

# **Changes in Schooling by Infusing More Effective Practices Into Existing School Structures: The Secret Laboratory of School Improvement**

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Problems cannot be solved at the same level of consciousness that created them!  
—Albert Einstein

Two afternoons a week, 12-year-old Kelvin goes to an enrichment cluster at the Noah Webster School in Hartford, Connecticut. When he was selected for the program, Kelvin said, “It feels good, but I was amazed. I was about to faint! I was super, super surprised.” The reason for Kelvin’s amazement was that he had never considered himself to be a good student, at least not in the traditional way. And the program was not exactly the kind of place you would expect to find youngsters like Kelvin, who lives in subsidized housing and whose family manages to survive on a monthly welfare check and food stamps.

But the cluster Kelvin is enrolled in looks at talent development in a different way. Based on a plan called the Schoolwide Enrichment Model (SEM), the program seeks to identify and serve a broad range of talent potentials in all students. The use of a strength assessment guide called the Total Talent Portfolio helps to focus attention on student interests and learning-style preferences, as well as on strengths in traditional subjects. Kelvin’s strongest academic area is mathematics, and, through a process called curriculum compacting, he is now being provided with mathematics material that is two grade levels above the level of the math being covered in his classroom.

Kelvin, who once described himself as a “mental dropout,” now finds school a much more inviting place. He is hoping to use the research he is doing in his enrichment cluster on the design of airplane wings to enter a state science fair competition. He is also thinking about a career in engineering, and the enrichment specialist has helped him apply for a summer program at the University of Connecticut that is designed to expose minorities to professions that are related to mathematics and engineering. “School,” says Kelvin, “is a place where you have must-dos and can-dos. I work harder on my must-dos so I can spend more time working on my can-dos.”

## **The Secret Laboratory of School Improvement**

Kelvin is an example of the ways in which numerous students are being given opportunities to develop talent potentials that too many schools have ignored for too many years. The type of program in which Kelvin is involved is not a radical departure from present school structures, but it is based on assumptions about learners and learning that are different from those that have guided public education for many years.

The Einstein quotation at the beginning of this article contains words of wisdom that we must consider if there is any hope of turning around a public education system that is slowly but surely deteriorating into a massive warehouse of underachievement, unfulfilled expectations, and broken dreams. The factory model of schooling that gave rise to the clear and present danger now facing our schools cannot be used to overcome the very problems that it has created. And yet, as we examine reform initiatives, it is difficult to find plans and policies that are qualitatively different from the old top-down patterns of school organization or the traditional linear/sequential models of learning that have dominated our schools.

Transcending these previous levels of consciousness will not be an easy task. If there is any single, unifying characteristic of today's schools, that characteristic is surely a resistance, if not an immunity, to change. The ponderous rhetoric about school improvement and the endless lists of noble goals need to be tempered with a gentle and evolutionary approach to change that school personnel can live with and grow with, rather than be threatened by.

I describe here a plan that has demonstrated its effectiveness in bringing about significant changes in schooling. That plan, the Schoolwide Enrichment Model, is a systematic set of specific strategies for increasing student effort, enjoyment, and performance and for integrating a broad range of advanced learning experiences and higher-order thinking, skills into any curricular area, course of study, or pattern of school organization. The general approach of the SEM is one of infusing more effective practices into *existing* school structures. This research-supported plan is designed for general education, but it is based on instructional methods and curricular practices that originated in special programs for high-ability students. These programs have been an especially fertile place for experimentation because they are not usually encumbered by prescribed curriculum guides or traditional methods of instruction. It was within the context of these programs that the thinking-skills movement first took hold in American education and the pioneering work of such notable theorists as Benjamin Bloom Howard Gardner, and Robert Sternberg first gained the attention of the education community.

Research opportunities in a variety of special programs allowed us to develop instructional procedures and programming alternatives that emphasize the need 1) to provide a broad range of advanced-level enrichment experiences for *all* students and 2) to use varied student responses to these experiences as steppingstones for relevant follow-up. This approach is not viewed as a new way to identify, who is or is not "gifted" rather, the process simply identifies how subsequent *opportunities, resources, and encouragement* can be provided to support the continuous escalation of student involvement in both required and self-selected activities. This approach seeks to develop high levels of multiple potentials in a broad range of students.

Practices that have been a mainstay of many special programs for "the gifted" are being absorbed into general education by reform models designed to upgrade the performance of all students. This integration of know-how from programs for the gifted is a favorable development for two reasons. First, the adoption of many of these practices

is indicative of the viability and usefulness of both the know-how of special programs and the role that enrichment specialists can and should play in total school improvement. Second, *all* students should have opportunities to develop higher-order thinking skills, to pursue more rigorous content than is typically found in today's "dumbed-down" textbooks, and to undertake firsthand investigations. The ways in which students respond to enriched learning experiences should be used as a rationale for providing all students with advanced level follow-up opportunities. The SEM approach reflects a democratic ideal that accommodates the full range of individual differences in the entire student population, and it opens the door to programming models that develop the talent potentials of many at-risk students—those often excluded from anything but the most basic of curricular experiences.

The transfer of know-how from special programs into general education is supported by a wide variety of research on human abilities (Bloom, 1985; Gardner, 1983; Renzulli, 1978; Sternberg, 1984). This research clearly and unequivocally endorses much broader conceptions of talent development. And these broader conceptions argue against the restrictive student selections practices that guided identification procedures in the past. Laypersons and professionals at all levels have begun to question the efficacy of programs that rely on I.Q. scores and other measures of cognitive ability as the primary methods for identifying which students can benefit from differentiated services. Traditional identification procedures have restricted services to small numbers of high-scoring students and have excluded large numbers of at-risk students.

Special services should be viewed as opportunities to *develop* gifted behaviors rather than merely to find and certify them. In this regard, we should judiciously avoid saying that a young person is either "gifted" or "not gifted." It is difficult to gain support for talent development when we say such things as "Elaine is a gifted third-grader." Such statements offend many people and lead to the accusations of elitism that have plagued special programs. But note the difference in orientation when we focus on the behavioral characteristics that brought this child to our attention in the first place: "Elaine is a third-grader who reads at the adult level and who has a fascination with biographies about women scientists." And note the logical and justifiable services that we might provide for Elaine: under the guidance of her classroom teacher. Elaine is allowed to substitute for the third-grade reader more challenging books in her interest area; she leaves the school two afternoons a month to meet with her mentor, a local journalist specializing in gender issues; and during time made available through curriculum compacting in her strength areas (i.e., reading, language arts, and spelling), the schoolwide enrichment teaching specialist helps Elaine prepare a questionnaire and an interview schedule to be used with local women scientists.

Could even the staunchest opponent of programs for the gifted argue against the logic or the appropriateness of these services? When programs focus on developing the behavioral potentials of individuals or of small groups whose members share common interests, we can avoid the controversies surrounding the "G word" by *labeling the services rather than the students*. Through the use of the Schoolwide Enrichment Model, we can serve both traditional high-achieving students, such as Elaine, and students who show their talents in a variety of other ways, such as Kelvin. A detailed

description of the model is beyond the scope of this article, but, as mentioned earlier, the plan is based on a thorough assessment of students' strengths through the Total Talent Portfolio, and it offers a broad continuum of services purposefully designed to capitalize on various strengths (Renzulli & Sally, 1994; 1997).

### **Schoolwide Enrichment and Education Reform**

Most efforts to make major changes in schooling have failed. Although there is endless speculation about why schools are so resistant to change, most theorists and policy makers have concluded that tinkering with single components of a complex system will give only the appearance of improvement rather than the real and lasting change so desperately sought by educational leaders. Examples of tinkering are familiar to most educators. For instance, more rigorous curriculum standards, without improved curricular materials and teachers able to use them, will not yield significantly improved academic performance. Similarly, tinkering designed to force change in classrooms (e.g., high-stakes testing) may create the illusion of improved achievement, but the reality is increased pressure on schools to expand the use of compensatory learning models that, so far, have contributed only to the “dumbing down” of curriculum and the lowering of academic standards. Teacher empowerment, school-based management, an extended school day and year, and revised teacher certification requirements are merely illusions of change when state or district regulations prescribe the curriculum through the use of tests that determine whether schools get high marks for better performance.

How, then, do we establish an effective change process—one that overcomes the long record of failed attempts? The leverage we need to make meaningful change cannot be had without doing away with two mindsets: 1) that one person or one group knows the right answer and 2) that change is linear. The only reasonable solution is to develop a process in which the adoption of policy and the adoption of practice proceed simultaneously! Policy makers and practitioners need to collaborate during all phases of the change process by examining local capacity and motivation in conjunction with the desired changes. Thus neither policy makers nor practitioners can reform schools by themselves; instead, both must come together to shape a vision and develop the procedures that will be needed to realize and sustain that vision.

Peter Senge compares “visioneering” to a hologram, a three-dimensional image created by interacting light sources:

When a group of people come to share a vision... each sees his or her own picture. Each vision represents the whole image from a different point of view. When you add up the pieces of the hologram, the image does not change fundamentally, but rather becomes more intense, more lifelike, more real in the sense that people can truly imagine achieving it. The vision no longer rests on the shoulders of one person [or one group], but is shared and embodies the passion and commitment of all participants (1990, p. 312).

The Schoolwide Enrichment Model has been developed around a vision that my colleagues in the Center for Talent Development at the University of Connecticut and I have shared for a number of years. This vision is also embraced by thousands of teachers and administrators with whom we have worked in academic programs and summer institutes dating back to the 1970s. Simply stated, this vision is that *schools are places for talent development*.

Academic achievement is an important part of the vision and of the model for school improvement. However, we also believe a focus on talent development places the need for improved academic achievement into a larger perspective about the goals of education. The things that have made our nation great and our society productive are manifestations of talent development at all levels of human activity. From the creators and inventors of new ideas, products, and art forms to the vast array of people who manufacture, advertise, and market the creations that enrich our lives, there are levels of excellence and quality that contribute to our standard of living and way of life. Our vision of schools for talent development grows out of the belief that *everyone* has an important role to play in the improvement of society and that everyone's role can be enhanced if we provide all students with the opportunities, resources, and encouragement to develop their talents as fully as possible.

The SEM is a practical plan for making our vision of schools for talent development a reality. We are not naive about the politics, personalities, and financial issues that often supersede the pedagogical goals that are the focus of the model. At the same time, we have seen this vision manifested in schools located in places ranging from struggling urban areas and isolated and often poor rural areas to affluent suburbs. We believe that the strategies are flexible enough for making any school a place for talent development.

There are no quick fixes or easy formulas for transforming schools into places where talent development is valued and vigorously pursued. However, our experience has shown that, once the concept of talent development catches on, students, parents, teachers, and administrators will begin to view their school in a different way. Students become more excited and engaged in what they are learning; parents find more opportunities to become involved in all aspects of their children's learning; teachers begin to discover and use a variety of resources that, in the past, seldom found their way into classrooms; and administrators start to make decisions that affect learning, rather than merely enforce "tight ship" efficiency.

Everyone has a stake in having public schools that provide all our young people with high-quality education. Parents benefit when their children are happy and successful in school. Employers and colleges benefit when they have a steady supply of young people who are competent, creative, and effective in the work they do and in the higher learning they undertake. Political leaders benefit when good citizens and a productive population contribute to a healthy economy, a satisfying quality of life, and respect for the values and institutions of our democracy. And professional educators at all levels benefit when the quality of schools for which they are responsible is high enough to create respect for their work and generous financial support for the educational enterprise.

Everyone has a stake in good schools because schools create and re-create a successful modern society. Renewed and sustained economic growth and the well-being of all citizens require investment in high-quality learning in the same way that previous generations invested in machines and raw materials. Our schools are already dumping millions of functionally illiterate young people into the work force, and more and more colleges are teaching remedial courses that deal with material once taught in high school.

Although everyone has a stake in good schools, America has been faced with a “school problem” that has resulted in declining confidence in schools and in the people who work in them. This decline has manifested itself in drastic limitations in the amount of financial support for education and in general public apathy toward or dissatisfaction with the quality of education our young people are receiving. The parents of poor children have largely given up hope that education will enable their sons and daughters to break the bonds of poverty. And middle-class parents, perhaps for the first time in our nation’s history, are exploring government supported alternatives such as vouchers and tax credits for private schools, home schooling, charter schools, and summer and after-school programs that enhance their children’s chances for admission to competitive colleges.

A great deal has been written about America’s “school problem.” Studies, commissions, and reports have been issued, and even a governors’ summit conference has been held—all in pursuit of solutions to the problems facing our schools. But the hundreds if not thousands of conferences, commissions, and meetings and the tons of reports, proclamations, and lists of goals have yielded only minimal results, mainly because they have generally focused on tinkering with traditional methods of schooling.

### **Three Key Ingredients of School Improvement**

If the traditional methods of schooling have failed to bring about substantial changes, we must look to different models that show promise of achieving the types of school improvement that we so desperately need. New models must focus their attention on three major dimensions of schooling: the act of learning, the use of time, and the change process itself.

*The act of learning.* School improvement must begin by placing the act of learning at the center of the change process. Such organizational and administrative structures as vouchers, site-based management, school choice, multi-aged classes, parent involvement, and extended school days may be important considerations, but they do not address *directly* the crucial question of how we can improve what happens in classrooms, where teachers, students, and curriculum interact with one another.

One of the things we have done in developing the SEM is to base all recommendations for school improvement on the learning process. It is beyond the scope of this article to explain this process in detail, but we must take account of the important components that students bring to the act of learning. Thus, when examining the learner, we must take into consideration: 1) present achievement levels in each area of study, 2) the

learner's interest in particular topics and the ways in which we can enhance present interests or develop new interests, and 3) the preferred styles of learning that will improve the learner's motivation. Likewise, the teacher and learner dimensions have subcomponents that must be considered when we place the act of learning at the center of the school improvement process (Renzulli, 1992).

*Use of time.* Although it would be interesting to speculate about why schools have changed so little over the decades, at least part of the reason has been our unwillingness to examine critically the issue of school time. If the ways we currently use school time were producing remarkably positive (or even adequate) results, there might be an argument for maintaining the traditional schedule and calendar. But such is not the case.

The universal pattern of school organization that has emerged over the years has contributed to our inability to make even the smallest changes in the overall process of learning. This pattern is well-known to educators and laypeople alike. The "major" subject areas (reading, mathematics, science, language arts, and social studies) are taught on a regular basis, generally five days a week. Other subjects, sometimes called "the specials" (such as music, art, and physical education) are taught once or twice a week. So accustomed have we become to the rigidity of this schedule that even the slightest hint of variation is met with a storm of protest from administrators and teachers. "We don't have time to cover the regular curriculum now." "How will we fit in the specials"? "They keep adding new things like drug education and sex education for us to cover."

Our unthinking acceptance of the elementary and secondary school schedule causes us to lose sight of the fact that at the college level, where material is ordinarily more advanced and demanding, we routinely drop from five class meetings per week, to three or even two. And our adherence to the "more time is better" argument fails to take into account research that shows just the opposite. For example, international comparison studies report that schools in eight of the 11 nations that surpassed the U.S. in an assessment of mathematics achievement spend less time on math instruction than do American schools (Jaeger, 1992). In the SEM, a number of alternative scheduling patterns are based on selectively "borrowing" one or two class meetings per month from the major subject areas. This approach guarantees that a designated time will be available each week for advanced-level enrichment clusters.

*The change process itself.* The approach to school improvement being recommended here is a realistic one because it focuses on those aspects of learning and development over which schools have the most influence. Therefore, the probability of achieving success is greatly increased.

Schools are constantly being bombarded with flavor-of-the-month proposals for change. These proposals range from total "systemic reform" to tinkering with bits and pieces of specific subjects and teaching methods. Often the proposals are little more than lists of intended goals or outcomes, and only limited direction is provided about *how* these outcomes are to be achieved. Even less information is provided about the effectiveness

of recommended practices in a broad range of field-test sites. Worse yet are the mixed messages that policy makers and regulators are beaming to schools at an unprecedented rate, messages that are often incompatible with one another. For example, one state mandated a core set of standards for students but then evaluated teachers on the basis of generic teaching skills that had nothing to do with the standards. In some places schools are encouraged to raise standards, and advocates of site-based management urge teachers to become more active in curriculum development. But, these same schools are rated on the basis of test scores tied to lists of state-specified, outcome-based competencies. A recent study by George Madaus showed that the most widely used tests measure low-level skills and knowledge and that teachers are under pressure to emphasize such material because it shows up on the tests (Madaus, 1992). The study also reported that teachers and administrators believed that the tests forced them to compromise their ideals about good teaching.

We believe that school improvement can be initiated and built upon through gentle and evolutionary strategies for change. These strategies must concentrate first on the act of learning as represented by the interactions of learners, teachers, and the curriculum. In the early stages of the change process, these strategies should make minimal, but specific, changes in existing schedules, textbook usage, and curricular conventions. And these strategies should be based on practices that have already demonstrated favorable results in places where they have been used for reasonable periods of time and with groups from varying ethnic and economic backgrounds.

We also believe that the individual school is the appropriate level at which to address school improvement and that effective and lasting, change can occur only when it is initiated, nurtured, and monitored from within the school itself. Regulations and remedies brought in from outside the school have seldom changed the daily behavior, of students and teachers or dealt effectively with solutions to inside-of-school problems (Barth, 1990). A simple but sincere waiver of top-down regulations: a plan that involves consensus and shared decision making on the arts of administrators, parents, and teachers; and incentives for specific contributions to the change process must be the starting points and are the only “big decisions” policy makers need to make in order to initiate a gentle and evolutionary school improvement process.

Our goal in the Schoolwide Enrichment Model is not to replace existing school structures, but rather to apply the strategies and services that define the model to improve the structures to which schools have already made a commitment. Thus, for example, if a school has adopted national standards, whole-language learning models, or site-based management, the purpose of the SEM is to help these structures become maximally effective. We view this process as an infusion approach to school improvement rather than as an add-on or replacement approach. The main targets of the process are those factors that have a direct bearing, on the act of learning. Evaluations of SEM programs have indicated that the model is systematic, inexpensive to implement, and practical in a commonsense sort of way that makes it appealing to both professionals and laypeople (Olenchak & Renzulli, 1989).



## How to Start a School Improvement Process

As is always the case with any change initiative, a person or a small group of people becomes interested in something that seems likely to be good for the school. I hope that those who read this article and the longer materials cited in the references will play this role. If that happens, I recommend the following series of actions for examining and implementing the model.

The principal and representatives of groups in the school's nuclear family should form a steering committee. There are only three guidelines for the steering committee as it embarks on a process for exploring the plan presented in this model. (I emphasize *exploring* because consensus must be reached at each step of the committee's process in order for the plan to work.) First, all steering committee members should be provided with information about the Schoolwide Enrichment Model so that they are well informed and can engage in an intelligent discussion about whether or not they are interested in the plan. All steering committee members should have equal rights and opportunities to express their opinions. If a majority decision is reached to recommend the plan to the school community at large, information should be made available to all faculty members and parents. Older students (middle grades and above) should also be asked to participate in the discussions.

Second, the steering committee should arrange a series of discussion group meetings that include members of all subgroups in the school's nuclear family. In setting up the discussion groups, it is important to avoid having separate parent groups, teacher groups, and administrator groups. Grouping by role is a classic error that has plagued communication in the school community, and it is the main contributor to the "us-versus-them" mentality that pits one group against another. Printed information, research findings, key diagrams and charts, and the results of steering, committee deliberations should be brought to the attention of the discussion groups.

The discussion groups should elect a chair and a recorder, they should remain intact for the duration of the examination process, and they should set a mutually acceptable schedule of dates and times for meetings. The meetings should continue until everyone has had a chance to express his or her opinions, after which a vote should be taken as to whether or not to proceed with the plan. The voting outcomes from each discussion group should be reported to the steering committee, and a report of all the votes should be issued to the school's nuclear family. The report should also contain each group's suggestions and concerns.

If at least two-thirds of those voting express an interest in going ahead with the plan, the steering committee should make arrangements to meet with the superintendent or appropriate central office personnel. Once again, descriptive material about the model should be provided, and the model should be characterized as a pilot or experimental venture. Assurances should be given that there is no intention to replace any of the programs or initiatives that the district has already adopted. The fastest way to a polite but firm rejection from the central office is to threaten existing programs or policies to which decision makers have already made a commitment. It is worth repeating that the

goal is to *infuse* exemplary learning and teaching, opportunities into the existing school frameworks.

A third guideline concerns strategies for overcoming roadblocks that might present themselves during the examination process. Any plan for school change is a lightning rod for naysayers, self-proclaimed experts, and people who are reluctant to endorse almost anything involving thinking or doing something differently. The problem is an especially sticky one if these people occupy positions of formal or informal authority in the school community or if they are particularly adept at creating negative energy that is not easily overcome. Like everyone else, such people must have an opportunity to express their opinions in a democratic process. But in order for a majority opinion to be the deciding factor in determining whether or not the model is adopted, it may be necessary to pursue strategies that ensure majority rule.

### **What's in It for Me?**

Although everyone has a stake in good schools, it would be naive to assume that already-overburdened professionals or parents who have historically had a limited impact on school change will find it easy to make a commitment to a new initiative that requires time, energy, and participation in activities that are a departure from the status quo. Each person examining the SEM should ask himself or herself a few questions: What's in it for me? What will I have to do? What will I have to give or give up? What will I get out of it?

Policy makers and administrators should examine these questions with an eye toward building the kinds of public support necessary for an adequate financial commitment to public education. The tide of criticism that is constantly being directed toward our schools has taken its toll in the extent to which the public is willing to pay for public education, and it has also resulted in low morale at all levels of the profession. Because of this criticism, education is rapidly becoming a profession without an ego. Schools in other nations are constantly being held up to us as mirrors for pointing out our own inadequacies; hardly a month passes without someone writing yet another article or news story about the crisis in educational leadership. It would be nice to think that some magical force will "save us," but the reality is that leadership for better schools can come only from people who are responsible for schools at the local level.

More than any other group, teachers will have to ask themselves some hard questions. Almost every teacher has—or at one time had—a notion of what good teaching is all about. And yet it is not an exaggeration to say that most teachers are dissatisfied with their work and with the regulations and regimentation imposed on their classrooms. A recent report on teachers' response patterns to classroom practices indicated that teachers who adapt to traditional practices "become cynical, frustrated, and burned out. So do their students, many of whom fail to meet expectations established for the classroom" (McLaughlin & Talbert, 1993, p. 6). However, we must still raise the questions: Are there benefits for teachers who are willing to take on the challenge of variations in traditional practice? Can we avoid the cynicism, frustration, and burnout that seem to be so pervasive in the profession? The SEM is designed to provide

opportunities for a better brand of teaching through the application of more engaging teaching practices.

Finally, parents must examine the questions above with an eye toward the kind of education they want for their sons and daughters. The SEM is not intended to replace the focus of the schools on traditional academic achievement, but it does emphasize the development of a broader spectrum of the multiple potentials of young people. Schools do not need to be places to which so many of our young people dread going, but if we are to make schools more enjoyable places, parents must have an understanding of and a commitment to an education that goes beyond the regimentation and drill that are designed only to get the scores up.

Schools are places for developing the broadest and richest experiences imaginable for young people. The atmosphere is favorable for a broader application of the strategies and techniques that originated in special programs, and they can serve as a basis for making all schools into laboratories for talent development.

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