Solutions in Search of Problems:
Breaking the Cycle of Failed Educational Reform

Lorin W. Anderson
Distinguished Professor Emeritus
University of South Carolina

November 6, 2007

Solutions in Search of Problems:
Breaking the Cycle of Failed Educational Reform

For the past quarter century, with impetus provided by the publication of *A Nation at Risk* in 1983, policymakers and educators have attempted to reform American education. These attempts arrived on the education scene in three waves (Desimone, 2002). The first wave called for systemic changes, such as higher standards, more instructional time, and increased teachers' salaries. The second wave focused on improving the relationship of schools and communities, addressing the needs of special groups of students, and attracting and retaining effective teachers. The third wave, generally referred to as comprehensive school reform (CSR), emphasized changes in the structure and organization of schools, as well as the way in which curriculum was conceptualized and instruction delivered.

How successful have these reforms been in improving American education? The answer to this question depends to a certain extent on who you ask. Suzanne Weiss (2003), a policymaker with the Education Commission of the States, has concluded that the reforms stimulated by *A Nation at Risk*, despite their weaknesses and limitations, have had a strong impact on American education, particularly in terms of the emphasis on academic standards and a focus on accountability.   Maris Vinovskis, a former U. S. Department of Education official during three presidential administrations, sees it differently: "They [reformers] keep spinning their wheels. Everybody wants their own plan, so we go through these big initiatives in an approach where we try a fad and don't really measure it to see whether it really works" (quoted in Serwach, 2003, p. 1).

If we examine the effect of these reforms in terms of "hard data," the picture is rather bleak. SAT scores have risen slightly since 1982, but are still below the levels achieved by students in the 1970s (Coeyman, 2003). Scores on the National Assessment of Educational Progress (NAEP) have remained fairly flat since the late 1970s and early 1980s, particularly in reading. For example, the

1

average NAEP scores of nine-year-olds were 215 in 1980 and 216 in 2004. Similarly, the average NAEP scores of thirteen-year-olds were 258 in 1980 and 257 in 2004 (National Center of Education Statistics, 2004). To put the NAEP data in context, a good rule of thumb is that 10 points translate into approximately one year's growth in reading or mathematics (Center for Public Education, 2007). Finally, a study by the American Institutes of Research (1999) found that only three of the 24 whole-school reform models that were examined presented strong evidence that they increased student achievement.

Those who believe these large-scale reform efforts have failed offer a host of reasons for their failure. O'Banion (1997), for example, suggested that the first wave of educational reform failed because the proposed solutions only tweaked the current system of education, correcting a process here and adding a program there. More recently, Kerschner (2005) argued that educational reform in Los Angeles failed primarily because the district had become dependent on outsiders for many of its resources and much of its operating capacity. He concluded that these outside forces had created a school system that was "reactive to its outside forces rather than generative of its own change" (p. 1). About a year ago, Evans (2006) reflected on thirty years of fragmented attempts to reform a single cluster of schools – one high school and its middle and elementary "feeder" schools – located in Portland, Oregon. Based on the available data, he concluded that "on average, the longer a student remains in the Jefferson Cluster, the worse his or her achievement results will be" (p. 1). Among the reasons for the failure of the reform efforts cited by Evans were a lack of any sense of urgency in making the necessary changes and a culture of low expectations for too many students.

Evans' report is particularly instructive in that he documents the various reform initiatives – 29 in all – that were introduced in the cluster of schools over a fifteen-year period. They included the "Woodlawn Math" curriculum (1992), the Laboratory Science Model (1995), School Uniforms (1998), "Investigations Math" Curriculum (2000), International Baccalaureate Program (2000), Peer

Counseling (2001), Personalized Teaching and Active Learning (2002), Small Classes and Clear Classroom Goals (2002), Freshman Academy (2002), and Single-Sex Education Options (2006).

Within the context of this paper, each of these reforms can be seen as a <u>solution</u> to some <u>problem</u> (or set of problems). Unfortunately, very few of the problems can be inferred from the names or titles of the reforms themselves. Consider the School Uniform Program, for example. Is the program intended to improve student behavior, minimize gang activity, or increase student achievement? Is it intended to impact on more than one of these possible outcomes or is there a different purpose altogether? Similarly, is adopting a new mathematics curriculum intended to increase the alignment of the curriculum with state tests, improve the quality of mathematics teaching, or change the emphasis in mathematics from skill application to problem solving? Once again, the curriculum may be expected to impact on more than one of these possible outcomes. Similar questions can be asked about the Personalized Teaching and Active Learning Program and the Single-Sex Education Options Program. What problem or problems are they intended to solve? What purpose, educationally-speaking, are they are intended to serve?

The practice of selecting or creating solutions without a clear understanding of the problem we are attempting to solve, although common, is rarely if ever effective. Goodwin and Dean (2007) have identified three of the major "mistakes" associated with this practice. The first is "treating the symptoms, not the problems" (p. 3). Sir Cyril Taylor, the chairman of the Specialist Schools and Academies Trust in Great Britain, has stated that there is a "serious literacy problem" in the British schools (quoted in Lipsett, 2007). Rather than identify the causes of the problem, Taylor readily offers two solutions to it. First, "schools should set aside at least 30 minutes a day for silent reading." Second, "all 11-year-olds' reading ability should be tested when they start secondary school." Apparently, more time and more testing will solve the literacy problem, regardless of its causes. When we rely on the "more is better"

approach ... more time, more testing, more discipline, more money ... we are typically focusing on the symptoms, not the causes.

The second "mistake" identified by Goodwin and Dean (2007) is "focusing only on tangibles and ignoring intangibles" (p. 3). In an era of accountability, the focus in education has been placed squarely on the "bottom line" – improved student test scores. Goodwin and Dean suggest that addressing "soft issues," such as culture, environment, attitudes, and beliefs lies at the heart of successful school improvement efforts. As Levin (1997) has written, "A program of reform in any setting should be grounded in a <u>clear sense of educational purpose</u> (*which I have addressed earlier*) that <u>fits the particular social context</u>" (p. 265) (emphasis mine). Culture, environment, attitudes, and beliefs are all components of the social context. Many school reform efforts (e.g., school uniforms, peer counseling, and single-gender education) have little, if any, direct effect on student achievement. However, they have everything to do with culture, environment, attitudes, and beliefs. Paying attention to the intangibles is important because, as Duke (2007) has pointed out, "No two low-performing schools are identical" (p. 35).

The third and final "mistake" suggested by Goodwin and Dean (2007) is "biting off more than you can chew." Rather than "attempting to do many things and doing none of them well, schools should identify the one or two meaningful things they will do next" (p. 4). This mistake is particularly prevalent in so-called "low-performing schools." Administrators and teachers in such schools are bombarded with what Hess and Kendrick (2007) have called a "cascade of remedies" (p. 30). In another case of "more is better" thinking, the mentality operating in many of these schools seems to be that by piling remedy upon remedy upon remedy, the problem, whatever it is, is likely to be solved or simply "go away." After all, when I catch a cold, if I take large doses of Vitamin C, suck on zinc lozenges, spray Echinacea in my throat, gargle with salt water, and eat chicken soup (a "cascade of remedies"), then my cold will certainly be cured, won't it?

A Strategy for Solving Educational Problems

How do we go about searching for solutions to problems, rather than finding solutions and hoping they will solve our problems? Placing the horse back before the cart, where it belongs, requires the systematic application of a four-step strategy (see Table 1). This strategy is described briefly in this section. In subsequent sections, I illustrate how the strategy can be applied to each of three longstanding problems in education: the "discipline problem," the "motivation problem," and the "reading problem."

Table 1
A Four-Step Strategy for Breaking the Cycle of Failed Educational Reform

Step 1. Clearly define the problem being solved. Step 2. Identify possible causes of the problem. Step 3. Select or create a solution strategy which focuses on the causes. Step 4. Implement the strategy and evaluate its effectiveness.

<u>The first step is to clearly define the problem being solved</u>. As the inventor Charles Kettering once said, "A problem well stated is a problem half solved." Is the "discipline problem" a problem of classrooms in utter chaos with few students behaving appropriately or is it a problem of a few students in every classroom behaving inappropriately most of the time? Is the "motivation problem" a problem of students not turning in assignments at all or turning in assignments of poor quality? Is the "reading problem" a problem of students not being able to sound out the words they encounter or is it a problem of students not understanding the words they see even after they have sounded them out? In each case, we are dealing with very different problems.

Clearly defining a problem is hard work and requires a level of precision that is not common among educators. Vague solution strategies directed toward equally vague problems are unlikely to be productive.

<u>The second step is to identify possible causes of the problem</u>. The emphasis here is on "possible causes." When searching for possible causes, the fundamental question that needs to be answered is "Why?" Why are these

children misbehaving? Why is Hallie unmotivated? A half-century ago, Rudolph Flesch (1955) asked "Why can't Johnny read?" In his now-classic text, *Why Johnny Can't Read: And What You Can Do About It*, Flesch argued vehemently that the cause of the reading problem was the lack of proper phonics instruction in the schools. Some two decades later, Vrest Orton (1977) asked the same question about Johnny but came to a different explanation. Johnny can't read because of the increased use of *sans serif* fonts by American book and magazine publishers. In Orton's words, "Johnny can't read, in large part, because printers and designers have kept him from reading" (p. 1). Because of the myriad of potential "causes" of most of our problems in education, we must identify the most "promising" causes. Once identified, studies must be conducted to determine whether solution strategies based on these causes actually solved the problem (see Step 4 below).

The third step is to select or create a solution strategy for the problem as defined, with an emphasis on treating the causes, not the symptoms. According to John Bonfadini (1993), for example, discipline is education's number one problem. Similarly, Ruth Wooden (2004) asserts that misbehavior is "poisoning" the learning atmosphere in schools. Is discipline the same as misbehavior? Is misbehavior a component of the "discipline problem?"

If the problem is rampant misbehavior in the classroom and the primary cause of the problem is the teacher's inability to control and manage the undesirable behavior, then the choice of the *Assertive Discipline Program* is reasonable (Cotton, 2001).   If, on the other hand, the problem is students who are unable to control their behavior, relate to others, and behave responsibly, then the choice of *Responsible Thinking Process Program* makes sense (Cotton, 2001). Is discipline something that teachers do to students? Or, is discipline a characteristic of the students themselves? The choice of an appropriate solution strategy for the "discipline problem" depends to a large extent on how we answer these and similar questions.

Finally, the fourth step is to implement the solution strategy in the local context and evaluate its effectiveness in terms of solving the problem. Although we might "like" one solution strategy better than the other or "agree" with the underlying philosophy of one strategy more than another, "liking" and "agreeing" are not reasons for selecting one strategy over the other. Just as the proof of the pudding is in the eating, the proof of a solution strategy is in solving the problem. It must be emphasized that the evaluation must focus on the extent to which the specific problem (as defined) was solved. If a school uniform program (the solution strategy) is intended to improve student behavior (the problem), then the evaluation must shed light on whether student behavior improved. Collecting data on student achievement, although the "bottom line" of numerous school reform initiatives, is not a valid evaluation of a school uniform program. Student achievement may or may not be effected by implementing the School Uniform Program, depending on the effectiveness of the program in positively influencing student behavior. And, even if the program has a positive influence on student behavior, it may not impact on student achievement. As numerous studies have emphasized, many factors other than student behavior influence student achievement (Walberg, 1992).

Solving the "Discipline Problem"

During the 2005-06 and 2006-07 school years, the Center of Excellence to Prepare Teachers of Children of Poverty at Francis Marion University (FMU) conducted two studies that focused on solving the "discipline problem." The perception of educators and community leaders was that the problem was widespread. In the vernacular, students were "out of control." Rather than accept this contention at face value, the first phase of the study was to determine the magnitude of the problem. FMU students were taught to use a simple structured observation form and then sent out to observe 22 teachers teaching two different subjects (e.g., reading, mathematics). All school levels – elementary, middle, and high school – were represented. Each observation period lasted 30 minutes, resulting in a total of 22 hours of observation records.

During each observation period, the FMU students scanned the classroom every two minutes and placed each student into one of five categories: unoccupied (e.g., daydreaming, wandering, sleeping), socialization, misbehavior, disruption, and "on-task." Misbehavior was coded when a student was not behaving in accordance with the classroom rules and routines. Disruption was coded when a student's behavior caused the teacher to stop teaching and deal with the behavior. For analytic purposes, misbehavior and disruption were combined into a category called "problem behavior." On average, students were "on-task" 85% of the time. In contrast, "problem behavior" was coded less than two percent of the time. The results of this study suggested that we had not defined the real "discipline problem." Problem behavior was not rampant; the vast majority of students behaved in accordance with rules and expectations (Anderson *et al.*, 2006).

In discussing the results with the participating teachers and FMU students at the end of the school year, the real "discipline problem" emerged. The problem was that a small number of students, perhaps two or three per classroom, were responsible for the vast majority of the behavior problems. In light of this new understanding of the problem, we set out during the second year to determine the causes of the problem behavior in this relatively small group of students. During the second year, participating teachers identified two or three "difficult and resistant students" (Vitto, 2003). They gathered information on each identified student by talking with him or her individually and perusing his or her permanent record. FMU students once again conducted classroom observations, but this time they shadowed the identified students for a minimum of four hours during a single day and wrote narratives describing their classroom and school behaviors. Both participating teachers and FMU students were instructed to look for clues as to why these students acted as they did.

The results of the study suggested that there were five categories of "difficult and resistant" students: easily distractible, constantly confused, angry and aggressive, attention seekers, and distressed. In terms of perceived causes,

"easily distractible" students tended to be bored. For these students, schoolwork was too easy or perceived to be irrelevant. "Constantly confused" students were those for whom the schoolwork was well beyond their current level of knowledge and functioning. Their mantra was "I don't get it." "Attention seekers" needed to feel accepted by others. They typically lacked a sense of self-worth. "Angry and aggressive" students lacked self-control, specifically alternative strategies for dealing with conflicts. Finally, "distressed" students typically had problems in their life outside of school that interfered with their ability to focus and concentrate in school. Identified problems included a mother dying of cancer, recently divorced parents, and a change of foster homes (Anderson *et al.*, 2007).

In combination, the results of the two studies suggest that (1) contrary to popular opinion the "discipline problem" is not widespread, (2) a relatively small number of students exhibit the majority of problem behaviors, and (3) students engage in these problem behaviors for very different reasons. To solve the real "discipline problem," then, we must accurately identify the "difficult and resistant students," determine the causes of their problem behavior (e.g., attention seeking and diminished self-worth v. distressed and out-of-school events), and craft interventions (solution strategies) based on our understanding of why these students behave the way they do. Note that generic classroom management techniques, coupled with posted rules and increasingly severe consequences of rule violation, are unlikely to solve the "discipline problem." Working toward improved teacher-student relations based on a greater understanding of individual students, on the other hand, has a great deal of potential in this regard.

The "Motivation Problem"

Teachers tend to have a reasonable understanding of the meaning of motivation. Students are motivated if they pay attention, do their work, and put forth the effort they need in order to learn. Students are <u>not</u> motivated if they do not. The problem in solving the "motivation problem," therefore, is not our inability to define the problem (Step 1).

Teachers have far less of an understanding of <u>why</u> students are or are not motivated (Step 2). Fortunately, there is a single theory – the Expectancy-Value Theory (Brophy, 2004) – that explains most of the reasons that students are or not motivated. In simplest terms, for a student to be motivated to work toward some goal, he or she must (1) value the goal (that is, see the goal as important or worthwhile) and (2) believe that the goal can be achieved with some reasonable degree of effort. The theory is represented visually in Figure 1.

A goal I value...
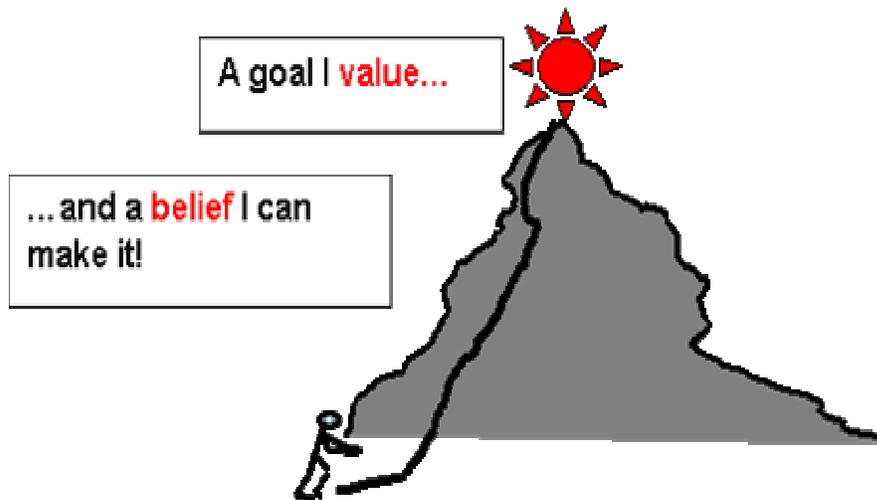
...and a belief I can make it!

Figure 1. The Expectancy-Value Theory of Motivation

The goal need not be learning *per se*. Rather, it may be something attained as a result of learning (e.g., good grades, parental approval). If the goal is, in fact, learning, we refer to the source of motivation as "intrinsic." If the goal is something attained as a result of learning, we refer to the source of motivation as "extrinsic." In either case, achieving the goal is something the student <u>values</u>.

The expectancy component of the theory has to do with the student's belief that the goal can be achieved. In other words, with a reasonable amount of time and effort the student can <u>expect</u> to achieve the goal. In the psychological literature this expectancy of success or belief that the goal can be achieved is called self-efficacy (Bandura, 1997). In lay language, expectations of success are associated with confidence.

If we want to solve the "motivational problem," then, we must find ways of increasing the value students attach to achieving academic goals, their likelihood of success in achieving the goals, or both (Step 3). Calls for relevance in education are, in fact, attempts to increase perceived value. Similarly, giving students choices of goals or assignments or being responsive to students' interests in selecting goals and materials are techniques for increasing perceived value. With respect to increasing self-efficacy or confidence, focusing on progress over time, rather than final achievement is a useful technique. Self-efficacy can also be increased by structuring the curriculum so that students experience early success that can be built upon. Finally, a strategy called Attribution Retraining (Brophy, 1986) has been used effectively with students who have struggled to achieve success in schools. Briefly, Attribution Retraining teaches students to (1) concentrate on the task at hand rather than worrying about failing, (2) cope with failures by retracing their steps to find their mistakes or by analyzing the problem to find another approach, and (3) attribute their failures to insufficient effort, lack of information, or the use of ineffective strategies, rather than to lack of ability.

The Expectancy-Theory of Motivation helps us understand why motivation decreases the longer that students are in school. As months of not learning turn into years, students' confidence in their ability to learn diminishes. Eventually, they come to believe that they cannot learn, either specific subjects or "at all." At this point in time, their expectancy of success is zero. To protect their sense of self-worth, however, they began to devalue learning and, perhaps, anything associated with formal schooling (Lumsden, 1994). Thus, as expectancy of success decreases, the value attached to schooling and learning decreases proportionately. At this point in time, students are well along the "path to dropping out" of school (Roderick, 1993).

To solve the "motivation problem," then, we must understand the specific causes of students' lack of motivation and design and implement solution strategies that address these causes. Because the causes of the "motivation

problem" may differ for different students, some individualization of solution strategies is likely necessary. Also, because we cannot be certain that we have identified the "real" causes, evaluating the effectiveness of the solution strategies in terms of solving the problem is a critically important step (Step 4).

The "Reading Problem"

The "reading problem" is complex because it is multi-faceted and changes as students move from novice readers to experts. Early in the reading process, young children learn to say the words they see. B-E-A-R is "bear." Fairly soon thereafter, the consensus seems to be somewhere around 8 years of age, children must move beyond simply saying the words to understanding what they mean. In this regard, saying the words aloud is believed to help young readers develop understanding by associating the sounds of the words they see with words they have heard sometime during their young lives. If we assume that the words they have heard make sense to them (e.g., when they hear the word "puppy," they think of a young dog), this connection between written words and the words children have heard gives meaning to the words that appear in print.

Eventually, however, young people must be able to make sense of larger chunks of written material, such as sentences, paragraphs, and stories. During this time they learn that same word can have different meanings in different contexts. For instance, the sentence "Bear right" does not instruct students to look to their right to see the bear. They also begin to make inferences based on what they are reading (e.g., "What do you think would happen next?") and summarize increasingly large amounts of written material (e.g., "What would be a good title for this story?").

Ultimately, reading requires that children (typically adolescents by this time) are able to "read between the lines." In the terminology of the Revised Bloom's Taxonomy (Anderson, Krathwohl, *et al.*, 2001), they must learn to analyze written material. They must be able to differentiate what is important or relevant for a particular purpose from what is not. They must be able to impose some type of organization on the material, an organization that helps them see

the relationship among the parts (plot, character, tone) and between the parts and the whole (the story). They must be able to put their own perspective aside and determine the perspective or point of view of the author of the material.

It can be argued that my analysis of the reading process over time is overly simple and/or too sequential. Although these may be fair criticisms, they miss the point! The point is that different reading programs address different reading problems and, furthermore, that different reading problems emerge at different points during the process of learning to read. While solving the problem of linking letters (symbols) with sounds is important, solving that specific problem does not solve the more general "reading problem." Rather, in the larger scheme of things, solving one reading problem quite often leads to another reading problem which has to be solved. Consider, for example, one of the conclusions drawn from a study published almost a century ago (Currier and Duguid, 1916). "The phonics classes were so concentrated on letter sounds that the attention was diverted from the sense of the paragraph to word pronunciation. The reading was generally less smooth, slower, and the idea confused" (p. 287) (emphasis mine).

The severity of the "reading problem" increases dramatically when children attempt to move from saying words to understanding their meaning. Understanding does not reside in the written words; rather, it resides in the connection between the words and the linguistic experience of the children who "read" them. Consequently, the greater (some would say, richer) the linguistic experience of children, the greater the likelihood that they will be able to make sense of what they read. The reverse holds true for children with lesser linguistic experience. Hart and Risley (2003) have identified a 30 million word gap by age 3 between children of parents whose jobs are classified as "professional" (e.g., doctors, lawyers, college professors) and children of parents on welfare. That is, by age 3, children of upper middle class parents will have heard and spoken a total of 30 million more words (obviously, not 30 million different words) than their welfare counterparts. For children of poverty, then,

the "reading problem" is or rapidly becomes a "language problem." As such it requires a "language solution." Examples of "language solutions" include Writing to Read (Martin & Friedberg, 1989) and Storytelling in Education (Wood, 2007).

The "reading problem" changes once again when students are expected to make sense of increasing amounts of written material, make reasonable inferences, and analyze the material to draw conclusions.   Not only does it change, it increases! Only 6 percent of 17-year-olds in this country can read at what NAEP test designers refer to as an "advanced level;" that is, they can analyze, synthesize, and learn from specialized reading material (Farber, 1999). Farber (1999) continues: "That age group is the only one showing lower scores today than when the NAEP was first given in 1971, which gets the question, Why are the reading skills of older students not showing more improvement?" (p. 1). One answer, consistent with the thesis of this paper, is that each change in our understanding of the "reading problem" and its causes requires a different solution strategy. If we truly believe that the solution to all reading problems rests with the improved teaching of phonics in the early grades, we neglect the burgeoning reading problem in the later grades.

The complexity of the "reading problem" illustrates once again the need for a systematic approach to problem solving in education. Each facet requires an understanding of the specific problem (e. g., cannot say the words) and its causes (e.g., poor visual discrimination, poor auditory discrimination, regional or cultural dialect). Armed with this understanding, one or more solution strategies can be designed, implemented, and evaluated.

Breaking the Cycle of Failed School Reform

What can be done to break the cycle of failed school reform that has plagued American education for the past quarter century? It will not be easy. Just as we cannot throw money at our problems and expect to solve them (Richards, 2005), we cannot "throw" generic programs at specific problems. Likewise, we cannot solve our problems by treating symptoms, rather than causes (Goodwin and Dean, 2007). So, as educators, what can we do?

First, <u>we need to be more analytical in our identification and examination</u> <u>of the problems and the solution strategies we choose to implement in order to</u> <u>solve those problems</u>. This change requires the formulation and testing of what are termed causal models. In simplest terms, a causal model is a series of "if-then" statements which examine the short- and long-term effects of various solution strategies (Anderson, 2000).

If, for example, we decrease class size (the solution strategy), then teachers should (1) know their students better, (2) have fewer discipline problems (since there are fewer students to "manage"), and (3) be more confident in the ability to teach the students well. If teachers know their students better, then they can provide (4) more personalized instruction to meet the needs of each student. If there are fewer discipline problems, there will be (5) more instructional time. If teachers are more confident in their ability to teach, they will (6) work harder to teach well and find alternative methods to do so. Finally, if there is more instructional time with an emphasis on more personalized instruction and greater effort on the part of teachers, <u>then and only</u> <u>then</u> will (7) students learn more or better.

Notice the many "degrees of separation" between our proposed solution strategy (reduced class size) and the recognized "bottom line" of schooling (improved student learning). To complicate matters further, even if students learn more or better, they may not be able to demonstrate their improved learning if the tests used to judge their improved learning are misaligned with the curriculum and instruction they receive. There are no simple solutions to the most common and perplexing educational problems.

Second, and directly related to the first point, <u>we need to formulate and</u> <u>use more comprehensive evaluation models and methods</u>. Returning to the reduced class size example, an appropriate evaluation model would include methods of collecting data on all of the factors included in the causal model. Do teachers know their students better? Are there fewer discipline problems? Are teachers more confident in their teaching ability? If the data collected suggest

that the answers to these questions are "no," there is no need to go any further. Even if there is an increase in student learning, that increase cannot be attributed to reduced class size.

Third, we need to understand that incremental change is more likely to solve our problems than is revolutionary change. Incremental change requires both comprehensive evaluation models and methods and the use of evaluation results not only to determine the effectiveness of our solution strategies, but to suggest improvements that will make them even more effective. This type of evaluation is referred as "formative evaluation." In contrast to incremental change, revolutionary change involves throwing the baby out with the bathwater, eliminating the "old" solution strategy and starting over "from scratch." The American education landscape is littered with "old" solution strategies that were tried and found wanting, but somehow manage to reappear in a slightly different form with a new generation of educators and policymakers.

Fourth, we need to be more precise in the way in which talk about problems. Note that I placed each of the three problems that I used as examples in quotations. What does it really mean when we say that Johnny can't read or that 20 percent of our high school seniors are reading at or below the eighth grade level? To understand the "reading problem" we must use words that convey the nature of the problem, describe how it changes over time, suggest possible causes of the problem, provide details about how our solution strategy operates on a day by day basis, and explain why it is likely to solve the problem as we understand it.

Finally, as educators, we need to be more patient than we have been in the past. At first blush, this recommendation may seem to be contrary to the need for a "sense of urgency." However, a sense of urgency does not mean rushing to find solutions to problems that we do not fully understand. One can have a sense of urgency and still be logical, methodical, and orderly.

These are difficult problems to solve; problems that have been with us for many decades. They are not going to be solved over night. There are no magic

bullets. We need to develop thoughtful solutions to well-defined problems, work hard and long toward solving these problems, and learn from our mistakes. All of these take time!

References

American Institutes of Education. (1999). *An educator's guide to schoolwide reform*. Arlington, VA: Educational Research Service.

Anderson, L. W. (2000). Why should reduced class size lead to increased student achievement? In M. C. Wang & J. D. Finn (Eds.). *How small classes help teachers do their best*. Philadelphia, PA: Laboratory for Student Success.

Anderson, L. W. (Ed.), Krathwohl, D. R. (Ed.), Airasian, P. W., Cruikshank, K. A., Mayer, R. E., Pintrich, P. R., Raths, J., & Wittrock, M. C. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. New York: Allyn-Bacon Longman.

Anderson, L. W. *et al*. (2006). *Action research project on classroom management and student behavior*. Florence, SC: Center of Excellence to Prepare Teachers of Children of Poverty.

Anderson, L. W. *et al*. (2007). *Classroom management as human relations: An action research study*. Florence, SC: Center of Excellence to Prepare Teachers of Children of Poverty.

Bandura, A. (1997). Self efficacy: The exercise of control. NY: Worth Publishers.

Bonfadini, J. E. (1993). *Discipline: Education's number one problem*. Blacksburg, VA: Virginia Council on Technology Teacher Education.

Brophy, J. E. (1986). *On motivating students*. East Lansing, MI: Institute for Research on Teaching, Michigan State University.

Brophy, J. E. (2004). *Motivating students for learning, 2nd edition*. Mahwah, NJ: Lawrence Erlbaum Associates.

Center for Education Statistics. (2004). *NAEP long-term trend summary data tables*. (http://nces.ed.gov/nationsreportcard/ltt/results2004/2004_sdts.asp).

Center for Public Education. (2007). *Score wars: Comparing the National Assessment of Educational Progress with state assessments.* (http://www.centerforpubliceducation.org).

Coeyman, M. (2003). Twenty years after "A Nation at Risk," *Christian Science Monitor*, April 22.

Cotton, K. (2001). *Schoolwide and classroom discipline*. Portland, OR: Northwest Regional Educational Laboratory.

Currier, L. B. & Duguid, O. C. (1916). Phonics or no phonics? *Elementary School Journal*, *17*, 286-87.

Desimone, L. (2002). How can comprehensive school reform models be successfully implemented? *Review of Educational Research, 72*, 433 – 479.

Duke, D. (2007). Turning schools around. *Education Week*, *26* (24), 35.

Evans, M. (2006). *Leaving most children behind: Thirty years of education reform at Jefferson*. Portland, OR: Cascade Policy Institute.

Farber, P. J. (1999). Johnny *still* can't read? *Harvard Education Letter*, July/August [http://www.edletter.org/past/issues/1999-ja/read.shtml]

Goodwin, B & Dean, C. (2007). Three school improvement mistakes (and how to avoid them). *Leadership Insights. 55*, 3-4.

Hart, B. & Risley, T. R. (2003). The early catastrophe: The 30 million word gap by age 3. *American Educator, 27*, 4-7.

Hess, F. M. & Kendrick, R. (2007). Too many reforms? *Education Week, 27*(05), 30.

Kerschner, C. (2005). Educational reform. *The Claremont Letter, 1*(1), 1-4.

Levin, B. (2007). The lessons of international education reform. *Journal of Educational Policy, 12*, 253-266.

Lipsett, A. (2007). Schools must tackle the literacy problem. *Guardian Limited*. (http://education.guardian.co.uk/schools/story/0,,2182800,00.html).

Lumsden, L. S. (1994). *Student motivation to learn, ERIC Digest, Number 92*. Eugene, OR: ERIC Clearninghouse on Educational Management.

Martin, J. H. & Friedberg, A. (1989). *Writing to read*. Lebanon, IN: Grand Central Publishing.

O'Banion, T. (1997). *A learning college for the 21st Century.* Phoenix: American
   Council on Education/Oryx Press Series on Higher Education.

Orton, V. (1977). Why Johnny can't read. The National Review
   (http://dennyhatch.com/pdfs/Why_Johnny_Cannot_Read.pdf).

Richards, M. (2005). Throwing money at education will not lead to reform. The
   Seattle Times, April 26 (http://seattletimes.nwsource.com/html).

Roderick, M. (1993). *The path to dropping out: Evidence for intervention.*
   Plymouth, NH: Greenwood.

Serwach, J. J. (2003). Twenty years after 'A Nation at Risk:" Why national
   education reform failed. *The University Record Online.*
   (http://www.umich.edu/~urecord/0203/Mar17_03/04.shtml).

Vitto, J. M. (2003). *Relationship-driven classroom management.* Thousand
   Oaks, CA: Corwin Press.

Walberg, H. J. (1993). The knowledge base for educational productivity.
   International Journal of Educational Reform, 1, 5-15.

Weiss, S. (2003). *Highlights from the 2003 National Form on Educational Policy:*
   Nation at Risk continues to affect education systems. Denver, CO:
   Education Commission of the States.

Wood, B. (2007). *Storytelling in education.* (http://www.billwoodstoryteller.com/
   Storytelling.html).

Wooden, R. A. (2004). Needed: A more disciplined approach to learning.
   Christian Science Monitor (http://www.csmonitor.com/2004/0909/
   p09s02-coop.html?s=hns).