

Thus, it is reasonable to evaluate the U.S. reform agendas of recent years against the high aspiration the Obama administration is implying with its ambitious reform initiative 'Race to the Top' (of best-performing countries in the world in the field of education), and to unfold our argument based on this analysis.

To use a theoretical framework for the evaluation of the latest reform initiatives and the explanation of the resistance against them, we choose the neo-institutional theory. This theory focuses on the functionality of institutions (e.g. schools, school districts, teachers' unions, etc.) acting in a distinct political and societal context requiring and restraining a certain behavior of the institution (Schaefers, 2002). We will explain how the adaption processes of institutions such as schools at the local level work and why the current reform initiatives might leave behind a significant share of so-called low-performing students, teachers and schools and may therefore be not a sustainable education reform.

#### 1.2 Structure

Our line of argument is comprised of five steps: First, we provide a brief overview of U.S. governance structures of the education system to lay the groundwork for the understanding of the reform initiatives conducted by the Bush as well as the Obama

administration (section 2). We will then describe major reform initiatives of U.S. school reform from NCLB to RTTT and point out the resistance they faced by public groups, especially the teachers' unions (section 3). Third, we will introduce our research question and unfold the theory of neo-institutionalism as a systematic framework to explain why these two major problems occurred (section 4). Fourth, using the theory of neo-institutionalism, we analyze how educational and political actors could implement reform measures of the U.S. education system that could broaden the ongoing top-down initiatives mainly relying on market based approaches and less on comprehensive reforms meaning also supporting low-performing students and schools (section 5). Finally, we conclude by recommending how (prospective) education reforms could be based on a broader foundation by including schools, teachers' unions and other local actors in the implementation process (section 6).

## 2. Governance structure of the U.S. education system

By law, public education in the United States is primarily a state and local government responsibility. Derived from the Tenth Amendment<sup>11</sup> of the U.S. Constitution, states were given the authority to shape their education policy formally independent of the federal government that, for a long time (from the 1960s through the 1990s), only provided support for disadvantaged students, conducted research or enforced civil rights laws in schools (the term 'disadvantaged students' recurs to students with disabilities, students from low-income families and/or English learners). In addition, the share of funding of education policy reflects the domain of state authority in education policy: In 2009, state and local government sources provided over 90 % of funding of public elementary and secondary schools, whereas the federal government only spent around 9 % of the overall \$591 billion (U.S. Census Bureau, 2009).

Before the implementation of NCLB and RTTT, states, represented by the respective State Education Agencies (SEAs) had more authority to set policies for the operation of schools such as graduation requirements, teacher certification and evaluation rules. Furthermore, most local school districts administered by Local Education Agencies (LEAs) operated schools with more flexibility in terms of authority over school curriculum and instruction.

Yet, after the implementation of NCLB and RTTT the interaction between the local, state and federal level has shaped, on the one hand due to tense budgetary situations of the states and on the other hand because of pressure from business groups demanding more accountability systems to raise the educational performance of the prospective workforce. Against this background the federal govern-

ment gradually acquired more authority by the implementation of NCLB. As a result, the federal government now has the ability to influence education policy on the local level, particularly in schools that receive Title I<sup>12</sup> spending by requiring schools to participate in annual testing or by being sanctioned if they fail to make *Adequate Yearly Progress* (AYP).<sup>13</sup>

There are, however, significant problems occurring as a result of the increased role of the federal government in U.S. education reform, as mentioned in the introductory section. Some observers go even further and identify a 'rebellion' of many states balking against the NCLB provision that requires states to push their schools to the unrealistic goals of having 100 % of their student at the 'proficient level' in reading and math until 2013–2014 (Abramson, 2011). In the absence of a reauthorization in Congress, the Obama administration has therefore granted waivers of this NCLB provision to 34 states and the District of Columbia (Rich, 2013).

This has so been the modus operandi of the U.S. education system that we will explain in more detail in the following section. We will show the resistance recent reform initiatives faced and the support they got from political and societal actors to unfold our argument and recommendations for more adequate reform measures.

### 3.1 Former approaches to fix the education system: From ESEA to NCLB

Early federal education reform initiatives can be traced back to President Johnson's 1965 *Elementary and Secondary Education Act* (ESEA), which initially allocated \$1 billion a year to support schools with high numbers of low-income students (Bunch, 2011, p. 324). Due to the broad distribution of federal money to electoral districts around the country, this legislation received tremendous support from Congress while the law established only low levels of accountability. Furthermore, it was supported by the two most powerful interest groups in education politics, the teachers' unions *National Education Association* (NEA) and the *American Federation of Teachers* (AFT, 2010). We mention these political and societal actors and their support for ESEA because in the following decades and especially after the 2002 reauthorization through NCLB the attitude of the NEA and AFT changed significantly.

In the 1990s, an alliance of reform-minded governors, businesses and civil rights groups emerged that pushed for nationally "mandated standards, tests, and accountability measures" and a federal role in implementing them (DeBray-Pelot & McGuinn, 2009, p. 23). Business groups were criticizing many public schools for not providing many graduates with necessary skills for even low paid jobs. They hoped that a strict accountability system would allow for better education of American workers and make them more effective. Reform-minded governors, ultimately, supported a larger federal role because they sought to "borrow strength"

by leveraging federal authority to advance their own school reform agendas" (ibid.).

Whereas the original ESEA had test measures that were neither strict, nor targeted at all of the nation's schools, the 1994 reauthorization of ESEA under Clinton (supported by an alliance of governors, businesses and civil rights groups) pressured the states to conduct three evaluation tests from third to twelfth grade. Moreover, states had to institute "content and performance standards in reading and math by the 1997-98 school year" (Cohen, 2002, p. 79). In spite of enhanced engagement to improve quality of education, the 1998 NAEP demonstrated that fourth, eighth and twelfth graders virtually had made no progress in reading during the previous six years. On the contrary, the average reading scores of the nation's 12th graders dropped by one point (Donahue et al., 1998). During the same period of time, major achievement gaps occurred: "At all three grades in 1998, the average reading score for White students was higher than that for Black, Hispanic, and American Indian students" (Donahue, Voelkl, Campbell & Mazzeo, 1998, p. iii).

Due to this increasing achievement gap, even larger than in the early 1970s, former President George W. Bush pushed Congress to amend the education law to what has become known as the *No Child left Behind Act* (Condron, 2009, p. 683; Harris & Herrington, 2006). The reauthorization of ESEA that followed was possible because the Republican opposition in Congress diminished in the late 1990s – due to public demands for an "active federal leadership in school reform and a new emphasis on standards, testing, and accountability" (DeBray-Pelot & McGuinn, 2009, p. 24).

The following subsections show the single reform items of NCLB and the resistance against them, coming from teachers' unions and other societal actors.

## 3.1.1 First reform item of NCLB: Content and performance standards

With the aim of narrowing the national achievement gap on the basis of an accountability system, NCLB requires states that receive federal funds to develop strict content and performance standards in reading and math to test their students' proficiency based on these standards (Schoen & Fusarelli, 2008, p. 191). In exchange for federal money, "local educators agree to produce certain outcomes. If they do not produce the promised outcomes, federal funding is cut off" (Loveless, 2006, p. 2). This regulation leads to a more influential federal role in the education reform process, because 90 % of America's school districts receive funding for more than 40 federal educational and support services and must therefore adhere to federal provisions.

The federal coercion of local testing in this regard has evoked criticism and lawsuits filed by some states and teachers' unions against the increased federal influence on state and local education policy requiring states to establish test systems without fully funding the costs of the projects. For example, school districts in Michigan, Texas and Vermont joined with the NEA in their 2005 lawsuit accusing the Federal Department of Education of violating the United States Constitution stipulating that "no state or district can be forced to spend its money on expenses the federal government has not covered" (Dillon, 2008, p. 1). Regarding the accountability system that the federal government required from the states, the plain-tiffs argued that the costs for the implementation of such accountability systems would exceed the funding they were getting from Washington.

The appeals court sided with the districts and the NEA against the Federal Department of Education and argued in its ruling that "NCLB fails to provide clear notice as to who bears the additional costs of compliance [i.e. for implementing test and accountability systems in the states]. It also noted that because the states had been required to spend state and local money to meet requirements of the federal law, their "injury has already occurred and is ongoing" (Dillon, 2008, p. 1).

A further point of resistance against this reform item of NCLB is that the focus on the subjects math and English does not correspond to the norms of teachers and community members of what subject has to be prioritized. In a 2011 survey<sup>16</sup> of 1,001 public school teachers two thirds said that "disciplines such as art, science, and social studies are getting crowded out of the school day" (Robelen, 2011, p. 1). This is another example for a disconnection between local and federal requirements of a school reform in terms of prioritizing the subjects in the center of the accountability system.

## 3.1.2 Second reform item of NCLB: Adequate yearly progress

In order to narrow the national achievement gap on the basis of a strict accountability system, NCLB stipulates that schools are accountable for the achievement of their students. Additionally they have to report annually if AYP is made. Here, the goal is to have all student subgroups proficient in reading and math by 2014. If schools cannot present AYP, they will face substantial sanctions supervised by the federal government (Dillon & Rotherham, 2007; Zvoch & Stevens, 2008, p. 570). Furthermore, the federal law claims a staggered set of measures for schools not making AYP. It begins with requiring them to develop an improvement plan (in case of missing AYP for two consecutive years) and ending with implementing a restructuring plan that can "include reopening the school as a charter school, contracting management to a private, outside management group, turning the school over to the state for reorganization, or any other changes to school governance that make fundamental reforms" (Dillon & Rotherham, 2007, p. 3).

Teachers' unions, state education officials and other critics are pointing to the problem with this section of NCLB that a school is labeled as 'failing' as soon as a single student subgroup (White, Hispanic, Black, Asian American and American Indian) is not making AYP. Given the fact that multiple factors contribute to a student's learning progress, so their argumentation, NCLB focuses tremendous resources on one single aspect – a procedure that poisons the learning atmosphere in schools and states and fosters local resistance against the federal education approach (Onosko, 2011). A striking example of the resistance against this NCLB provision is the state of Illinois which is the third largest school district of the United States. 98 % of the state's high schools fell short of meeting AYP in 2012 although many of aforementioned schools were highly valued by students, parents other community members. "Gery Chico, the chairman of the Illinois State Board of Education, called the law 'severely deficient' because it forces the state to categorize some outstanding schools as underperforming" (Lawrence, 2012). A further consequence of this NCLB provision was a widely recognized teacher strike in Chicago that shut down schools for nearly two weeks and made clear the resistance of local and state education professionals against the federal reform initiatives.<sup>17</sup>

### 3.1.3 Third reform item of NCLB: Quality of teaching

During the Clinton administration, a new paradigm of measuring teacher quality (from input – e.g., qualifications of teachers – to output – e.g., effects on student learning (Stronge, Ward & Grant, 2011, p. 340) – orientation) began to evolve that gained momentum under Bush's NCLB and reached a preliminary climax under Obama's RTTT. Under NCLB, one can already recognize a blending of traditional and revisionist notions of what constitutes 'highly qualified teachers'. In this sense, a teacher's effectiveness depends on his qualifications (input-oriented), e.g. if he carries at least a bachelor's degree, a state license, and demonstrates "competency in the subject matter taught", (Corcoran, 2010, p. 1). Besides these input-oriented pillars, Bush's legislation also encouraged states to develop outcome-oriented measurements like evaluations of teacher effectiveness by using Value Added Methods (VAM) (Dillon, 2010). 19 The idea behind VAM is trying to reduce the effects of a student's background (family income, disabilities, etc.) on his learning performance singling out the value a teacher adds to his academic progress (Corcoran, 2010, p. 4; for alternative evaluation systems and their effectiveness, see Welsh, 2011; Darling-Hammond, 2012).

The use of VAM, though, is controversial. On the one hand, supporters argue that VAM provide "fairer measures of school performance than measuring the numbers of students that score at the proficient level" (The Working Group on Teacher Quality, 2007, p. 1). On the other hand, critics point to some cases in

which VAM – based on longitudinal mathematical modeling – rated good teachers (measured by students' and parents' subjective assessments) as least-effective.

To show the resistance of some actors of the local level against this item of federal education reform, we take a closer look at the Los Angeles Unified School District – the second largest school district of the United States. In 2010, the L.A. Times released the value-added ratings of 11,500 Los Angeles Unified elementary school teachers. Consequently, teachers' unions arguing that "experts from across the country had pointed out both the limitations and dangers of using, in isolation, the value-added method to rate a teacher's performance" (AFT, 2010). Resistance against the blaming of L.A. teachers based on federally demanded VAM has further manifested in critique by the teachers' unions and even highly esteemed foreign education pundits<sup>20</sup> querying this item of the federal education reform: "Instead of involving teachers and their unions in collaborative reform, they are being pushed aside as impediments to top-down decision-making" (Rubinstein, Heckscher & Adler, 2011). With this line of argumentation, the development of this federal reform item is highly problematic because it poisons the learning atmosphere in schools and the willingness of local level actors to be open for education reform initiatives (Onosko, 2011).

As demonstrated above, NCLB's main method for narrowing the achievement gaps between the different subgroups focuses on school reform. However, children only spend a third of their time awake in school, which leads to the conclusion that much potential to improve a student's learning performance lies beyond the classroom (Rothstein, 2004). Therefore, we elaborate the initiatives that former President Bush implemented to support disadvantaged children and students representing a relatively high share in the U.S. compared to other countries participating in PISA (compare section 1).

### 3.1.4 Social spending under former President Bush

In his book 'Class and schools: Using social, economic and educational reform to close the Black-White achievement gap', Richard Rothstein draws attention to the correlation between test scores and a student's family income (Rothstein, 2004).<sup>21</sup> A first finding is that children of families depending on social welfare programs have an abortive vocabulary compared to children of affluent parents. "The researchers found that ... professional parents spoke over 2,000 words per hour to their children, working class parents spoke about 1,300, and welfare mothers spoke about 600" (Rothstein, 2004, p. 19). This constitutes an early obstacle for students of poor families with regard to their learning performance. A follow-up problem could therefore evolve when those children grow into parents who are, in turn, only

capable of facilitating the development of limited communication skills to their children.

A second explanation for the achievement gap is that different social classes live with diverging health situations: "Fifty percent or more of minority and low income children have vision problems that interfere with their academic work" (ibid., p. 37). Additionally, poor children are three times more likely to suffer from untreated dental problems than middle-class children. Also, asthma is a big problem causing chronic school absence, so that low-income pupils with this disease are 80 % more likely than their financially well-situated peers to miss lessons in school (ibid., p. 39 f.).

Against this background of evident correlations between family backgrounds and student performance we now describe social support measures under former President Bush to address the aforementioned problems of disadvantaged children. In this process, pre-school initiatives are generally given a great amount of credit in trying to close the achievement gap, which is seen as the single most important problem in the U.S. education system (Besharov & Call, 2009). 'Head Start', the most famous federally funded pre-school initiative, has supported children of low income families in a broad manner since 1965 (Butler & Gish, 2003, p. 1). Including "child development, educational, health, nutritional, social and other activities," Head Start has been provided with steadily increasing funding since 1989 that reached \$6,9 billion at the end of former President Bush's legislation (Butler & Gish, 2003; ECLKC, 2011). Since its implementation the program has enrolled more than 25 million children, and, interestingly, the increased funding since 1989 correlates with also increased student performance in this period (Deming, 2009, p. 111; Price, 2009, p. 5; NCES, 2011a). 22 However, the funding level under former President Bush is slightly inferior to the Head Start funding under President Obama.

Critics argue that *Head Start* is another useless federal program costing billions of each year, but as we will show in section 5 on the basis of the 2010 impact study, *Head Start* makes "significant differences ... on every measure of children's preschool experiences" (Department of Health & Human Services, 2010).

The next section elaborates on the Obama administration's education policy. By illustrating the various reform items and the resistance against President Obama's reform approach from the state and local level, we build the groundwork for the explanation of the hurdles of the recent federal education reform that will be unfolded in section 4 and 5.

# 3.2 Former approaches to fix the education system: From NCLB to Obama's blueprint

When President Obama signed the \$787 billion *American Recovery and Reinvest-ment Act* (ARRA) on February 21, 2009, a significant amount of money was targeted at improving the education system at the state and local level. About \$5 billion were allocated for early learning programs, \$77 billion for reforms to strengthen elementary and secondary education, and \$30 billion to address college affordability and improve access to higher education. In addition to funding these improvements, \$4.35 billion were also appropriated for states that improve their education systems along the principles set forth by the administration's RTTT program.

A look into the executive summary of the RTTT initiative reveals the following four priorities in President Obama's reform approach: (1) implementing standards and assessments, (2) improving teacher effectiveness, (3) improving collection and use of data, and (4) turning around struggling schools (Department of Education, 2009).

#### 3.2.1 First reform item of RTTT: Common core standards

Like former President Bush's NCLB, President Obama's RTTT initiative requires states to develop content and performance standards in reading and math. Through the competitive RTTT fund, though, the Obama administration pressured states to go beyond NCLB requirements and implement national common core standards that were adopted by 27 states in 2010 (meanwhile 45 states adopted the standards). Supported by the *National Governors Association* (NGA), the *Council of Chief State School Officers* (CCSSO) and the leadership of the AFT, the standards stipulate what has to be learned in English and math in the K-12 period. These contents, though, are often criticized because the individuality of states even to set higher education standards is getting lost through the uniformity of the new common core standards: "All states will be judged by the same mediocre national benchmark enforced by the federal government" (Malkin, 2013).

Further resistance against this reform item of RTTT comes from conservatives and tea party affiliates criticizing the federal overreach in education policy intruding the former domain of the states: "In practice, Common Core ... standards undermine local control of education, [and] usurp state autonomy over curricular materials" (ibid.). Another subject of concern during the conception and implementation process of the common core standards was raised by Marion Brady who argues that the contents of the common core dominated by federal level advocates were out of touch with local and state education professionals and conceived without public dialogue (Brady, 2012). Critics like Edward Miller and Nancy Carlsson-

Paige reviewed the makeup of the committees that wrote and reviewed the Common Core Standards. "In all, there were 135 people on those panels. Not a single one of them was a K-3 classroom teacher or early childhood professional" (Miller & Carlsson-Paige, 2013).

Further reform items taking prominent positions in Obama's RTTT program are improving teacher effectiveness as well as teacher evaluation systems.

#### 3.2.2 Second reform item of RTTT: Teacher effectiveness and evaluations

One of the biggest controversies of the Obama administration education reform is the question of how teachers should be evaluated? President Obama's blueprint for education reform calls for an improvement of teacher effectiveness along positivistic measures. As the definition of an effective teacher along Obama's proposal shows, it is based "in significant parts on student growth and also include other measures, such as classroom observations of practice" (Department of Education, 2010). Using student growth measure as a 'significant part' in teacher evaluation processes, though, led to fierce resistance of teachers' unions against this reform item. In the case of the New York City School District – the largest district in the United States – negotiations between Mayor Bloomberg and local union members broke down over the regulation of teacher evaluations. "In particular, the mayor insisted that a deal on an evaluation system must extend for perpetuity" (Powell, 2013). The teachers' union, on the other hand, argued for a two-year agreement for the new teacher evaluation system to have the opportunity to adjust it in case of inadequacy which was also common in other states. Because of this stalemate the city risked losing \$240 million desperately needed money in state aid for its public schools, especially for low-performing schools with high shares of disadvantaged students. The impending loss of the money and the fierce debates between city and union officials show that federally demanded reform of the evaluation system adopted by the state of New York did not match the requirements of the teachers' union at the local level.

A similar amount of local resistance against federally demanded teacher evaluation systems from the local level was also observed in the second largest school district of the United States. In Los Angeles, \$40 million of RTTT funds were lost because of teachers' unions' resistance to a new federally demanded teacher evaluation system emphasizing student performance growth as a significant factor in teacher evaluations.

A third example of local and state resistance against the federally implemented education reform is the attempt of administrations of Texas, Wisconsin and Ohio pushing back teachers' unions influence in the implementation process of reform item in the local level (Rapoport, 2012).

One consequence of these three examples is that millions of federal RTTT funds are being left idle at the federal level without fostering needy schools at the local level. Another consequence of the inability of state and city officials to reach deals with teachers' union members is that the federally implemented reform risks losing a solid and legitimate groundwork that is inevitable for sustainable reform.

## 3.2.3 Third reform item of RTTT: Intervening in lowest-performing schools

On March 13, 2010, President Obama revealed his blueprint for revision of the 2002 NCLB. While adhering to the accountability and test regime of NCLB, some changes have been made in the Obama administration's version, for example, regarding the students' proficiency level and the proficiency deadline. Therefore, NCLB's much criticized 2014 deadline for proficiency in reading and math would be replaced by the requirement that by 2020, "every student graduates from high school well prepared for college and a career" (Department of Education, 2010). Thus, the (new) federal government had realized that the once federally implemented 2014 proficiency deadline was out of touch with the goals that could be accomplished by local public schools. Hereby, the problem is that "an estimated 48 % of the nation's public schools did not make AYP in 2011. This marks an increase from 39 % in 2010 and is the highest percentage since NCLB took effect" (CEP, 2011). Putting it in absolute figures, 43,738 public schools in the U.S. did not made AYP in 2011 and, if they failed to make AYP in their second consecutive year, they are subject to certain interventions mandated by NCLB (and beyond).

President Obama and the Department of Education recognized the deficiencies of this NCLB initiative now requiring states receiving School Improvement Grants (SIG)<sup>23</sup> to "identify the lowest-performing 5 percent of schools based on low performance and lack of improvement over time. In exchange for SIG funding, states and districts are required to implement one of four interventions for each school, chosen by the community, based on what is most appropriate for each school" (White House, 2012). The four tiers of school intervention are similar to those of NCLB. In the Turnaround Model the principal will be replaced, existing school staff will be screened, and no more than half the teachers will be rehired.<sup>24</sup> In the Restart Model a school will be converted or closed and re-opened as a charter school or, alternatively will be managed by an education organization. A third measure is *School Closure*. In this case the student will be sent to higher achieving schools in the district. Finally, in the *Transformation Model* the principal will be replaced and the school will be improved through "comprehensive curriculum reform, professional development, extending learning time, and engaging the community and families" (ibid.). Although the measure of school performance is based on AYP and, thus, is similar to the NCLB regulation elaborated in section 3.1.2,

President Obama granted local communities a greater say in the school restructuring process.

Another difference of RTTT and NCLB at this point is that the Obama administration grants waivers for states not reaching the rather unrealistic NCLB requirement that all students have to make AYP and, additionally, have to reach the proficient level in reading and math by 2014.

In the next subsection, we show that in the policy field of social spending, President Obama's policies are slightly different to that of former President Bush.

### 3.2.4 Social spending under President Obama

Social spending in the area of education (e.g. through *Head Start*) is crucial to narrow the mentioned achievement gap of the different student subgroups (Rothstein, 2004). In economically harsh times and budget fights with Republicans in Congress, President Obama faces tough headwinds in pushing for continuing social spending for the low income families with disadvantaged students. Thereby, the conflict line mainly runs between (liberal) Democrats who want to spend more for public safety nets and education programs to support poor families, and (conservative) Republicans who argue for general spending cuts and a diminished role of the federal government.

This assessment can be illustrated by formerly mentioned programs like the *Head Start* controversy in 2011 and *Temporary Assistance for Needy Families* (TANF) that Republicans want to see cut by \$1 billion a year. In the former case, Republicans in their 2011 budget proposal cut nearly a quarter (or \$2 billion) of *Head Start* funding, whereas Obama requested an increase of \$1 billion. In a compromise, Obama reached a \$340 million increase but lost substantial ground with regard to Pell Grant programs, as well as his attempt to prevent layoffs of teachers through a \$35 billion initiative that was blocked in Congress 2011.

In the case of TANF, Republicans were forging opposition through the *Welfare Reform Act of 2011*, introduced by Senator Jim DeMint (R-South Carolina), that would have "reduce[d] TANF spending by \$1 billion a year, and [would have] repeal[ed] a provision from the 'stimulus' increasing Food Stamp benefits" (Republican Study Committee, 2011). The House of Representatives has been dominated by Republicans since the 2011 midterms with the backing of the Tea Party, who wants to cut government spending and diminish the federal role in politics. With one branch of Congress containing so much animosity toward his programs, the President's initiatives to overhaul NCLB and keep alive social programs face great opposition.

We have now described the reform initiatives from former President Bush to President Obama and pointed out the resistance the single reform items face from the local and state level as well as political actors in general. In the next section our research question will be unfolded along with the theoretical concept explaining why these phases of resistance occurred, and, against this background, how U.S. education reform could nevertheless be successful in narrowing the achievement gaps in a sustainable manner.

# 4. Research question and theoretical framework for the analysis of education reform

In section 1 we introduced two main problems with the recent U.S. education reforms that were unfolded in section 3. Problem 1 is the relatively high share of low-performing students and, thus, an achievement gap that is narrowing only in modest terms. Problem 2 is that the top-down implemented reform faced a lot of resistance from the state and local level revealing that the reform initiatives are not build on a legitimate groundwork. As we showed in section 3, some state officials (e.g. in Texas, Wisconsin and Ohio) have even excluded teachers' unions members from important decision making processes concerning education policy underlining the problem that we are adverting to.

Against this background, we raise the research question how the resistance against recent education reform can be explained (problem 2) and what options for closing the achievement gap can be derived (problem 1).

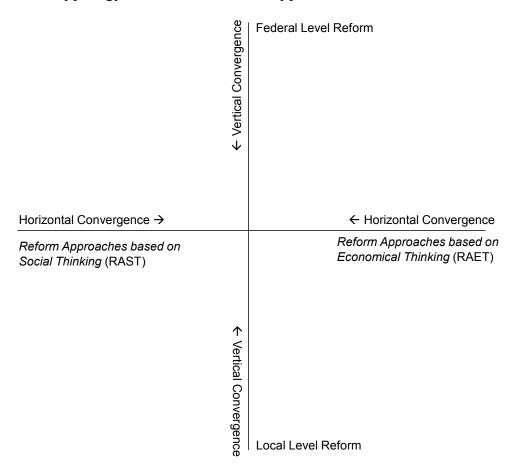
To answer the first part of the question, we use the theory of neo-institutionalism that concentrates on the behavior of institutions<sup>25</sup> (e.g. schools) when confronted with different political and societal norms (Schaefers, 2002, p. 836). We will first consider two possible ways institutions react when confronted with norms (e.g. education reform requirements) from the institutional environment (meaning the societal and political context schools are operating in): Firstly, institutions can respond to reform requirement on the *Talk Level*, meaning reform pressure from the environment will be compensated by the institutions only through the adoption of the reform vocabulary, not through implementing substantial reform items. Secondly, institutions can respond to reform requirement on the *Action Level*, meaning reform pressure from the environment will be implemented within the institution through substantial change in the operating principles of the institution (Brunsson & Olsen, 1993). In this case we speak of *Adaption* of environmental norms and requirements by the institution.

The option the institution will choose depends on several factors, for example, given resources and norms within the institution or scale and type of the environmental pressure. In section 5 we will see that because of the strict accountability system of the environment, U.S. schools had no choice, but to react on the *Action* 

Level because the required output of schools (in terms of student test scores) could be measured and compared. The adaption of environmental norms and requirements by the institution can be induced by three different mechanisms (DiMaggio & Powell, 1991). Firstly, adaption of environmental norms can be achieved through Coercive Isomorphism meaning institutions adhere to laws and/or political pressure from the outside and change their internal behavior. Secondly, adaption of external requirements can be implemented through Normative Isomorphism, recurring to norms existing inside the considered institution leading to changes in the institutions' behavior. Thirdly, adaption of external requirements can be implemented through Mimetic Isomorphism, meaning that institutions adapt their internal behavior conformingly to external norms and procedures because the former internal procedures are not able to solve current problems within the institution.

In section 5, we will see that the problem of resistance against U.S. federal education reform from the local level can be explained through *Coercive Isomorphism* relying virtually exclusively on legal compulsion in implementing the education reform (leaving aside, for example, the second way of *Normative Isomorphism* that would have incorporated ideas and norms from teachers and community members).

Figure 1: Typology of education reform types



To answer the second part of the research question, we now develop a typology of a comprehensive and sustainable education reform to evaluate the different items that had been dealt with in section 3. Against this background, we can characterize NCLB and RTTT and outline options to close the identified student achievement gap in the United States. Figure 1 shows our matrix of education reform types.

The four corners of the matrix as well as the combination of those categories will now be explained.

Reform Approaches based on Economical Thinking (RAET) use incentive-based policies that induce competition between the various entities of a system. On the one hand, initiatives within these approaches reward the 'winners' (i.e. best-performing students, teachers, schools, etc.) of that competition in terms of financial support or public praise. On the other hand, 'losers' (i.e. low-performing students, teachers, schools, etc.) of that same competition are penalized in terms of financial cutbacks, exclusions from the (education) system and/or public blaming. To measure which entity of the system is (un)successful in the competition, quantitative methods are used and the respective consequences are based on them.

Whereas RAET focus on rewarding the 'successful' entities of the system, *Reform Approaches based on Social Thinking* (RAST) include policy incentives that also give support to 'low-performing' entities of the system (i.e. students, teachers, schools, etc.). In contrast to RAET which is based purely on quantitative data, RAST also take qualitative measure methods into account, for example, through recognizing harsher environments (e.g. school districts with high percentages of disadvantaged students) that the 'low-performing' entities are struggling with. As indicators for classification we will use the different reform items elaborated in the sections 3.1.1 through 3.1.4 as well as 3.2.1 through 4.1.4.<sup>26</sup>

Federal level reform means that reform initiatives as well as the framework of reform policies are induced by the federal government. State and local authorities in this case are only the executing organs in the reform process.

Local level reform means that reform initiatives as well as the framework of the reform are induced by state and local authorities. Compare with federal level reform, this process is characterized by a variety of different approaches that contrast the unitary initiative of a federal level reform.<sup>27</sup> As indicators for classification we will analyze the ways of the education reform presented in section 3 by identifying from which level (federal or local) important reform items were induced.<sup>28</sup>

The phrase 'comprehensive (reform)' means that RAET and RAST are conducted in a balanced way. This means economic and social reform policies can be found in an equilibrated manner (graphically intersection of RAET/RAST). Alternatively, a comprehensive reform can be described through the concept of horizontal convergence meaning an adjustment process of RAET and RAST.

The term 'sustainable (reform)' means that federal level and local level policy compromises occur, ensuring that the conducted reform policy is legitimate and based on the a broad groundwork that includes local and state interests (and is not just top-down conducted). Alternatively, a sustainable reform can be described through the concept of vertical convergence meaning an adjustment process in federal and local level reforms.

The next section applies this matrix as well as our theoretical framework (neo-institutionalism) to answer the research question.

## 5. Analysis

On the basis of our matrix of education reform, a comparison between former President Bush's and President Obama's approach yields many similarities and few differences. Similarities can be found in the way the reform is conducted, namely in a top-down manner. On the local level, public schools were obligated to adhere to federal level reform requirements, because they were (legally) bound by receiving Title I funding as well as in terms of their need to service their financial debts through additional federal money offered by Washington in case of their compliance with reform requirements. But not only are the reform initiatives (i.e. nationalized common core standards, student tests, AYP measures and teacher evaluations) induced by the federal government, also the framework of education reform is being set by Washington.

Per definition, NCLB and RTTT can therefore be classified generally as federal level reforms that set clear reform frameworks, detailed reform requirements, and, in case of undesired outcomes, sanctioning mechanism for teachers and schools. One point of difference between NCLB and RTTT, though, is that President Obama's approach gives states more flexibility to cope with struggling schools, i.e. through the granting of waivers or the enhanced authority of local communities in the process of turning around lowest performing schools (see section 3.2.3). Because of these two slight differences, we rated President Obama's reform approach (see figure 2).

As we saw in section 3, teachers' unions have raised criticism about the extended role of the federal government in education policy. The resistance against the federally induced accountability system with its continuing student tests and sanctioning procedures can be explained by the theory of neo-institutionalism that we presented in section 4. As we elaborated, institutions (e.g. schools) can react to environmental (reform) requirements on the *Talk* and the *Action Level*. A response on the *Talk Level*, though, will only be 'accepted' by environmental actors (e.g. the

state and federal government) if the latter cannot really uncover the institutional *Action* as merely rhetorical. Since the implementation of a strict positivistic accountability system establishing national common core content standards and continuing student tests, schools could no longer react to the federal requirements on the *Talk Level* because measureable outcomes (i.e. student performance) could now be reviewed by environmental actors. Thus, public schools had to deal with the education reform requirements on the *Action Level* and had to actually implement the demanded reform items (i.e. student tests, etc.) – a development that explains the harshness of the resistance.

The resistance of local institutions against the federal education reform can further be explained through the three adaption processes that neo-institutionalism offers (see section 4). NCLB and RTTT predominantly proceeded through Coercive Isomorphism applying reform items to local institutions by legal and external pressure. Norms engrained in the institutions and local communities, for example, content that has to be learned by students or regarding the schools that have to face restructuring, were not considered by the federal government. Thus, federal actors (e.g. the Education Department, and, ultimately the President) avoided Normative Isomorphism in their education reform, and, therefore missed the opportunity to implement a sustainable reform by considering local norms and individual interests and ideas, that would have led to more acceptance of the education reform on the local level. The fact that Washington reached a superficially high compliance in terms of states adopting common core standards or test systems, can be explained with the third adaption process (Mimetic Isomorphism): The federal government pushed states to establish accountability systems (through common core standards and yearly tests) without fully funding the enormous costs arising for the budgets of the states. Alone \$15 billion dollars of Title I funding for low-income school districts have been tied to the adoption of the national common standards – a fact contributing to the problem that local authorities could no longer maintain individual school evaluation programs. They had to adapt their systems to unified federal test regimes out of financial rationale. Against this background, institutional changes were implemented in a top-down reform approach based of legal and external coercion. Thus, we expect that the education reform will not be sustainable in this manner, and that parts of it will be revised prospectively. One example that supports this estimate is the attempt of California – the most populous U.S. state – to revise the AYP provision and replace it with an individually more appropriate evaluation system developed on the local level (Baron, 2012).

Further similarities between NCLB and RTTT can be found in the economical principle that underlies both approaches: a federally implemented incentive-based reform framework that induces competition between the different states and local

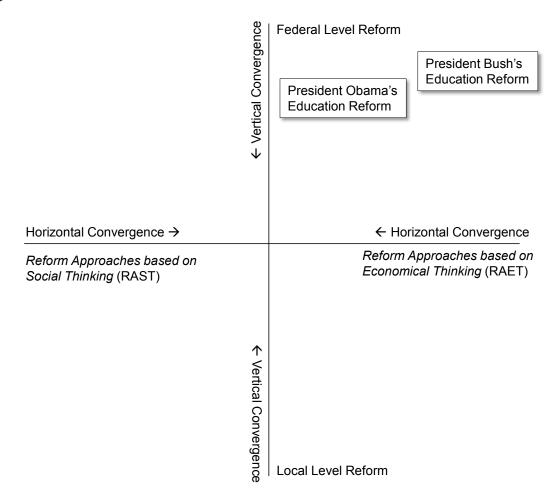
education authorities (LEA) for winning federal grants. Those states lacking the financial means to implement the required common core standards and the corresponding test systems are left behind in the NCLB and RTTT competition. According to a 2012 study of the Brooking Institution, larger states "tend to spend substantially less, per student, than smaller states (because they) save on fixed costs like test development by spreading them over more students and may have more bargaining power" (Chingos, 2012, p. 1). Hence, many small states will be disadvantaged (financially) in the competition for federal grants. But not only is the framework of recent education reform based on economical thinking, but also are the methods within the framework very similar: a quantitative accountability system based on yearly student tests (in grades 3 through 8 and in one grade in high school). Based in large part on these quantitative measures, schools are being rewarded (for adequate results) or punished (for missing AYP), although the validity in terms of indicating the quality of schools is not even ensured: "On various polls, only between 20 and 25 percent of teachers indicate that they think the standardized tests associated with NCLB are accurate reflections of their students' learning" (Resmovits, 2012, p. 1). Against this background of emphasizing quantitative methods as well as frameworks borrowed from economical practices we categorize the mentioned reform items of NCLB and RTTT as Reform Approaches based on Economical Thinking (RAET).

However, there are reform items in President Obama's approach that show distinct differences compared to those of former President Bush, for example, the amount of social spending for programs like Head Start. As we described in section 3.1.4 and 3.2.4 social spending for *Head Start* varied slightly under former President Bush compared to President Obama. The Democratic administration spent an average of \$8 billion per year in the 2009-2012 period, whereas the former Republican administration provided an average of \$7,2 billion in the last four years of their legislature. Given the fact that Republican law makers wanted to cut Head Start spending significantly as described in section 3.1.4 the higher social spending under Obama in the 2009–2012 period represents a clear hint that Obama's education policy in this regard is based more on RAST than the policy of his predecessor. In disagreement with the critique from Republicans / Conservatives we argue that Head Start is a vital factor contributing to narrow the achievement gap from the bottom-up by helping disadvantaged children in the early education process. As the Head Start 2010 and 2012 (follow-up) impact study demonstrates, 3-year-olds participating two years in *Head Start* show benefits in all four domains examined (i.e. cognitive development, social-emotional development, health status and services, and parenting practices; Department of Health & Human Services, 2010, p. ii). In contrast, 4-year-old participating in *Head Start* only one year consequently showed

benefits only in one of the four domains tested (Department of Health & Human Services, 2010). Admittedly, the 2010 (2012) impact study found that "the advantages children gained during their Head Start ... years yielded only a few statistically significant differences in outcomes at the end of 1st (3rd) grade". However, that does not mean that *Head Start* would be ineffective because by the end of 1st (3rd) grade tested children were at least 2 years out of the *Head Start* program (Department of Health & Human Services, 2010, 2012). In contrast, the fact that longer participation in *Head Start* leads to more benefits in the four tested domains leads to the conclusion, that *Head Start* works and must continue at least at the current (funding) level. To expand the benefits gained from *Head Start* participation it would be beneficial for U.S. to think about ways and means to further support disadvantaged children even in primary school so that the achievement gap could be narrowed from the bottom up.

Against this backdrop, we can now categorize former President Bush's and President Obama's education reform initiatives to close the achievement gaps.

Figure 2: Classification of recent education reform initiatives



As is seen in general, both reform frameworks are conducted in a top-down manner from the federal level. Although RTTT gives slightly more authority to the local level by granting waivers for the AYP regulation and giving communities more flexibility when intervening in failing schools. While both initiatives are based on RAET in restructuring the U.S. education system, the Obama administration's way of proceeding entails parts of RAST in terms of higher social spending. Therefore, we positioned President Obama's reform approach to the left of former President Bush's classification indicating that his policies are slightly more based on RAST. Altogether, neither the Obama nor the Bush administration's education reform can be labeled as comprehensive and sustainable, because both classifications are located in the right corner of our typology suggesting that RAST as well as interests and norms on the local level that would guarantee legitimate reform groundwork have been neglected in both reform approaches, NCLB and RTTT.

In the last section, we conclude our postulations for a more comprehensive and sustainable U.S. education reform on the basis of this analysis.

### 6. Conclusions

While these lines are being written, Congress is debating the reauthorization of ESEA – the education policy framework of 1965. As was shown in section 3 and 5, the last reauthorization of ESEA – i.e. former President Bush's NCLB – and the Obama administration's approach to overhaul the education system met harsh criticism, and, therefore, we have provided this analysis and we will offer recommendations for the prospective education reform.

With the help of neo-institutionalism we explained the mechanism of the resistance of institutional (i.e. school) change, and developed a typology to categorize NCLB as well as RTTT. From our analysis in section 5, we would like to derive two recommendations for the ongoing overhaul of U.S. education policy to establish a more comprehensive and sustainable approach.

Horizontal Convergence: For the prospective reauthorization of ESEA we recommend to keep up social spending (for Head Start and other programs for disadvantaged children like TANF), and, simultaneously, blend RAET with RAST in a horizontal convergence of policy initiatives. As we showed in section 5, Head Start fosters participating children – even though not as long-ranged as desired – and thus leads to a narrowing of the national achievement gap by supporting disadvantaged children. Another possibility that would blend RAST and RAET, and, therefore, would reduce local resistance is a more balanced concept of teacher evaluation systems that were the main obstacles in the reform debate in the two biggest school districts in the United States. Due to the fact that a student's perfor-

mance is influenced by many factors, teachers should be evaluated more on the basis of classroom observation (RAST) than purely on student test scores (RAET). The New York City School District has implemented a pioneer evaluation project in 2012 in this regard.

Vertical Convergence: To make the upcoming education reform more sustainable, we recommend a vertical convergence of policy initiatives meaning that the authorities ought to implement new reform initiatives which should not be dominated by the federal government. With this approach, all important stakeholders in education should be included, because the individuals from the teaching profession being at the forefront of the education reform. Furthermore, Washington has to respect the (constitutional) authority of states and local government level when deciding on education reform measures. Thereby, local norms (e.g. regarding school content or management) and interests would influence the implementation process of new measures, and, thus would make them more sustainable by anchoring them on a more legitimate foundation.

#### Notes

- 1. 48 countries participated in the 2007 TIMSS that President Obama was referring to (NCES, 2007).
- 2. In the category of 'science' eighth graders performance was improved from 11th (2007) to 10th rank (2011). In math, the performance stayed the same (rank 9). In the 2011 TIMSS, 56 countries participated in testing their 8th graders. In the 2011 *Progress in International Reading Literacy Study* (PIRLS) U.S. students ranked 5th out of 48 countries (IEA, 2011).
- 3. The Bush-era law that required states to implement (individually) *State Content and Academic Achievement Standards* to track the development of education progress by testing and made schools show how students of different races achieved.
- 4. Note that 500 total points were (theoretical) achievable. A closer look on the requirements, though, shows that the authors of the scale used very high requirements for students that relativize the numbers. E.g., the 500 points can only be reached if "fourth-grade students were able to integrate procedural knowledge and conceptual understanding to complex and nonroutine real-world problem solving in the five NAEP content areas" (NCES, 2011a, p. 28).
- 5. E.g. in the category of fourth graders, the math achievement gap in the White/Black subgroup just narrowed by one point (26 in 2005 compared to 25 in 2011) and even stayed unchanged in the White/Hispanic subgroup (20 in 2005 compared to 20 in 2011; NCES, 2011a).
- 6. E.g. the Black/White achievement gap of fourth graders in reading shrank by six points after NCLB (between 2003 to 2011) and by eight points before NCLB (between 1994 and 2002). The Black/White score gap of fourth graders in math narrowed by two points in the 2003 to 2011 period, while the gap lowered by six points between 1992 and 2002. The Black/White gap narrowing was constant for eighth graders in reading between 2003/2011 and 1994/2002 (three points) and higher for eighth graders in math after NCLB's implementation (4 points between 2003 and 2001 compared with three points between 1996 and 2002; NCES, 2011a). Considering these two achievement gaps identified by the Obama administration it is

- even more striking that the U.S., though, not a top performer by international comparison, is yet a top spender in terms of outlays per student (over \$100,000; only Luxembourg spent more; OECD, 2009b).
- 7. A country's share of disadvantaged children can be measured on the basis of the percentage of students who are eligible for reduced lunch prices. This is a national as well as international accepted indicator (OECD, 2009b).
- 8. I.e. "a disadvantaged student who's residual performance is found to be among the top quarter of students' residual performance from all countries" (OECD, 2009b).
- 9. "In the United States, there are 32 % of students in schools with a socio-economically disadvantaged intake" (OECD, 2009b).
- 10. Plenty other examples can be found in the spate of cheating scandals around the U.S. showing plain evidence of local resistance against the accountability system (Rich, 2013).
- 11. Here the Constitution stipulates: "powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people". Since education is not mentioned in the constitution, the regulation of education policy was long regarded as state priority.
- 12. Federal-funding program designed to help low-income children who are behind academically or at risk of falling behind. Title I funding is based on the number of low-income children in a school, generally those eligible for free lunch or reduced fee lunch programs.
- 13. AYP represents the minimum level of improvement that schools and school divisions must achieve each year as determined by NCLB.
- 14. On the other side of the debate, unions strictly opposed at least until 1994 "school vouchers, choice, charter schools, rigorous standards and tests, alternative teacher licensing, merit pay, and accountability measures" (DeBray-Pelot & McGuinn, 2009, p. 18).
- 15. Furthermore, civil rights groups were trying to narrow the racial achievement gap via distinct measuring methods allowing more precise reform initiatives.
- 16. The survey was "commissioned by Common Core, a Washington-based research and advocacy group that has long raised concerns about the impact of the No Child Left Behind Act on the curriculum" (Robelen, 2011, p. 1).
- 17. Furthermore, this reform item of NCLB leads to teaching-to-the-test methods in many schools that are worsening student-teacher relationships, which in turn deteriorates the learning atmosphere in schools and lowers the learning performance of students (Onosko, 2011).
- 18. E.g., through a relevant college major or master's degree.

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- 19. By definition, VAM "measure the gains that students make and then compare these gains to those of students whose measured background characteristics and initial test scores were similar, concluding that those who made greater gains must have had more effective teachers" (Baker et al., 2010, p. 9).
- 20. E.g., the Finnish education expert Pasi Sahlberg contrasts this U.S. blaming approach with a Finnish 'value-approach' of teachers: "Teachers in Finland are highly regarded professionals akin to medical doctors and lawyers" (Sahlberg, 2012).
- 21. See also Coleman et al. (1966), who argues that low-income students have higher levels of achievement, and/or larger achievement gains over time, when they attend middle-class schools than when they attend high-poverty schools. For a meta-analysis of the effects of family background on educational attainment see Sirin (2005).

- 22. This is not to say that there is a strict causal connection, but *Head Start* provided millions of disadvantages students with support fostering early cognitive, social-emotional, and health development.
- 23. "The President's FY 12 budget proposes \$600 million to continue the School Improvement Grants for districts nationwide to dramatically improve student achievement in their lowest-achieving schools" (White House, 2012).
- 24. Further measures in this model are the adoption of new governance structures and improvement of the school through curriculum reform.
- 25. 'Institution' is the central term of neo-institutionalism. Institutions are a construct of social rules, which are defined in the dimensions of temporal, social and factual as permanent, obligatory and meaningful (cf. Senge, 2006, p. 35).
- 26. If RAET or RAST prevail in the fashion that one of the two approaches is dominating the other in terms of the elaborated reform items in section 3, the respective reform measure has to be classified as dominating approach (RAET or RAST).
- 27. A successful decentralized education reform by standards put forth by a 2010 PISA analysis took place in Canada. "The most striking feature of the Canadian system is its decentralization. It is the only country in the developed world that has no federal office or department of education. Education is the responsibility of its 10 provinces and 3 territories" (OECD, 2010). That is not to say all decentralized system deliver better education outcomes or allow more effective education reforms. But as the 2010 PISA report and Santos (2012) show, the reform culture in decentralized systems is more beneficial for education reform (OECD, 2010).
- 28. If compromises between federal and local-level authorities were not possible or just not conducted in key reform issues (e.g. implementing a state-wide evaluation system for teachers based on student test scores), a vertical convergence is not given and the reform measure has to be classified as rather federal-level or local-level oriented.

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