HOW TO CHANGE WHAT MATTERS

The classic one-two punch in educational change is a stinging mandate followed by a powerful technical assist. Hit and run training won’t work.

State and local minimum competency testing programs are finding students, schools, and districts that consistently fail to meet minimum standards. Remediation is obviously the next step. But what should be changed and how?

The New Jersey Department of Education administers Minimum Basic Skills Tests in reading and mathematics in grades 3, 6, 9, and 11 each year. This fall the Department identified about 175 schools—elementary, middle, and high—in which 35 percent or more of the students had failed to meet state standards for three years in a row and no improvement was occurring. These schools enrolled students comparable to those in other schools which were meeting the standards.

Each school has been publicly identified and is now being visited by a five-person team of professionals and citizens and judged on an elaborate, explicit set of research-based standards for good instructional processes compiled by Research for Better Schools (RBS), the regional educational laboratory serving New Jersey. The visiting team’s recommendations must then be carried out by the school or else the school must file its own plan for improving learning with the Department.

At that point, the four Educational Improvement Centers (EICs) which blanket New Jersey (assisted by the County Superintendents’ offices) will provide technical assistance to the 175 schools in making the planned improvements.
We are here to decide how to improve 175 schools which are not working. How serious is this problem? They are only schools. If they were hospitals, their patients would be dying. If they were libraries, no one would be reading their books. If they were police stations, criminals would be ruling their precincts. If they were firehouses, the cities would be burning. If they were companies, they would be bankrupt. And if we were here to fix them, we would think it deadly serious, and we would be in a great hurry, and we would be after powerful solutions.

But they are only 175 schools. All they are doing wrong is turning out children who will have to make it through the next 50 years without being able to read or write or do arithmetic or figure out contracts or interpret insurance policies or hold decent jobs. How serious is that?

**How Serious Is the Problem?**

Let me tell you how serious I think it is.

- My organization has been surveying citizens and teachers and students and graduates about the most important things for students to learn. They ought to know. And they find it easy to agree. Figure 1 indicates the top ten graduation requirements from a typical survey, along with the percentage of the residents who would require them for graduation.

These are the things in the New Jersey tests. So the 175 schools are failing to do the most important things they were created to do.

- These schools are taxing the parents of their children and spending that local money wastefully. The State of New Jersey is taxing the parents of other children and sending that money to the schools to waste.

![Figure 1. A Typical Survey](image)

<table>
<thead>
<tr>
<th>Graduation Requirements</th>
<th>Percent of Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computes accurately (adds, subtracts, multiplies, and divides)</td>
<td>96%</td>
</tr>
<tr>
<td>Knows the fundamentals of mathematics</td>
<td>96%</td>
</tr>
<tr>
<td>Reads with understanding</td>
<td>94%</td>
</tr>
<tr>
<td>Writes correctly (proper grammar, punctuation, and capitalization)</td>
<td>89%</td>
</tr>
<tr>
<td>Solves mathematical problems in practical situations</td>
<td>89%</td>
</tr>
<tr>
<td>Reads to learn</td>
<td>86%</td>
</tr>
<tr>
<td>Reads carefully</td>
<td>82%</td>
</tr>
<tr>
<td>Spells correctly</td>
<td>82%</td>
</tr>
<tr>
<td>Speaks correctly (proper grammar)</td>
<td>80%</td>
</tr>
<tr>
<td>Can follow directions, both written and oral</td>
<td>81%</td>
</tr>
</tbody>
</table>

- These schools are not getting any better.
- If the children in these schools were sent to other schools in New Jersey, they would learn.
- We know how to fix these schools.
- I think that's serious.

**How To Improve the Schools**

Well, how can we improve the schools? So much of the research literature dealing with educational change in the past decade, it seems to me, has become jargon-ridden and convoluted, dealing with phenomena that are marginal if not esoteric, that I want to go back to the basics.

What is a public school? What makes it work? How do you change it? I have tried to brush the cobwebs of the change literature from my mind and forget the vocabulary of the field. I have tried to approach the topic as a civilian rather than as a change specialist.

Before I discuss how to change schools, please take a couple of minutes to jot down the three most effective techniques you have used to change schools this year. Here are some possibilities.

**SOLUTION 1: Fire 175 principals.**

Push the big button. Start at the top, get rid of the key person, and let the new principal do whatever else needs to be done. Re-educating the present principals is going to be slow and expensive and chancy. Reaching around the principals to work with the teachers is going to be impossible.

You do not have an obligation to re-educate these 175 professionals. It would cost too many children.

Tenure won't protect incompetence. Anyone who runs a school that can't educate children whom other schools can educate, a school that keeps on doing a bad job year after year without improving, is incompetent. The State Department of Education ought to be the star witness in court.

Before you fire the principals, you might make them one last offer: one year to produce two years of learning on the state tests or get fired. Take it or leave it. Whatever they choose, the kids will be better off.

**SOLUTION 2: Close 175 schools.**

Don't solve the problem: eliminate it. Dissolve the unsuccessful networks of principals and teachers and paraprofessionals who operate these schools and the parents who put up with them. Cut through the present patterns—a lobotomy, if you will—and knit together a new pattern of people, preferably in a new location. You have to close some schools in New Jersey; let these be the ones. Use declining enrollment to fight declining achievement.

It will be quicker and cheaper to close these schools than to improve them. The children will benefit sooner and more because they will be transferred overnight to schools that work. The district might even save enough money to give the taxpayers a break in the future, although what they really deserve is a refund for the past.

**SOLUTION 3: Transfer all the teachers from 175 schools.**

Not to other schools, of course. The thing to do is to place them into a pool in their districts. Then let the other principals in town exchange any of their teachers for any in the district pool—if the principals choose to. All a teacher has to do to get out of the pool is to persuade some principal that he or she is better than a current teacher in that principal's school.

When the trading ends, the worst teachers in town will be in the pool, where they should stay until they are exchanged for even worse teachers.

Meanwhile, where does the orig-
Can a tenured teacher get out of the pool by going to court? Maybe. Of course, every principal in the district can testify against the teacher, and so can the state officials who put the teacher into the pool for years of incompetent teaching in the first place.

**SOLUTION 4:**
**Give 175 schools the best teachers.**

Let the principals of the 175 schools have their choice of any teachers in their school district. Let them take the best from any school or the best of the new applicants. The other schools can have whoever is left.

If the other principals don't want to lose their good teachers, let them help the principals in the 175 schools improve learning. I think they'll be eager to oblige.

If the good teachers don't want to be transferred out of their schools, let them help the teachers in the 175 schools improve learning. I think they'll come up with something pronto.

Should the 175 schools have the best teachers? Well, it's better than the opposite.

**SOLUTION 5:**
**Convert the EIC budgets into prize money for 175 schools.**

Exchange the EIC staff members for five million dollars in cash and offer it as rewards to the schools that get their kids up to standard on the state tests. Or pay it to the 40 schools which improve most in a single year.

The principal and teachers in a winning school should keep 20 percent of the money for personal use—just treat it like salary increases—while the remaining 80 percent goes into a kitty for the principal and teachers to buy anything they choose: secretaries, paraprofessionals, specialists, books, consultants, training, trips, whatever.

Five million dollars won't go very far as prize money for 175 schools. But it won't go very far for EIC services to the schools either. And it might go further as prizes.

The winning schools could, of course, pool their prize money to set up four new EICs. That's what they probably would do—unless they could think of a better way to guarantee that they would win the prize money again next year.

On the other hand, the schools could take their prize money and hire former EIC staff members. That's even more likely than their recreating the EICs—unless they could think of a better way to guarantee that they would win the prize money again next year.

**SOLUTION 6:**
**Give 175 schools $5 million in EIC vouchers.**

Give the schools five million dollars in vouchers good for spending at the EICs and let the EIC directors hire any staff and buy any materials or equipment needed to fill the orders placed by the schools. The schools might order what the EICs are selling now. They might not. If not, the EIC directors would sell something else.

TheEIC directors wouldn't care. They are out to sell improvement—not any particular service—and they would be glad to sell improvement in any form. They are results-oriented, not services-oriented. Or they should be.

**SOLUTION 7:**
**Keep the teachers in 175 schools in their classrooms all summer.**

Don't let the teachers go home in June if their students have not learned. Increase the teachers' time on task. Evidently, the teachers didn't put enough on it during the year. Teachers unwilling to stay all summer would not be allowed back in the fall.

You would have to keep the principal, of course. And the students. They haven't finished their work so they can't go on vacation either.

Maybe you think we should not do this to the teachers and principals. Just ignore the fact that they didn't do their jobs. Go ahead and give them their paychecks and send them on vacation—exactly like those in the other New Jersey schools who did do their jobs. Maybe those in the 175 schools will do their jobs next year. If not, pay them again anyway—just like you are doing every year.

Maybe you think it would be unfair to the students. They would be better off running in the streets rather than learning to read and write. Their parents would not agree. Neither would the legislature. Neither would I. Neither should you.

Come to think of it, maybe we would not have to keep the teachers after school. Maybe they would figure out what to do and get it done by June so they could get out. I'll bet their students would even help.

**SOLUTION 8:**
**Restrict the 175 schools to teaching the basic skills.**

Don't let the 175 schools teach anything except reading, writing, listening, speaking, and mathematics concepts, computation, and applications. Once the students master those, let the schools add social studies, science, art and music, health and physical education.

Schools should not turn out illiterates who can bounce balls or put paint on canvas. When we broadened the curriculum beyond the basic skills, we never intended to substitute those additions for the basic skills.

Won't the teachers find the day dull if they can teach only the 3 R's? I would hope so. I would hope they would find it so dull that they would learn how to do it right so they would get permission to teach something in addition. What about the teachers of art and music and science and physical education? What would they do? Walk the streets until the teachers of English and math learned how to teach. Or they could apply for jobs in good schools, where they would probably prefer to teach anyway.

Wouldn't the students be bored? I suspect they are bored now, being taught the same thing unsuccessfully year after year. It isn't boring for a child to learn to read and write and do arithmetic. It's boring not to.
"Whatever the society is doing wrong, [other New Jersey] schools are doing enough right to overcome it. The 175 schools should be changed enough to do the same."

Who Else Has Some Responsibility?
You may feel that the school superintendents, and the school boards, and the school communities, and the State Department of Education are getting off too lightly in this analysis. Don't they have some responsibility? Don't they have to change? Don't they have to help?

The only thing I would ask of them is that they fire the principals or close the schools or transfer all the teachers or give the best teachers to the 175 schools or give the prize money to the 175 schools. EIC staff members can't do that. Only boards and superintendents and the state can do it. That's the only thing I would ask them to do.

You may feel that we ought not blame these 175 schools and the four EICs for the children's not learning, but we ought to blame homes and families and friends and television and movies and churches. Rather than adjusting the schools and the EICs, you may feel we should be adjusting the homes and television and churches.

Here's how I feel about that. In the other schools in New Jersey, the same kinds of children with the same kinds of homes and families and friends and television and movies and churches are learning. Whatever the society is doing wrong, their schools are doing enough right to overcome it. The 175 schools should be changed enough to do the same.

What Won't Work
I apologize for the fact that my list of how to change schools is so short. I thought of some other things, but I did not put them in because they will not work. They have already been tried and they failed.

Here are a few ideas I rejected:

- Insist that the teachers and principals graduate from professional schools of education. It's too late. They already have.
- Require them to be certified as competent by the State of New Jersey. They already are. Certified.

- Require the schools to spend as much to educate these students as others in New Jersey. They already spend as much.
- Send in extra federal money to help these schools teach basic skills. They already get it.
- Require the schools to operate 180 days a year. They already do.
- Require the schools to teach certain subjects—like reading, writing, and arithmetic. They already do.

You can see that these are too weak to guarantee learning. They are being used now and they don't work.

What Really Won't Work
I thought of some that are even weaker so I certainly cannot recommend them. Here are some really weak ones I rejected:

- Run a three-day workshop for volunteer teachers from several schools.
- Mail a newsletter describing good teaching practices.
- Visit a school for a day and compliment the principal and teachers on good things you observed.
- Distribute a summary of the latest research on how to teach reading or arithmetic.
- Give a speech at a faculty meeting about techniques for teaching arithmetic.
- Convene a group of teachers in a school and ask them what should be done to improve learning.
- Maintain a circulating professional library.
- Help a committee of teachers select new teaching materials.
- Spend a whole day with one teacher, observing his or her classes and offering suggestions.

None of these separately or the whole group together is powerful enough to get fifth graders to read like fifth graders if they are reading like third graders now. You can see why. They are addressed to things that do not matter (like teaching techniques) or they lack the appeal of strong incentives (like money) or they lack the power of authority or they provide too little training and supervision to change actual adult behavior.

This might be a good time to look over your own list of effective techniques for changing schools—the three you wrote when we began—and rate them for power. But first, let me offer a little theoretical background to help you judge what you wrote.

Changing the Government
Public schools are government agencies. To change a school is to change a government agency. You know how hard it is to change the government. If it is difficult to fight city hall, it is nearly impossible to change city hall.

Moreover, local public schools are local government agencies governed by state government agencies. To change the local government, it may be necessary to change the state government. And to change the state government, it may be necessary to change the federal government. You would be trying to change a government agency nested inside another government agency nested inside another government agency.

When you deal with teachers, you are not dealing with independent professionals. They are not private entrepreneurs free to alter their working situations when they choose—not free to decide what they will teach to whom at what time and what price.

Public school personnel, as professionals working in bureaucratic organizations, are somewhat like professionals and somewhat like bureaucrats. Local, state, and federal governments treat school personnel like bureaucrats when it comes to important changes in professional practice and treat them like professionals when it comes to unimportant changes in professional practice. What kinds of changes are important enough for the bureaucracy to make, and what kind are so unimportant that they can be left to individual professionals to make?
"The three most important ingredients in the setting are the student, the teacher, and the length of time they are together."

What Matters

What is most likely to influence student learning is the opportunity to learn rather than the technique of teaching. Putting it as simply as possible, the opportunity to learn is constructed by the school as an institution while the techniques of teaching are constructed by the teacher as a professional. Thus, what the school constructs is more important than what the teacher constructs.

What I mean by the opportunity to learn is the set of circumstances in which a teacher meets a student. If a capable student is there (not absent), if a capable teacher is there (not a substitute), if the spelling content is there explicitly (not buried in the reading lesson), if the expectation is there ("I can teach it and you can learn it"), and if the time is there (not interrupted for band practice), then the student will learn to spell. Given that set of circumstances, the technique of teaching spelling does not matter much. No variation in teaching technique can make up for the absence of spelling from the curriculum or improve student learning appreciably if spelling is present in the curriculum.

The three most important ingredients in the setting are the student, the teacher, and the length of time they are together. Children have different personal characteristics (especially intelligence) which have a primary effect on how much they learn. Teachers have different personal characteristics (especially intelligence, charisma, affection for children) which have a primary effect on how well they teach. Given a particular student and a particular teacher, the length of time they are together influences student learning more than anything else. Once those three are established, researchers will discover little if any significant difference among various teaching methods.

In short, what schools do as institutions is to select teachers, assign particular students to them, decide what will be taught (but not how), decide how long teachers and students will spend together, make sure that students and teachers keep their appointments with each other, and set expectations (or demands) for how much students will learn. The rest, particularly the techniques of being a teacher or the techniques of a principal, are left to the judgment of the individual professionals.

Let me give you some examples of what local, state, and federal government agencies determine versus what they leave to individual professionals. Remember that the government agencies are nested inside each other and can only control what is left to them by the higher levels of government.

Local Changes That Matter. Boards of education, school district administrators, and school building principals use whatever discretion is left to them by state and federal governments to structure and to modify learning opportunities, but not teaching techniques. That is, they determine which teachers to hire, which courses to teach, which books and equipment to purchase, how long students will study each subject, which grades to house in which buildings, which extracurricular activities to provide, which students to assign to which teachers, how much to spend per pupil, and so on.

On the other hand, they do not determine whether teachers will lecture or discuss, whether instruction will be deductive or inductive, whether concepts and skills will be taught through films as well as through books, what psychological climate will pervade the classrooms, how teachers will grade students, and so on. Changes in teaching methods are left as options to be exercised by individual teachers.

State Changes That Matter. State legislatures, state courts, state boards of education, and state education departments use the very considerable authority left to them by the federal government to mandate—by state law, state court order, or state regulation—learning opportunities. They determine preparation programs for teachers, qualifications of teachers, subjects to be taught, time allocations for subjects, uniform competency tests to be used, minimum competencies for promotion or graduation, the ages of school attendance, the minimum amount of money to be spent on each pupil, and so on.

On the other hand, they say little or nothing about how teachers will teach or how principals will be principals. The choice of teaching method and administrative method is left to the discretion of individual teachers and individual principals.

Federal Changes That Matter. The federal courts, the Congress, and administrative agencies such as the Department of Education and the Department of Labor usually mandate learning opportunities for one particular population of students which has been singled out for special federal attention: the minority. The federal government has begun to do for minority students what state education departments or for majority students.

To guarantee minority students the opportunities they require for learning—sometimes very special opportunities—the federal government concentrates on matters like the desegregation of schools (rearranging what kinds of teachers are brought together with what kinds of students), the inclusion of vocational courses and bilingual instruction (controlling the content of what is taught), the equitable treatment of the sexes (ensuring that boys and girls get the same opportunities to learn the same things), the development of individual educational plans for the handicapped (note that the teaching techniques included in these plans are left entirely to the discretion of individual professionals), supplying extra money (most of which goes into expanding instructional time for students by changing the classroom ratio of students to teachers), and so on. You can see
that the federal government, like the state and local governments, concentrates on creating learning opportunities rather than trying to modify teaching techniques.

**Mandates for Bureaucrats and Options for Professionals**

In short, school personnel are treated like bureaucratic functionaries when government agencies establish the length of the school year, length of the school day, and length of the high school class period, for example. Individual teachers and principals are given no discretion whatsoever about such matters. On the other hand, they are treated like independent professionals and are given considerable discretion, for example, in establishing a psychological climate in the schools and in choosing methods of teaching and administering. The reason for this difference, to repeat, is that the length of instruction is a major determinant of the opportunity to learn while the climate in the school and the techniques of instruction constitute minor changes in that opportunity.

So we can see that schools do change after all, and they change in important ways. But how are these hard-to-change government agencies actually changed? By government action. Government agencies are changed by government action.

The chains of local, state, and federal government agencies are connected by authority relationships. They use those authority relationships as the cheapest, fastest, most reliable means of making significant changes in opportunities to learn. They use mandates. Mandates are the most effective way to change government agencies (like local school districts) or the behavior of government employees (like local teachers and principals).

Moreover, mandated changes in the nature of the opportunity to learn touch all teachers in all affected grades and/or subjects at the same time because mandates change the entire system. In contrast to mandates which touch all teachers, optional changes in teaching methods are frequently offered to individual teachers who volunteer to learn them, because it makes relatively less difference if those teaching methods are changed. That is why institutional mandates deal with the *what* and *when* of learning rather than with the *how* of teaching.

But what about other organizations engaged in changing schools, non-government organizations which have no authority over the schools? What about the professional associations, the colleges and universities, the intermediate education agencies (created to replace the once authoritative county level in school government), the federally-financed, university-based research and development centers and regional educational laboratories, the voluntary clusters of schools such as accrediting associations and school study councils, and the publishers? The answer is that these non-government organizations are left to traffic in innovations which are relatively insignificant. That is, once the opportunity to learn has been structured, the power of the remaining innovations to produce changes in learning is only marginal.

Thus, they can reasonably be left to the option of local school districts, local school buildings, and individual school personnel. Consequently, non-government organizations customarily deal with teachers and administrators as individual professionals exercising their options rather than as sets of bureaucrats following orders. And they approach teachers and administrators with a service orientation: “How can we help you?”

This is the primary reason for the inability of non-government organizations to bring about major changes in the schools, which can only be accomplished through the use of authority since professionals in government agencies exercise and respond to authority. It follows that the schools can and do effectively resist or simply ignore the bulk of the innovations purveyed by non-government organizations.

What can the non-government organizations do, then? What they can do is to provide technical assistance to the local schools. You need to understand that mandates make the market for technical assistance. Technical assistance is hard to sell in the absence of mandates and it is always most effective in the wake of mandates. The classic one-two punch in educational change is a stinging mandate followed by a powerful technical assist. The pattern is for a government agency to give an order to a school and for a non-government agency to help the school carry it out. Since the mandate is always to the entire school, the technical assistance must be to the entire school rather than to individual teachers or an individual principal.

The purpose of technical assistance is to change the attitudes and skills—the actual behavior—of the professionals in the schools. There is only one way for professionals to learn new attitudes and new skills: through guided practice over time. Nothing else works. The professional has to practice the new attitudes and the new skills under expert guidance for about a year. In the ideal circumstances, those giving technical assistance know a great deal more about the change than those receiving technical assistance and the technical assistants have themselves used the attitudes and the skill successfully in schools much like the ones they are helping. Again, the assistance, which is almost always some form of training, reaches the principal and all teachers in the school simultaneously, extends over a long period of time (about a year), and is interspersed with actual practice on the part of those being trained. The initial training is not as important as continuous supervision and coaching. Hit and run training won’t work.

Now, you can take another look at your list of effective procedures and see how well they fit what I have been saying.

**The Stage Is Set**

The stage is set in New Jersey for improving the 175 schools. The State Department of Education has mandated that they must change. The *Guidelines* describe how the schools must look after they have been changed. The Program Reviews will determine the gap between what the schools are like now and what they must become. The local school must write a plan for closing the gap. The EICs must be ready, willing, and able to give the kind of intensive, over-the-shoulder, long-term technical assistance the schools must have if they are to bring themselves up to the *Guidelines*. Finally, the State Minimum Basic Skills Tests will provide a clear measure of whether the schools have in fact improved.

So if you know how to change schools, go to it.