

## **Why Band-Aids Don't Work: Analyzing and Evaluating No Child Left Behind (NCLB) In Light Of Constructivist Philosophy, Theory, And Practice**

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The overwhelming consensus as the twentieth century has closed has been that knowledge is constructed.

D. C. Phillips, *Constructivism in Education*

### **Abstract**

In this paper the No Child Left Behind (NCLB) Act, a top-down, one-size-fits-all coercive nostrum constructed by politicians purportedly to improve all American public schools that piddles with symptoms rather than deal with root causes, is first delineated and analyzed. Its departure from local educational governance to an accountability-focused nationalizing influence with draconian sticks and carrots is cited. Its major awards and sanctions are noted including its Annual Yearly Progress (AYP) criteria as an attempt to denigrate public education in order to privatize it. Next, the main tenets and practices involving constructivism are briefly explored, its major schools of thought mentioned, together with the nature of its resulting individualized educational practices. Last, constructivist thought is held aloft as a prism to critique NCLB and AYP, followed by conclusions and implications for fundamental policy and practice changes that depart significantly from NCLB initiatives to address basic underlying societal dysfunctions cited.

### **No Child Left Behind (NCLB)**

When Shawn Sturgill began Shelbyville High School, southwest of Indianapolis, IN. in 2002, he joined a group of about ten students who became his friends. He describes them as “Not too rich, not too poor; not bookish, but not slow,” or typical, average kids (Thornburgh 2006). By his senior year, only one or two of Shawn’s friends remained; almost all the rest became high school dropouts. Statistics indicate that of the 315 Shelbyville students who began high school with Shawn, only 215 were expected to graduate (Thornburgh 2006). This disturbing story of educational failure, although extreme, is nonetheless an indication of the overwhelming malfunction of the federal government’s attempt to reform education in American schools though the No Child Left Behind Act (NCLB) signed into law by President George Bush on January 8, 2002. The law sets requirements for granting schools federal funding.

NCLB focuses on five principles:

1. Accountability and Assessment
2. State flexibility in the use of federal funds
3. School Choice
4. Emphasis on scientific teaching methods
5. Teachers must be “highly qualified”

Through these principles the government has made an “unprecedented effort to expand the role of the federal government in education. The Constitution contains no provisions for influence in education. But, if states wish to benefit from federal education funding they must comply with whatever regulations Washington imposes” (Jaeger 2007, 2). NCLB’s ultimate goal demands 100% student proficiency in reading and mathematics by the end of the 2013-2014 school year for all students in third through twelfth grades.

Of these five principles, the most notably problematic aspect is in accountability and assessment. States are required to develop standardized assessments of student proficiency. The most economical means of student assessment is standardized testing which has therefore been adopted as the primary instrument for measurement. The scores from these tests are used to grade the schools and the school systems themselves. A school's achievement is based on its ability to meet what NCLB defines as Adequate Yearly Progress (AYP) goals. Each year this goal is raised in order to meet the 2014 deadline. When schools do not meet their AYP, they suffer consequences:

1. After two years of not meeting AYP, schools must allow students to transfer to higher-performing schools and must provide transportation for the students.
2. After three years of not meeting AYP, schools must pay for outside tutoring at the request of parents.
3. After four years of not meeting AYP, schools the state must take "corrective action" which includes "replacing staff, implementing new curriculum including professional development, decreasing management authority at the school site level, appointing an outside expert to advise the school, extending the school day, or reorganizing the school internally." (Jaeger 2006, 8)
4. After five years of not meeting AYP, the school district must fundamentally restructure the school including, reopening school as a charter school, replacing school staff, and/or turning over school operations to the state or a private company.

While accountability and achievement are the concern of every educator in America, the NCLB initiative goes about it in the wrong way. Traditionally, one of the primary strengths of the educational system is that it is locally governed thereby meeting the specific needs of the students in quite different environments and cultures across the US. An Intuit child in Alaska has significantly different educational needs than a child growing up in urban Los Angeles or suburban Miami. Yet, NCLB removes this localized focus by setting unrealistic goals to which all children must conform or else the local educational system has the proverbial rug pulled out from under it.

Four years later, in 2006, Shawn faced his fifth year of high school while his friends who dropped out were "shuffling through menial jobs—one works at the car wash, another is washing dishes. A few, says Shawn, aren't doing much of anything except playing video games at their parents' houses" (Thornburgh 2006). These are the students that were on the front lines of the battle for education—the battle for a better future. They were casualties, and they were left behind.

### **Constructivist Thinking**

This section first explores constructivist thought followed by its educational practices. As philosopher D. C. Phillips (2000, 6-7), commissioned by the National Society for the Study of Education (NSSE) to edit a book on opinions regarding constructivism in education, notes

"constructivism" refers to at least two quite different things...In the first case, "constructivism" embodies a thesis about the disciplines or bodies of knowledge that have been built up during the course of human history.... In the second case, "constructivism" refers to a set of views about how individuals learn (and about how those who help them learn ought to teach).

This paper focuses on the latter, noting that constructivism focuses on analyzing how people actively develop their perceptions, their knowledge, their concepts and attitudes. Phillips clarifies ...this...type of constructivist view is that learners actively construct their own (“internal,” as some would say) sets of meaning or understandings; knowledge is not a mere *copy* of the external world, nor is knowledge acquired by passive absorption or by simple transference from one person (a teacher) to another (a learner or knower). In sum, knowledge is *made*, not *acquired*. (2000, 7)

In short, people build their understandings and perceptions of new concepts, symbols, facts, and attitudes based on their present bodies of knowledge and attitudes, that is, through the prisms of their backgrounds of experience.

Age, gender, socio-economic class, culture and sub-cultures, rural, urban, or suburban upbringings exert a strong impact on every human’s background of experience. Thus, people develop different perceptions, viewpoints, expectations of such universals as their families, people, art, money, education and school, work, politics, religion, sports, and other cultural components as they develop different experiences with these various phenomena.

Kant is cited as founding the philosophical basis for constructivism, in that he “argued that certain aspects of our knowledge of the physical universe (time and space, for example) were the products of our own cognitive apparatus – we ‘construct’ the universe to have certain properties, or, rather, our faculty of understanding imposes those temporal and special properties on our experience.” (D. C. Phillips 2000, 8).

Pestalozzi, Rousseau, and Dewey were major contributors, and Bruner, Freire and Vygotsky are cited by Marlowe and Page (1998, 13-19) as major contributors to developing constructivist thought. Shapiro (2003, 328-9) points to Descarte and George Herbert Mead (a colleague of Dewey’s at the University of Chicago and founder of the school of Symbolic Interactionism in social psychology), as well as Gardner as significant pioneers in developing constructivist theory.

One of the first uses of the term is implied in Piaget’s (1954) title of his benchmark book, *The Construction of Reality in the Child*, where Piaget sought to determine empirically how children construct their understandings, their perceptions of ideas, concepts, facts, their understanding regarding how processes work in their world. This knowledge is often startlingly divergent from adult understandings, as anyone interacting with youngsters can attest. A simple example of adults constructing their realities might serve: My wife was brought up in the forests of Oregon where fire can be deadly. As a direct result, she is extremely alert to smoke in the distance, whereas I, brought up in Chicago, am fairly oblivious to smoke until it is quite heavy and/or close.

Further support for the views expressed above can be found in such literature as Berger and Luckmann’s *The Social Construction of Reality* (1966), which asserts that people construct their own realities within the society and culture in which they live. In other words, people in every culture construct their own culturally-based realities.

### **Major Forms Of Constructivism**

As with any academic field, two major forms of constructivism have emerged, psychological and social, each in turn morphing into radical and moderate schools of thought (Fosnot 1996). While the focus of this paper permits only brief discussion, we may point out their approaches. Psychological constructivism focuses on the psychological understandings of the individual learner. Radical psychological constructivist thought is best analyzed by von

Glaserfeld (1995, 1), who notes that his understanding of the concept of blue may be different than your understanding which he notes "...is a profoundly shocking view." , although this viewpoint seems undercut by the idea that language is a socially constructed phenomenon. Radical and moderate social constructivism differ in that the former believes that all bodies of knowledge, including the so-called hard sciences "can be fully *explained* or *entirely accounted for*, in sociological terms." (D. C. Phillips, 8-9). This, of course, has led to the so-called science wars. Moderate social constructivism limits its views to noting that the human sciences have been formed by social forces.

### **Constructivism and Education**

Matthews (2000, 161) notes

although constructivism began as a theory of learning, it has progressively expanded its dominion, becoming a theory of teaching, a theory of education, a theory of educational administration, a theory of the origin of ideas, a theory of both personal knowledge and scientific knowledge, and even a metaphysical and ideological position. Constructivism has become education's version of a grand unified theory.

It is a well-known axiom that education to be successful must start with where the child is, which is precisely where constructivist philosophy, theory, and practice rests, not where the teacher is, or wants students to be. Thus, constructivist education requires a highly individualized approach, focusing on what the student wants to learn, what are his/her interests, needs, experiential level over a range of academic and other talents (Taylor 1968). And, particularly, what are the students' abilities. Each child develops a variety of levels of achievement over a range of academic areas and other talents such as communicating, ability to relate effectively with others and other social skills, artistic and physical talents, planning and organizing abilities. Not only do they develop and learn at different rates, but their achievement levels are heavily impacted by social factors, including poverty, often described as the 800 pound gorilla lurking in the cloak rooms of many schools (Berliner 2006.).

Tyler (1949) notes three sources of knowledge for developing curriculum: the needs of the individual, those of society, and the contributions of the subject to the education of students. Constructivist thought rests on the first, the needs and interests of the student. Obviously, NCLB places the needs of society and the subject matter specialists as the prime drivers for designing educational experiences.

Briefly, further educational practices of constructivism include:

- active learning vs. passive learning
- therefore, a focus on experiential learning
- generally working in small groups since learning theory indicates that a majority learn best by working together (Lewin 1952; Gregorc 1982)
- developing an emergent curriculum based on students' interests, needs, talents
- emphasis on higher order thinking, critical thinking
- students developing options for their own choosing
- opportunity to develop a community of learners
- opportunity to develop ownership of the learning process since students are involved in the process

## **NCLB vs. Reality**

### ***Achieving NCLB Goals***

The Civil Rights Project at Harvard University (CRP) released today a new study that reports the federal No Child Left Behind Act (NCLB) hasn't improved reading and mathematical achievement or reduced achievement gaps. The study also revealed that the NCLB won't meet its goals of 100 percent student proficiency by 2014 if trends of the first several years continue....Based on the NAEP ( the American National Assessment of Educational Progress), there are no systemic indications of improving the average achievement and narrowing the gap after NCLB. (Lee 2006)

The explicitly stated goal of NCLB is that every student in the United States will be proficient, that is, on grade level by the year 2014, clearly placing the needs of society first. AYP provisions require that 95% of every minority ( racial, ethnic, second language speakers, special education, etc.) take the high stakes tests and must pass them with proficiency, or schools face serious sanctions, such as being labeled as failing, in some states given a grade (A to F). Other sanctions cited above include forcing the school to reorganize, replacing administration and faculty.

However, it is manifestly impossible for every child to achieve levels of proficiency that are average or above average in every subject since all talents, including the academic, are unequally distributed. "Proficiency for all is an oxymoron" (Rothstein, Jacobsen and Wilder 2006). This fundamental goal of NCLB of 100% proficiency appears to be more of a fantasy than a realistic aim in view of the enormous impact of poverty and other cultural factors impacting students in the United States, and, presumably, other nations with the considerable discrepancies generated by poverty. NCLB has constructed a Lake Woebegone artificial mythological world where all the children are above average, the men are handsome and the women are strong.

Next, the pressure exerted by NCLB has resulted in narrowing and circumscribing the curriculum to focus on mathematics, reading, writing, and later, science, reducing or actually eliminating the role of the humanities, social studies, physical education, and the like. The result of high stakes testing has resulted in heavy emphasis on "drill and kill", generally considered the lower cognitive levels of Bloom's taxonomy (1956), knowledge (actually recall or rote knowledge) and comprehension. Since teachers increasingly teach to the test, focusing on these lowest two levels, this certainly neglects critical and higher thinking approaches.

Bracey (1995), an educational research psychologist and columnist for Phi Delta Kappan, who became irritated by the myopic focus of the testing movement (which he termed a madness), developed a list of human qualities which we value the most, among which are:

- Creativity
- Critical thinking
- Resilience
- Motivation
- Persistence
- And self-awareness, among others

### ***Other Criteria***

Other criteria may be utilized to point up the sizeable differences between NCLB and constructivist philosophy, theory, teaching practice. Utilizing Maslow's (1950) Hierarchy of

Human Needs, NCLB fails miserably. His second need, the individual's need for Safety, is severely challenged by NCLB's rigidity regarding standards. In Florida, if students do not pass the third grade tests mandated by NCLB, they must be failed, that is, retained, despite unequivocal research findings that such an action is extremely feared by children and results in disastrous consequences for the child and for his/her educational progress (Smith and Shepard 1987; Jimmerson, Anderson and Whipple 2002). They generally do much worse the year after retention than if they had progressed along with their peers; additionally, they experience enormous humiliation with their classmates (Smith and Shepard 1987).

In the first year of Florida's version of the NCLB, in which the Florida Comprehensive Assessment Test (FCAT) was administered, 43,996 students were in danger of failing. Actually, 26,398 failed (Greene and Winters 2006). The state legislature, supported by former Governor Jeb Bush, enacted a law mandating that if a child fails a second time, he/she will be retained again, despite research indicating that students will do poorly the second time. This time, 10,000 third graders were retained a second time, leading to these students being two years older than their classmates. Further, many are also retained by not passing the 8<sup>th</sup> grade FCAT test, resulting in numbers of student actually being 16 years old (and able to drive to school by that time), yet still in grade eight.

Roderick (1994) found that sixty-nine percent of students failing one grade are more likely to drop out than students who pass, and Mann's (1987) study indicated that 90% of students failing two courses are likely to drop out. If a country wishes to exacerbate the social sorting mechanism of schools, it could hardly find a more effective device. Manifestly, this also generates large increases in dropouts in the United States, hardly a beneficial grand governmental goal and contrary to the Goals 2000 aim of increasing graduation rates substantially.

As for the fourth Maslowian level, Esteem, the negative consequences of NCLB are obvious. A video one of my very progressive students brought into a class recently consisted of mostly disadvantaged minority students begging her not to have endless rehearsals for the NCLB-sponsored exams which they considered stultifying.

Developmentally, NCLB also generates difficulties for students, particularly those who are slower in reading, math, or in interpreting information. Most students who are a bit slower in reading in the early grades, for example, do catch up by fourth grade. But, NCLB and Florida's FCAT mandate yearly exams in third grade, with the above mentioned results.

### **Hidden Purposes**

Not surprisingly, a body of literature has sprung up questioning this governmental emphasis on accountability involving universal standards, a movement that has gained speed in recent years despite the formerly local nature of the public school institution in the United States (Bracey 2003; Berliner 2006). AYP is considered as a clever mechanism established to make certain that many schools long considered excellent become labeled as failures, such as in Minnesota where 70% risk such a label (Darling-Hammond 2007).

Some of this literature points to the deliberate derogation of the public schools, undermining them, as a device to eliminate them, calling it a "manufactured crisis" (Berliner, 1996). Private and charter schools in Florida do not need to take the FCAT, thus attesting to the fact they are not held accountable, and supporting the charge that they have been constructed both to undermine and to replace the public schools. Teachers must be "highly qualified", but tutors are not.

Some analysts perceive this as looking to education as source of money for private interests. As a matter of fact, recent research points to charter schools as generally lagging behind their public counterparts by about a half year (Nelson, Rosenberg and Van Meter 2004)), seriously undermining one of their *raison d'être* to serve as models for public school reform. Too many charters are merely cookie cutter clones, not being developed to meet the needs and interests of students and their communities, and certainly investing to develop curricula based in the interests and needs of the students and communities. Similarly, when private schools are compared with their public counterparts and controlled for class, they appear to be about even, with public schools outperforming private schools in math at grade 4 and about even at grade 8. In reading they were even at grade 4 and private outperformed public at grade 8 (Bracey 2006; Braun, Jenkins and Grigg 2006).

### **Conclusions and Implications For Policy And Practice**

NCLB and constructivism remain poles apart philosophically, theoretically, and in educational practice. NCLB is top-down with politicians and testing experts from afar controlling and denigrating education, while constructivism proceeds in a bottom-up *modus operandi*. NCLB is designed by conservative politicians with a radical hidden agenda, the replacement of the public schools by private schools (Roberts 2008, June 25). It appears to be based upon politicians' and distant experts' perceptions and assessments of society's needs. In contrast, constructivism always begins with the student's needs, interests, abilities, and talents. NCLB's emphasis is on accountability for narrow goals, with its mechanism of high stakes tests resulting in universal standards, which usually become the ceiling, not the floor. Its pressure for continually increasing improvement, termed "raising the bar", often results in a deleterious impact on those most in need of support. The focus is on testing rather than investing (Darling-Hammond 2007), resulting in minority as well as majority graduation rates declining, the exact opposite of NCLB's publicly stated intentions.

NCLB takes the Nation toward increasingly centralizing directions, contrary to the formerly local nature of the American educational institution. Oldroyd (2003 Spring), in comparing the American and UK models of forced and stringent accountability in contrast with the Scandinavian approach, termed the former "leadership for results rather than leadership for learning".

NCLB essentially piddles with symptoms, rather than address core issues in American society, culture, and economic factors which circumvent serious attempts to reform education, such as the huge and increasing income inequality and poverty afflicting the Nation, the increasing re-segregation even in the South, the increasing depersonalizing large size of schools, the attempt to establish national standards for our formerly localized governance patterns, the lack of health insurance and quality pre-school programs, etc. The radical agenda to privatize education has deflected serious efforts at reforming other core issues affecting education. Supporters of NCLB call for Herculean efforts, but it constitutes a Sisyphean labor, impossible to attain, as even key conservative supporters have begun to realize (Bracey 2007 February).

Thus, a fundamental comprehensive policy change is necessary, including abandoning the attempt to nationalize the American educational system, which has generated highly dysfunctional results. Long term investment is necessary. For example, if highly qualified teachers are a goal, a Marshall Plan for Teachers (Darling-Hammond 2007) might be a solution, by investing in preparing people for the profession rather than a hit-or-miss quick-fix approach to training people in quick, short term preparation programs which do not develop the goal of

highly qualified teachers. Rescuing the instructional paradigm pushed by NCLB from direct instruction, scripted lessons, and lectures to one of active learning, particularly inherent in constructivist approaches to teaching and learning, is imperative. Teachers and students cannot learn when imprisoned by rigid expectations that they will be on such and such a page daily.

Expanding rather than contracting the curriculum is indispensable. We need liberally educated students, not people trained to respond to questions and hating it, and, often, education. We need a focus on other major educational goals, such as creativity, critical thinking, motivation, self-awareness, etc., inherent in constructivist approaches. Attacks and attempts to replace the public schools with private counterparts are counterproductive. Both have a proper place in the American scene.

Long term efforts to provide a supportive infrastructure of high quality universal pre-school programs which exist in Scandinavian and other European nations, as well as universal health care for children, are necessary. So is an attack on the pervasive and high rates of poverty afflicting American education, such as income strategies to reduce poverty (Wilson 1996).

Research indicates that some of the best approaches to improve schools are to reduce class size as the excellent Project STAR (Student Teacher Achievement Ratio) studies have discovered (which we knew all along) (Achilles 2002), and to reduce our rapidly increasing large schools into smaller more personalized, decentralized units, as the Small Schools Movement research clearly reveals (Bryk and Schneider 2002; Lee and Smith 1995; Howley and Bickel 1999 Aug.). Howley and Bickel also note the power of small size stating "...small schools cut poverty's power over achievement by 80 to 90 percent in reading, writing, and mathematics".

And last, rather than focus on the lower cognitive levels, the emphasis should be on the higher cognitive levels and critical thinking. This is essentially what the Bologna Convention (1999), which has been adopted in all of Europe and much of Asia, asserts.

Why not America?

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