# Restructuring High-Poverty Elementary Schools for Success: A Description of the Hi-Perform School Design

In this, the second of a two-part series, Stanley Pogrow outlines the basic structure of the kind of school that will help the children of poverty gain ground and so reduce the learning gap.

# BY STANLEY POGROW

T IS shameful that our society has such high levels of poverty and that so many of the children born into poverty are concentrated in struggling schools across the country. We must confront the fact that, despite a century of alternating progressive and traditionalist reforms and despite the unselfish and creative efforts of many in high-poverty schools and of the profession as a whole, such schools generally remain highly ineffective in terms of their ability to reduce the learning gap or to accelerate their students after the third grade.

Nor are the current pure traditionalist approaches that districts are adopting in response to No Child Left Behind (NCLB) working. Though such reforms have historically produced some gains, these test gains tend to level off quickly, do not transfer to other liter-

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acy tasks, and are not sufficient to substantially reduce the remaining large learning gap. It is not enough to get everyone on the same page — the page needs some new prose.

Is it possible to develop more powerful and effective forms of high-poverty schools? This is a particularly important question now, because thousands of schools around the country are about to run out of time under NCLB and will have to be restructured or taken over by the state or some outside entity.<sup>1</sup> Such restructuring, though painful, represents an opportunity to create fundamental new designs. Either we can make superficial changes or we can use this opportunity to develop bold new designs that avoid the mistakes of past redesign movements. In addition, districts establishing new schools in low-income areas because of population shifts have to provide a desirable alternative to what local independent charters offer.

I believe that it is possible to establish far more effective high-poverty schools. One such approach is the Hi-Perform School redesign for high-poverty elementary schools.<sup>2</sup>

#### **DEVELOPING THE DESIGN**

In the October *Kappan*, I argued that the two essential features of a new design for more effective schools are 1) high-quality teachers and administrators and 2) a synergistic blend of the most effective traditionalist and progressive ideas. I note here a third ingredient that is especially important for schools serving children born into poverty: there must also be a way to realistically deal with the huge differences in skill levels among the students and the constantly shifting student populations.

Because I believe that if you build a better school, high-ability teachers and administrators will come, my research has focused on identifying the best progressive and traditionalist ideas to adopt for the design. I searched the literature for research on interventions that looked powerful enough to reduce the gap. However, I searched with a slightly different lens than most academicians. Rather than relying on reports of effectsize differences between experimental and control groups - the traditional research measure of effectiveness -I was more interested in work wherein the treatment group made unusually large gains and ended achieving at high levels. For example, the Success for All program reported major effect-size differences in its influential research in Baltimore. My own published research showed that, after five years in the program, the students entered the sixth grade reading the equivalent of three to four years below grade level. In terms of the criteria used in this search, that program would *not* be considered successful or suitable for my design. I tried to find interventions that worked powerfully with children of poverty, particularly after the third grade, when earlier gains tend to dissipate. Finally, only approaches that had been shown to work on some scale were considered.

Despite all the hoopla about reforms that work, I found only three interventions that seemed powerful enough to meet the criteria of my search. I then combined these three into a synergistic design, which I call "the Hi-Perform School." That does not mean that there are no other valuable ideas that could be incorporated into the design. It means that these three form the superstructure of the design, to which other desired elements can be added to finish the structure.

#### COMPONENTS OF THE HI-PERFORM SCHOOL DESIGN

**Modularized Continuous Progress.** The first powerful intervention incorporated into the Hi-Perform School is the Modularized Continuous Progress (MCP) approach developed by John Champlin in the 1970s for cultivating basic skills. MCP was the best way to implement Benjamin Bloom's Mastery Learning principles. Champlin was voted the first national superintendent of the year for this work, and I believe that it is the only programmatic initiative ever developed by a former pitcher for the Brooklyn Dodgers or, for that matter, by any other former professional athlete. MCP is an efficient and equitable way to provide basic reading and math skills, and as such it provides the traditionalist girders of the superstructure.

The breakthrough of the MCP approach was to solve the problem of the inherent inefficiency of teaching basic skills in classrooms as they are currently organized. Despite professional rhetoric, trying to meet students' needs at a particular point in time during reading and math instruction is extremely difficult — probably impossible — given the tremendous diversity of needs in the typical high-poverty classroom. When faced with a highly diverse classroom, teachers generally cope by aiming for the middle or for the lowest common denominator. At best, the teacher can really differentiate instruction to meet each individual's need only for a very small amount of time, and that is not enough for students who are behind. The problem of meeting students' individual needs is compounded in high-poverty schools by student mobility and absenteeism, which make it difficult for teachers to establish continuity. As a result, the typical high-poverty student starts falling further and further behind after the third grade.

Schools adjust to the inherent inefficiency of the standard approach to organizing basic-skills instruction by instituting supplemental remediation and reteaching. However, this remedial work is time-consuming and expensive. It is also inefficient, because even in the remedial groups there remains a wide diversity of needs. If students still struggle after something has been taught the second time, they get more "help," and it is taught to them a third time. This hitand-miss approach is so inefficient that high-poverty schools increasingly find themselves teaching reading three hours a day and ignoring other areas. Worst of all, the traditional model fails because remedial help has little or no impact after the third grade, as at-risk students' academic slide accelerates.

Schools have traditionally tried to solve the problem of diverse needs in the classroom by having high, low, and medium groups in each class. However, there still remains a high level of diversity within each of these groups, and students in the low group are essentially tracked in the low group as they move from one grade level to the next.

The bottom line is that organizing basic-skills instruction by grade level is an incredibly inefficient way to help either students who are struggling or those who are way ahead. The MCP approach changes this by reorganizing basic reading and math instruction by students' knowledge level instead of by grade levels or ability groupings. It subdivides the entire elementary reading and math curriculum into 40 to 55 sequential modules, scheduling students into the appropriate modules based on their existing knowledge and skill levels instead of into a classroom, grade, or teacher's room.

In reality, elementary reading and math are already divided into pieces — one for each grade. Students spend a year in each of these large pieces — i.e., a grade level of material — which covers a large amount of content. So the curriculum is already subdivided, albeit into very large pieces. The key step in the MCP process is to subdivide the existing yearlong pieces into smaller modules. Each of the new modules incorporates a relatively small set of skill requirements along with a benchmark indicator of mastery. Once schools have aligned and calibrated their curricula according to state standards, as most have done, the next step is to subdivide them into 40 to 55 sequenced subsets of the skills. *Any curriculum can be modularized!* 

With the MCP approach, each student is tested initially and placed in the module that corresponds to his or her knowledge and skill level at that point in time (regardless of grade level). Thereafter, *whenever* a student has mastered a given module's benchmark, he or she immediately moves to the next one. Individual students are constantly being advanced as soon as they are ready. Those who finish the entire sequence of modules prior to graduation are placed in enrichment modules.

This learning process is far more efficient than the standard model. It is also more equitable, because students are not tracked into "high" or "low" groups. Those who lag in their movement through the modules get help from "acceleration coaches." Those who move through the modules quickly, rather than being pre-labeled as "gifted," earn access to enrichment opportunities.

As a result, the reading and math basic skills instruction in each module is multigrade, and the composition of students in each given module is constantly changing. At the same time, the students are together with their age peers in a regular class setting for all other content instruction and school activities. This enables students to develop socially with a stable group of sameage peers for most of the school day. Clearly, this is a highly dynamic approach, with the distribution of modules required to meet student needs in constant flux. For example, at the beginning of a year, there may be a need to have four sections of Module #3 and only one of Module #15. As students progress, by mid-year there may be a need for only two sections of Module #3, while six sections of students are now ready for Module #15. In this organic approach, teachers redistribute themselves.<sup>3</sup> Some of those teaching Module #3 move to other modules for which the need has increased. In other words, teacher assign-

come more inclined to help one another.

I proposed this approach to teaching basic skills to the U.S. Department of Education (ED). The response was that I "had not submitted scientific evidence that teaching students where they are at is better than teaching them where they are not"! Hmm. My experience is that when you get such a mindless response from ED, you are on the right track.

In addition to producing much higher levels of basicskills achievement, the efficiency and effectiveness of the MCP approach provide additional equity and fi-

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ment flows to where students' skill needs are, as opposed to the existing system, in which a teacher has a static assigned grade and room and has to cope with a huge range of needs and skill levels. So part of the school day offers a highly organic and responsive approach driven by students' needs, as opposed to fitting students into teachers' static schedules and spaces.

The MCP approach is particularly beneficial for atrisk students, whether they are English-language learners, Title I, learning disabled, or recent immigrants. Mastering a small module is an easier, more manageable and tangible goal for them than is having to succeed at an entire year's work in order to be considered successful and get promoted. In this approach, students "pass," succeed, and get "promoted" many times during a school year. This breeds a "can-do" attitude. Much as students in a video game push to move to the next level, students begin to challenge one another to get to the next module and get through as many modules as possible each year. Students accelerate in their mastery of basic skills across all the grade levels because such instruction is always focused on their immediate skill needs. There is much more time-on-task at the current skill level of each student.

This approach will also appeal to those parents who are leaving public schools because they feel that their children are more advanced or can learn more quickly and are being held back by low standards. Their children can accelerate to their full ability and reach the enrichment level. In addition, once acceleration becomes a peer norm, all students may start to pressure their parents to help them more at home and may benancial benefits. First, because all students are being instructed where their needs are at any given time, there is no need for remediation. This saves one to two hours per school day, valuable time that can be used for other vibrant forms of teaching and learning. This also saves the cost of expensive remedial interventions.

Second, there is no need to retain students, because they are always being taught at an appropriate level. In other words, there is no longer any rationale for not promoting struggling students. Retention is tremendously inefficient. It is the equivalent of having a group trying to hike up a mountain and imposing the policy that those who do not make it to the top in a certain amount of time have to start over again from the bottom. Retained students go back to the beginning of the year and generally repeat that same year's work. In the modular system, those who do not make it to the "top" by the end of a year continue to hike from the point they reached — i.e., students continue to progress from where they are in the reading and math sequence. Eliminating the need for retention avoids its politically contentious and stigmatizing effects as well as the huge cost of keeping students in school an extra year.

Third, and best of all, Champlin's unpublished research shows that, two years into the program, 60% of the eighth-grade students were six months or more *above* grade level. Indeed, students' rate of acceleration through the modules increased over time. This is tremendously significant — instead of falling behind after the third grade, the students experience accelerated progress in the upper grades. So rather than demeaning traditional forms of teaching and learning, or swamping the school schedule with a sole focus on teaching and reteaching basic skills, the Hi-Perform School design offers direct instruction in basic skills in an efficient and dynamic form that focuses on the needs of students rather than on the needs of the institution. It is in effect a practical, child-centered approach to basic skills.<sup>4</sup> The extensive time and money saved in basic-skills instruction is then used to provide the two other uniquely effective interventions in the design, which happen to be progressive.

**Participation in dramatic and musical productions.** Research by James Catterall and associates on a national database showed that participation in dramatic productions increased the reading scores of low-income high school students to a greater extent than those of advantaged students.<sup>5</sup> Shirley Brice Heath showed that the growth resulted from the group task's eliciting more sophisticated uses of language from students than are called for in the typical classroom.<sup>6</sup> Thus for test score gains to occur, students must be involved in major decision-making components of such productions.

In the Hi-Perform School, all students would participate in planning and putting on several such productions. This does not necessarily mean that every group would put on a production for the entire school or a school assembly. If you use the model of a theater school, some productions are indeed put on for the large stage, but the majority are put on to provide performance experience before a smaller audience, usually fellow theater students and friends. So, for example, older students could put on performances for younger students and serve as role models.

In addition, this approach gets at multiple intelligences. Some students would be actors and actresses; others would contribute by creating sets, costumes, music, and even scripts. When all students in a school participate, the teachers' roles change. Rather than having a "drama teacher" who controls all aspects of the major school production, teachers would serve as coaches to help students select material and organize themselves into mini-theater groups.

The three main requirements would be that: 1) starting at an agreed-upon grade, all students would participate in at least one production a year; 2) students would be involved in all aspects of decision making as to content and direction; and 3) community arts groups and artists would be drawn in to inspire and provide assistance. The goal would be for each school to tap into local cultural traditions.

Thinking-skill-development sequence anchored by HOTS. The third uniquely effective intervention, also a progressive element, incorporated into the Hi-Perform School is based on my own large-scale reform, the Higher Order Thinking Skills (HOTS) project. For the past 25 years, HOTS has systematically provided thinking development to Title I and learningdisabled students in grades 4 through 8 in lieu of supplemental remedial work and test prep. This thinkingdevelopment approach yields substantially higher testscore gains than remedial or test-prep approaches approximately three times the growth in reading comprehension — even as it produces gains in overall intellectual and social development. My research has identified the specific conditions under which such transfer occurs and has demonstrated that the falloff in student acceleration after the third grade results from either the absence of any thinking development or, just as bad, improperly sequenced thinking development. In terms of the latter, though disadvantaged students are bright, to be successful in thinking-in-content activities, they must first develop a general sense of understanding about how to deal with abstract ideas and how to generalize and integrate information. They have to first learn how to understand "understanding." Developing a sense of understanding is the critical preliminary thinking-development step that HOTS provides through intensive, daily, small-group Socratic discussions over a oneto two-year period.<sup>7</sup>

As a result of this large-scale research in 2,600 schools with 500,000 students, the thinking-development strand of the Hi-Perform School is divided into three developmentally appropriate stages. In K-3, all teachers consistently use a few basic questioning techniques to get students accustomed to responding to a set of thought-provoking questions. In grades 3-5, most students are placed into small-group intensive Socratic learning environments similar to the HOTS program for 35 minutes a day. Starting in the middle of the fourth or fifth grade, intensive thinking and problem solving are integrated into all content learning. Content-based thinking approaches such as Supermath,<sup>8</sup> Junior Great Books, and others are integrated into the regular content instruction and the enrichment modules.

**Design synergies.** Both the drama-participation and thinking-development strands provide benefits on their own in the form of sparking artistic fascinations, intellectual development, and curiosity. Just as important, both of them accelerate the acquisition and retention of basic skills and content knowledge to a far greater extent than would otherwise occur. Both progressive strands encourage and enable students to use basic skills in a far more sophisticated, contextually based, and integrated fashion — thus producing much higher test scores than strictly traditional approaches and remediation. That is the power of transfer from creative involvement and a sense of understanding.<sup>9</sup>

Once at-risk students have internalized a sense of understanding, they succeed in content-based thinking and problem solving. In addition, a sense of understanding accelerates the learning, use, retention, and transfer of the basic skills developed in the MCP approach. A sense of understanding transfers across all forms of learning: it produces the basic-skill and academic-content gains emphasized by traditionalists, and it increases the overall individual intellectual and social growth emphasized by progressives. The result is a winwin situation for the differing philosophical traditions — as well as for students and teachers.

#### DESIGN VERSUS MODEL

The Hi-Perform School is a design rather than a model. It defines only the superstructure while leaving opportunity for local customization. The design does not dictate what reading or math curriculum a school should use; it specifies only that the school modularize the one that it feels best meets its needs. It does not dictate who should provide staff development for anything other than the thinking-development strand. Though the sequence of thinking development is specified, as is the curriculum for the HOTS middle stage, that specification is only for two grade levels for 35 minutes a day. The drama strand allows for a great deal of customization and community involvement.

In addition, schools can adopt other reforms, such as two-way bilingualism. The only requirement is that the curricular superstructure of the three specified reforms be in place. Schools can also decide on their enrichment modules.

#### IMPLEMENTING THE HI-PERFORM SCHOOL DESIGN

This design is only for a school that is starting from scratch, either as a new school or as a restructured school. This is an essential point, because it is critical that the administrators and teachers volunteer to be part of this type of school and that they come with a track record of success.

Clearly, implementing the MCP approach requires more flexible teachers and administrators and involves scheduling and negotiation issues that must be worked out with unions and staffs. At the same time, there are administrators and teachers who will want to participate in a more flexible type of school schedule. The feasibility of using MCP was demonstrated by the spread of this approach in the 1970s and early 1980s.

School personnel should anticipate a minimum of a year of curricular planning to prepare to implement the Hi-Perform School design. During this period, the basic reading and math curricula would be modularized, the organization of the drama-participation strand and the enrichment modules would be planned, and union negotiations and teacher recruitment would be conducted.

Once people understand that this design does not require their school to adopt new reading and math curricula, the biggest concern I hear is, "If reading and math are not grade-based, how will we get students ready to take state grade-level exams as required by NCLB?" First, this being a new school, there is leeway for a few years in meeting standards. Second, the current vogue of teaching all students at grade level regardless of how far behind they are is managerially simple and seductive but does not really develop grade-level skills. With the MCP approach, by the time that new accountability demands kick in, the majority of students will have accelerated to being *above* grade level. However, to allay concerns, it would be prudent to suspend the MCP schedule for one to two weeks prior to the state tests to provide all students with grade-level test preparation for the first year or two. After a year in this type of school, students will be doing far better on the tests than students in conventional high-poverty schools.

The initial goal is to establish 10 Hi-Perform elementary schools across five or more districts. I would be available to 1) assist districts during the planning year, 2) provide some of the needed staff development, and 3) establish a communication network between school leaders across the sites and districts. Network users would share ideas about how to implement the drama-participation strand and the enrichment modules and provide support and encouragement to one another. Some districts may want to seek support from local foundations for start-up costs, but after that the school should run at the same budget level as traditional schools, as the design merely reallocates how existing time is used.

#### SIGNIFICANCE OF THE HI-PERFORM SCHOOL PROJECT

We do not need to yield to the pessimistic view that schools cannot make powerful differences on a large scale in the lives of children born into poverty. Though restructuring is a wrenching dislocation for everyone involved, we can either focus on complaining and redoing failed approaches, or we can view it as an opportunity to create great schools built on bold and better designs. If we are not bold, many urban districts and high-poverty schools will continue the trend of losing students to alternatives at a high rate — with or without NCLB.

The Hi-Perform School design provides a practical way to reallocate time and funds and thereby harness and combine the best traditional and progressive approaches. It promises to produce far greater test-score gains while developing the overall intellectual and social potentials of at-risk students to their fullest. This design also unifies the intellectual traditions of developing basic, artistic, and thinking skills in a highly synergistic fashion.

Alas, as of this moment, the Hi-Perform School design exists only on paper. I am looking for some brave souls who would like to know, "What would happen if you took three very different interventions that were uniquely powerful in their own right and combined them in a school?" I am hoping that some will be willing to exert leadership and work with me to put this new design in place.

Such an effort would demonstrate the power of more appropriate school designs to reduce the learning gap and lift up children of poverty. It would also generate new knowledge on how to better integrate multiple, differing reforms. The success of this design on both traditional and progressive outcomes would free us from the "one best approach" mentality of school leadership and reform that has dominated our profession for more than a century. It would also serve as a catalyst for other unique designs to be developed, tried, and funded. Most important, the success of this bold design would demonstrate that high-poverty public schools can unlock the tremendous intellectual and creative potential of their students and that we can turn them into lighthouse schools on a large scale.

6. Shirley B. Heath and Adelma Roach, "Imaginative Actuality: Learning in the Arts During the Nonschool Hours," in Fiske, pp. 19-34.

8. Stanley Pogrow, "Supermath: An Alternative Approach to Using Technology to Teach Math," *Phi Delta Kappan*, December 2004, pp. 297-303.

<sup>1.</sup> Schools that fail to make AYP for three consecutive years go into the restructuring phase. NCLB offers districts the following options for restructuring such schools: 1) reopen the school as a charter, 2) replace all or most of the staff, including the principal, 3) contract with an outside entity to manage the school, 4) face state takeover, or 5) undergo other major restructuring. This article refers to districts that choose to retain control of failed schools under option 1, 2, or 5.

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Each teacher is responsible for teaching several modules at several different grade levels. The overall responsibility in terms of the number of topics will be the equivalent of a whole year's worth of content.

<sup>4.</sup> The MCP approach is unique in that it successfully combines elements of both progressive (child-centered) and traditional (a systematic, linear, basic-skills curriculum) goals.

<sup>5.</sup> James Catterall, Richard Chapleau, and John Iwanaga, "Involvement in the Arts and Human Development: General Involvement and Intensive Involvement in Music and Theater Arts," in Edward B. Fiske, ed., *Champions of Change: The Impact of the Arts on Learning* (Washington, D.C.: Arts Education Partnership, President's Committee on the Arts and the Humanities, 1999), pp. 1-18.

<sup>7.</sup> The findings of the conditions needed to develop a sense of understanding and to produce transfer from thinking development to increased academic achievement are contained in Stanley Pogrow, "HOTS Revisited: A Thinking Development Approach to Reducing the Learning Gap After Grade 3," *Phi Delta Kappan*, September 2005, pp. 64-75. This article can be obtained through Phi Delta Kappa or by contacting the author.

<sup>9.</sup> This synergy is a subtle departure from conventional progressive ideology, which seeks to have all basic skills learned in context. In this design, basic skills are learned in a highly efficient manner and applied in a motivational context in a separate process. This respects the progressive instinct, but it does so in a more practical and powerful way. It also provides greater freedom for the child to construct his or her own context of understanding and pursue deeper learning.

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