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Chapter by Patrick B. Johnson, Ph.D., excerpted from a forthcoming edited volume entitled,
***Authentic Educational Reform*, edited by Salz and Johnson. Anticipated publication: July, 2007 by Taylor-Francis**

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HIGH-STAKES TESTING AND NO CHILD LEFT BEHIND: CONCEPTUAL AND EMPIRICAL CONSIDERATIONS

by **Patrick B. Johnson, Ph.D.**

With the passage of NCLB and its emphasis on accountability to insure students' academic achievement, student assessment has taken on far greater significance and urgency. In addition to providing a measure of whether a student has successfully reached some arbitrary standard or benchmark, assessment also provides a measure of whether a teacher's class as a group has reached a similarly arbitrary standard. With the passage of NCLB, failure to achieve the standard carries serious negative consequences both for students and teachers. For the student, it may result in mandated summer school, tutoring, or grade retention. For the teacher, it may result in special mentoring, after-school workshops, and increasing job insecurity. These consequences are all triggered by student's scores obtained on single tests given at one point during the school year. According to Spring (2004), a high-stakes test "refers to an examination that determines a person's future academic career and job opportunities." (p.36).

HIGH-STAKES TESTING: HISTORICAL, CONCEPTUAL AND EMPIRICAL ANALYSES.

***High-Stakes Testing*: *Recent Background*.** Much of the current concern about American academic performance and its ultimate impact on national competitiveness in the global economy can be traced to the publication of A N*ation at Risk*: T*he* I*mperative for* E*ducational* R*eform* (National Council on Excellence in Education, 1983). This report decried the mediocrity of American education and offered Japan and its schools as an antidote. While the political motives behind this report have been widely circulated (Bell, 1988; Berliner & Biddle, 1995), for unknown reasons, most educators accepted the validity of the report and its indictment of American schools. Cremin (1989), an exception, suggested that the report, "is at best a foolish and at worst a crass effort to direct attention away from those truly responsible for doing something about competitiveness and to lay the burden instead on the schools. It is a device that has been used repeatedly in the history of American education" (pp. 102-103).

To provide additional historical perspective, Bracey (2003) suggested that any thoughtful analysis of subsequent economic history would have strikingly demonstrated the fallaciousness of the report's assumptions, findings, and conclusions. Shortly after the publication of A N*ation at Risk*, Japan's economy fell into a long period of decline at precisely the same time that the American economy surged to become the standard to which other nations aspired. Interestingly, during this time or subsequently, little was said about the role American schools played in this unanticipated economic reversal (Bracey, 2003).

It is within this context that one should seriously question the current despair and hand wringing regarding the poor quality of American education and the poor comparative performance of American students in international studies. According to Berliner and Biddle (1995), the poor performance of American students in such studies can be explained, at least partially, by the fact that in the United States all public school students participate in these tests; while in other countries, only those students attending academically rigorous schools are included. Clearly, such an apples to oranges comparison places American "students" at considerable academic disadvantage compared to "students" from other countries.

It is also within this context that one needs to understand the emergence of NCLB in 2001 and the central emphasis it places on testing our way to successful academic achievement. While there appears to be little, if any, relationship between academic competitiveness and a nation's economic competitiveness (Bracey, 2003; Spring, Chapter 1 this volume), today, the American public is once again being inundated with propaganda to the contrary, as special interest groups including the testing industry and tutoring companies line up to make a killing at the expense of generally dedicated teachers and hard-working and over-stressed children.

It should also be added, however, that an additional rationale for NCLB can be found in the long-standing racial disparities observed in American education (NCLB, 2001, Sec. 101) and an apparent desire by policy makers to enhance the academic performance of all groups (Kim & Sunderman, 2005). Accordingly, school districts must now disaggregate performance scores separately for different racial/ethnic and socioeconomic groups to ensure that all groups are making adequate yearly progress (AYP). Unfortunately, because the law also requires that academic progress will be determined by mean group proficiency scores, schools with large populations of economically disadvantaged students and/or racially diverse student populations are more likely to fall short of their AYP requirements as recently demonstrated in the analyses of Kim and Sunderman (2005). This is because the mean accords greater weight to extreme scores than would the median score.

***High-Stakes Testing*: A *Conceptual* Analysis.** The term "high-stakes testing" does not appear in the hundreds of pages of the NCLB law. A central focus rests instead on accountability and holding key constituents responsible for educational outcomes. The general idea is that unless students and their teachers are held accountable for poor academic performance, the performance will continue to suffer or still worse, further deteriorate. From this perspective, it is the specter of these negative consequences or stakes that are supposed to motivate students to learn more and teachers to transmit information more effectively. It is the fear engendered by these consequences that will insure that "no child is left behind." Now, of course, should a child fail to perform to standard, he or she, in reality, can be summarily left behind their current peer group.

B.F. Skinner, the most influential learning theorist of the 20th century, conducted countless studies on the differential impacts of carrots (reinforcements) and sticks (punishments) on learning. And, let's not kid ourselves about the true meaning of the current high-stakes testing environment in which children are being threatened with the ultimate academic punishment—grade retention. According to Skinner (1951), punishment is a wholly ineffective technique because its most immediate effect is to suppress rather than to eliminate unwanted behavior. How suppression could move a child from ineffective to effective learning strategies is not readily apparent. Nor has anyone identified specific studies that demonstrate that fear and punishment produce more effective learning or a desire for lifelong learning.

Now, Skinner did identify "extraordinary" circumstances in which punishment was effective at eliminating unwanted behavior such as when severe punishment was applied. However, he warned that the side effects of severe punishment were so unpredictable that it should never be used to facilitate learning (see examples below in section on the impact of high-stakes testing on students).

Not surprisingly, short-sighted policy makers, looking for a quick fix to solve the "problems" of American education, have ignored this warning and plunged ahead without considering the likely consequences of severely punishing large numbers of children. While it can certainly be argued that high-stakes testing ultimately will hold teachers and administrators or even parents responsible for the poor education of American children, the cold reality is that in its most immediate impact, it is the children, especially those from disadvantaged socioeconomic circumstances, who are being held responsible and being severely punished when they fail to perform well on these tests.

According to Spring (2004), using high-stakes tests to motivate school children is an attempt to motivate them by fear of failure. Unfortunately, a central problem with fear of failure motivation is that the best way to avoid failure is simply to avoid putting yourself in an achievement situation (Weiner, 1992). Following from this, one obvious way to avoid academic failure would be to drop out of school, a solution increasingly taken by students following the introduction of high-stakes testing in Chicago (Roderick, Nagaoka, & Allensworth, 2005) when social promotion was eliminated and in Louisiana, the first state to mandate such tests statewide, a state in which approximately 1 in 3 students drop out before completing high school (Harvard University, 2005).

***High-Stakes Testing*: An *Empirical* Analysis.** In the current educational environment with its emphasis on evidence-based practice and data-driven decision for teachers, it seems only reasonable that a momentous policy decision such as mandating high-stakes testing for all public school children would be based not just on the results of a few studies, but rather on an avalanche of supportive findings. This is especially true given Skinner's findings on the dangers associated with using punishment to modify learning. However, as Joel Spring points out (Chapter 1 this volume), actually there is no data to support the contention that the use of such testing will enhance student learning or improve teachers' teaching.

Unfortunately our political leaders are not being held to the same evidentiary standards as the teachers they so often and easily criticize. Nor are these leaders required to be responsive to evidence that runs counter to their beliefs about the need to subject children to high-stakes testing. A particularly egregious example of this know-nothing, anti-empirical approach can be found in the recently enacted New York City public school policy to end social promotion. Despite considerable evidence suggesting that such a policy was doomed to failure based on countless studies including a recent, nine-year study of the detrimental effects of a similar policy change in Chicago (Roderick et al., 2005), the Mayor of New York and his hand-picked School Chancellor, neither of whom had any background in education, imposed this policy on the largest school district in the country. Both dismissed the Chicago findings by emphasizing that New York City was not Chicago—a true but irrelevant point given that both are large, urban school districts with large numbers of poor, minority students. They contended instead, possibly based upon some intuitive "knowledge", that the policy of ending social promotion and imposing high-stakes testing for third graders would be successful in New York.

While there is no evidence indicating that high-stakes testing will improve learning and teaching, there is a great deal of empirical evidence on the negative correlated consequences of such testing both on students and their teachers.

THE IMPACT OF HIGH-STAKES TESTING ON STUDENTS.

High-stakes testing impacts students in terms of their educational choices and options, their academic performance and intellectual development, and their psychological health. With regard to educational choices, empirical studies have repeatedly demonstrated positive associations between the introduction of high-stakes testing and increased student dropout rates (Darling-Hammond, 2000; Haney, 2000; Madaus & Clarke, 2001). The associations have been especially strong among poor and minority students according to Madaus and Clarke (2001). They pointed out that the most negative academic effects of high-stakes testing including grade retention and school drop out are not experienced equally by all children but fall disproportionately on the small shoulders of those who possess special needs and/or who are most economically disadvantaged.

It is important to acknowledge, as Nieto and Johnson suggest (Chapter 2 this volume), that many poor parents are strong supporters of NCLB. They support it because they correctly perceive that they and their children have been seriously disadvantaged by an educational system seriously biased against them in terms of the inadequate resources and supports provided. Many of the parents believe or at least hope that NCLB will correct these inequities. Unfortunately, what we know about the impact of high-stakes tests is that their negative educational consequences--retention and drop out—will be disproportionately borne by their children under the current NCLB legislation. This was dramatically demonstrated in Haney's (2000) reanalysis of the "Texas' educational miracle" data that demonstrated the disproportionate numbers of Hispanic and African-American students among those who dropped out following the advent of high-stakes testing in Texas in the 1990s.

A great deal of attention has also focused on the psychological impact of high-stakes testing on American children and adolescents. Much of this attention has revolved around the stress engendered by such tests including general psychological distress and the test anxiety first identified by Mandler and Sarason (1952). Many students are intimately acquainted with the sympathetic nervous system signs of test anxiety including sweating palms, nausea, and inhibited concentration and recall (Gregor, 2005; McCarthy & Goffin, 2005). For the many afflicted with this test-taking malady, high-stakes testing is not a recipe for academic success but rather a recipe for physical discomfort and poor test performance.

General psychological distress is another common concomitant of high-stakes tests. According to Abrams, Pedulla and Madaus (2003), "increased levels of anxiety, stress, and fatigue are often seen among students participating in high stakes testing…" (p. 20). Other examples of the psychological consequences for children can be found throughout B. Johnson and D. Johnson's (2002) compelling book on high-stakes testing. For example, "As the children begin the first timed test, Kevin vomits in his hands and runs to the bathroom." "Gerard takes one look at the first section and begins to cry." (p.141). Learning that they have failed the tests, "most of the children are crying." "One little girl in the room next door tells her friend, 'I'm going to kill myself.'"(p. 177). They also cite a headline in a local paper that read, "Failure of LEAP Test Prompts Suicide Attempt by Fifteen Year Old Student" (p. 42).

There is also suggestive evidence that some children may turn to alcohol and drugs to self-medicate the emotional distress produced by these tests (Morehouse, 2004). Then, too, some have suggested that rather than providing the necessary assistance that "at-risk" students certainly deserve, teachers particularly resent such students because of the threat they pose to the class' test average and the teacher's job security or salary advancement (Johnson & Johnson, 2002).

Some might argue that high-stakes tests and the negative consequences associated with failure will teach children that school is serious business to which they need apply themselves. The recently released summary of findings on Chicago's nine-year experiment to eliminate social promotion suggests otherwise (Roderick et al., 2005). Results revealed increased drop out rates among those children retained in the third grade, the same pattern observed by Haney (2000) in Texas following the advent of high-stakes testing there.

For all of these reasons, the wisdom of our current system of high-stakes testing must be seriously questioned. But those who have imposed and expanded this system are either ignoring this information or simply ignorant of it. As Kohn (2000) has passionately argued, it is our responsibility to educate them through whatever means will most expeditiously and effectively gain their attention.

An educational practice that increases the likelihood of school dropout rather than enhancing student's academic performance surely must be questioned. To label such a program No Child Left Behind is nothing less than cynical political propaganda. But there may be other serious, unintended consequences associated with use of such testing procedures.

The introduction of high-stakes tests produces a narrowing of the school curriculum (Horn, 2003; Madaus & Clarke, 2001). In a high-stakes testing environment, rather than offering students a full-range of courses, what becomes emphasized is a narrow range of material focused upon the material and subject matter to be tested.

Kohn (2000) has suggested that such narrowing in combination with students focusing only on what will be assessed on exams has led to shallowness or superficiality in student thinking that inhibits their ability to think deeply about complex content material (Anderman, 1992). If true, this is certainly not helpful to our students as they prepare to compete against their counterparts from other technologically advanced societies. As Klein, McNeil and Stout (2005) recently pointed out, "This emphasis on mastering a standardized, uncontroversial curriculum…is killing off exactly the qualities our children need most to appeal to future employers, who want not just 'reading, 'riting, and 'rithmetic,' but innovation, initiative, and flexibility." (p. 32).

THE IMPACT OF HIGH-STAKES TESTING ON TEACHERS.

Teachers are the other group of educational stakeholders most immediately impacted by the tidal wave of high-stakes tests. The effects of such testing on teachers have been widely reported and here will only be briefly summarized.

A frequent and commonly reported complaint is that high-stakes tests force teachers to "teach to the test" or to focus their classroom instruction on the material likely to be covered on the test (Popham, 2001). This position was often voiced by teachers at the 2004 conference "Authentic Educational Reform" as evidenced by Baghban and Li and by Zarnowski, Backner, and Engel Chapters 7, 8 this volume). For example, Baghban and Li emphasize that the "increased, unceasing emphasis on testing and assessment" (p.) leads to the "imposition of highly scripted programs that tell them exactly what to do and what to say…" (p.). Or quoting a teacher from Zarnowski et al.: "I have a lot of pressure from my administration to focus on test prep all day long." (p.).

Recently, an 8th grade science teacher described the pressure she was feeling to produce lessons that emphasized the material to be tested either on the math or English Language Arts portions of New York's high-stakes tests. She had been asked repeatedly by her principal to focus on these materials especially when the English teacher was absent. As Zarnowski and her colleagues have pointed out, increasingly content areas like science and social studies are being ignored, only focused upon when they are included on the tests.

Not surprisingly, a recent article in the New York Times (Saulny, 2005a) revealed that middle-class parents are becoming restive about the restrictive educational practices currently in wide use in New York City. They "have complained of an increasing focus on test preparation and remedial work, of a decreasing focus on science education…(p. A1).

The emphasis on test score-driven instruction forces teachers to ignore important academic areas while focusing exclusively on those that will be tested. B. Johnson and D. Johnson (2002) highlight this tendency as teachers are explicitly told to ignore science and social studies because they will not be on the tests.

High-stakes testing impacts teachers and teaching in other, less direct ways. For example, the increased pressure on first-year teachers to produce positive test results heightens the stress in an already stress-filled first year. Terzian (2002) quotes a new teacher: "The pressures a first-year teacher faces are stressful enough; suddenly, I had to worry about keeping my job even before I had begun to teach." Such effects may be even more acute in teachers working in schools located in poor areas. Reporting on the reactions of these teachers, Wright (2002) concludes:

> *The teachers are stressed and overwhelmed by all the curricular changes and pressure to teach to the test and raise scores. …They experience additional stress when helping students in poverty deal with problems within their families and neighborhoods. They are insulted when monetary awards are disbursed to schools and teachers of more privileged students. They are frustrated when they watch good teachers leave the school, and sometimes teaching in general.* (*p.* 12).

In addition, this pressure may negatively impact the relationships between teachers, both new and old, and their low performing students who may be subjected to additional strain in a high-stakes environment. While teachers normally might focus additional attention and provide more academic support for low performing students, in the high-stakes testing classroom such attention takes valuable time away from teaching those students likely to bring up the class average. In line with this, on more than one occasion I have heard school administrators recommend that teachers focus their attention on students most likely to show the most improvement in their scores or to move from one performance category to another even if they don't show a great deal of improvement. The implication here is clearly that it is not efficient to spend too much time with the lowest performing students.

This also appears to be the position taken by states generally, many who exclude large proportions of special needs and second-language learners from their state testing requirements. A recent U.S. Government Accountability Office report (2005) estimated that the average proportion of special needs students excluded by states was close to 40%! The effect of such exclusionary policies is, of course, to artificially enhance state test scores (Herman, 2000). At the same time, many states have requested variances to allow similar exclusions for NCLB-mandated tests and, in many instances these requests have been granted (Olson, 2005). In so doing, the Department of Education is clearly violating both the letter and spirit of "No Child Left Behind." One unintended benefit of granting these exclusions has been that at least the children in these groups are spared the stress and travails associated with high-stakes testing. However, in requesting and in granting these exclusionary requests, federal and state educational leaders and administrators are once again marginalizing special needs and second-language students.

In light of these and other practices, it is hardly surprising that many of the best teachers decide to leave the profession. Many became teachers because they wanted to educate children and help them acquire the necessary skills to be successful in life. They are now being asked to be complicit in a process that is antithetical to these goals and so choose to leave rather than participate (Spring, 2004; Wright, 2002).

In such an educational environment, it is likely that it will become increasingly difficult for schools to attract those who previously wanted to become "teachers" but now realize that "teaching" is not possible in the current climate. If this occurs, our educational system will have further reduced the availability of its most important resource—competent, effective teachers.

ALTERNATIVE ASSESSMENT METHODS.

In the controversy surrounding high-stakes testing, the distinction between testing and assessment is often blurred or ignored altogether. In contrast to the considerable controversy surrounding the academic value of high-stakes testing, most educators involved in this debate recognize the value of educational assessment. Without accurate assessment, it is impossible to know if children are learning or to determine how best to help them to learn more or to do more efficiently. To assess something means to measure or quantify it and there is little argument regarding the necessity of measuring student learning in some fashion. The real debates revolve around whether assessments should be summative and only provide information about what or how much a child has learned or formative and provide information about how to enhance teaching and learning (Roddy, 2005). Then too, debates continue regarding how to provide the most accurate, fair, and educationally sound method of conducting such assessments and the determination of what precisely should be taught and what assessed.

It is important to understand, therefore, that those educators, parents, policy makers, and students who are opposed to high-stakes testing are generally not opposed to assessment. They are simply convinced that reliance on single-moment assessments that mostly measure specific disconnected pieces of information or dead knowledge is not the best way to assess our children and to enhance their educational progress. Moreover, many are convinced that this approach may in fact be counterproductive when it comes to enhancing our children's knowledge base and their higher-order cognitive skills (Popham, 2001).

For example, the National Research Council's committee on appropriate test use has stated: "An educational decision that will have a major impact on a test taker should not be made solely or automatically on the basis of a single test score." (Heubert & Hauser, 1999) (p.15).

Moreover, the International Reading Association (2006) and the National Council of Teachers of Mathematics (2006), organizations that represent reading teachers and mathematics teachers in this country, are both on record opposing high-stakes testing, each also recognizes the intrinsic value of assessment. The Reading Association's position is that, "Assessment should be used to improve education and benefit students rather than compare and pigeonhole them." According to the National Council of Mathematics Teacher' statement on high-stakes testing, "When assessments are used in thoughtful and meaningful ways, students' scores provide important information…The misuse of tests for high-stakes purposes has subverted the benefits these tests can bring if they are used appropriately." (page number). It is worth noting that these two organizations represent the disciplines initially impacted by the high-stakes testing associated with NCLB.

At the same time, opposition to high-stakes testing in no way indicates opposition to standards-based instruction, but rather to the current preoccupation with mindless test preparation and administration with serious consequences for students and teachers that have little to do with classroom instruction or learning. In emphasizing the distinction between standards and high-stakes testing, Horn (2003) described high-stakes testing as the "evil twin" of the current standards movement.

From this perspective, there is little disagreement regarding the importance of identifying appropriate educational standards to be achieved. Serious and deep divisions arise, however, regarding whether high-stakes testing enhances or actually impedes the likelihood that children will achieve the standards.

High-stakes testing has been mandated throughout American primary and secondary schools to ensure the accountability of students and teachers. The underlying assumption of this educational model is that by holding these groups accountable, the apparent problems with student achievement will be overcome. One obvious difficulty with such thinking is that, because it focuses exclusively on the end point of the educational process or achievement scores, it ignores the processes involved in student achievement and the teaching required to support it. Figure 1 provides a simple schematic of this mindset.

FIGURE 1.

HIGH-STAKES TESTING > > > > ACCOUNTABILITY > > > > ENHANCED STUDENT ACHIEVEMENT

This says nothing about the process of learning and the impact of teaching on this process. Nor does it provide any information about how to improve scores other than to repeat the mantras, "more testing" or "higher stakes." This is an example of a summative approach to assessment or evaluation (Roddy, 2005). Summative assessments seek to measure the end-point or culmination of the learning process.

However, since learning is a process in which teaching is intimately involved (Vygotsky, 1978), a more accurate model might utilize a more formative approach to assessment. In formative assessment, the primary purpose is to modify and improve the process of teaching and learning (Roddy, 2005). Assessments are used to modify teaching and improve learning. This formative approach might look something like Figure 2.

FIGURE 2.

EFFECTIVE TEACHING AND CLASSROOM SUPPORTS >>> ENHANCED STUDENT LEARNING >>> ASSESSMENT >>>

>>> IMPROVED TEACHING >>> MORE ENHANCED LEARNING AND SO ON

Such a model acknowledges the essential importance of teachers to learning and of feedback to the improvement of the teaching process and to the improvement of student learning and achievement (Morrison, 2006). It also acknowledges the ongoing, iterative nature of teaching and learning. Teachers are certainly accountable, to a considerable degree, for student learning. But to focus our attention on test scores as the primary method for gauging a teacher's effectiveness is to diminish the importance of teaching and, in so doing, to distort the educational process. To do so in poor school districts with unprepared students, little academic support, and overwhelmed teachers represents educational malpractice at its worst and a cynical ploy to make it appear that tests with consequences will somehow miraculously improve student achievement in the absence of resources and effective teaching. Darling-Hammond (2000) persuasively makes the same point.

In contrast to the high-stakes testing approach with its emphasis on summative assessment, there are examples of state programs that have clearly recognized the appropriateness of formative assessments and highlighted the importance of teaching and support to student learning and the local nature of this process. Rhode Island (Thompson, 2001) and Connecticut (Darling-Hammond, 2000) are two that have worked to improve their educational practices and whose student' learning has been enhanced as a result. Interestingly, both have been successful while emphasizing low-stakes rather than high-stakes testing where assessment is used primarily to provide feedback to enhance teaching and, thereby, enhance student learning.

Many educators agree that there are problems in the American educational system today. But as Madaus and Clarke (2001) have suggested it is simplistic to assume that we will be able to test our way out of these problems especially if we rely on summative rather than formative assessments. Instead a careful and systematic approach needs to be developed; one that provides teachers with the information they require to better educate children and with the economic and material supports only the most affluent school districts possess today.

CONCLUSION.

Accountability and the high-stakes tests that are supposed to provide it are not new (Callahan, 1962; Darling-Hammond, 2000). What has changed recently is the age of the children being required to take these tests, the universality of their administration, and the belief that summative tests will somehow magically enhance student learning. While tests are mandated, there is little consideration given to explaining how more and more testing will improve student understanding of key content areas including math and science. It is easy to demand more testing and student and teacher accountability and to exact stiff penalties for failure to "perform." But it is difficult to see how simply giving more consequential tests is going to help students to learn more or teachers to teach more effectively. The absurdity of the current situation is has been amplified by reports highlighting widespread scoring errors that "raised fresh questions about the reliability of the kinds of high-stakes tests that increasingly dominate education at all levels (Arenson & Henriques, 2006).

An oft-stated rationale for the move to high-stakes testing is the concern of policy makers regarding, the much discussed, poor relative performance of American students' on international math and science comparisons. While serious questions have been raised about the validity of this concern (Berliner & Biddle, 1995), there can be little doubt that it has played a critical role in creating an unprecedented and deeply unsettling era of high-stakes testing.

This concern with comparative test scores is most certainly linked to the belief among business leaders and policy makers that if our students cannot compete academically against those from other countries, this will ultimately have serious negative consequences for the nation's economic competitiveness. This is, of course, the same concern raised in A N*ation at Risk* over two decades ago about how American school children and their academic failures would ultimately destroy our economic superiority if we did not change the educational system. As previously discussed, this position was wrong then and it is wrong now.

As Cremin (1989) emphasized then, the nation's economic competitiveness is far more "a function of monetary, trade, and industrial policy, and of decisions by the President and Congress…" Today, the economic future of the country is imperiled not by our school children's scores on international comparisons, but by the nation's astronomical trade imbalance, its tax policies, and the profligate personal spending and meager personal savings (Krugman, 2006; Phillips, 2006). By redirecting the focus to schools, students, and teachers, the business and political leaders are attempting to abnegate their responsibility for the nation's current economic crisis.

The American public and all involved in the American educational process must now demand more thoughtful educational policies from their national and local policy leaders. These "leaders" need to be held accountable for the serious damage caused by high-stakes testing, especially in the lives of the nation's poor and most vulnerable children.

At a 2001 press conference, President Bush stated, "Too much precious time has lapsed in this for us to achieve what we want: every child being able to learn. Testing every child every year is the way to stop the cycle. We must care enough to ask how our children are doing." (G.W. Bush, press conference, January 2001).

Incessant testing with serious consequences is not the way to guarantee that children will learn what they need for success in the 21st century. In fact, for many the lesson learned will be extremely negative and counterproductive to their prospects for lifelong learning. While it is certainly important to ask how our children are doing, it is far more important to provide them with the resources necessary to improve their educational experiences and to enhance their current learning while motivating them to continue learning in the future. High-stakes testing is not a solution to our current problems, but rather a symptom of what is wrong with current educational policy. Rather than focusing so much time, energy, and scarce school dollars on test preparation and testing, all involved in schools should work together to focus more directly and systematically on teaching and learning and on ways to make the American educational process more fair and equitable for all students.

Unfortunately, the sad irony is that the real legacy of NCLB legislation is likely to be that those economically disadvantaged groups that most support it will be more disadvantaged because of it. Given the current realities of the American social structure, while this is sad, it is hardly surprising.

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