Conventional School is . . .

Obsolete.

Minnesota's innovation is developing a new approach to learning . . . better at engaging all students and more rewarding for teachers.

Here it is — and how it can be spread.

Ted Kolderie

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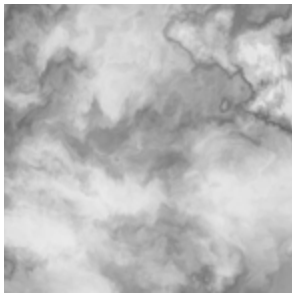


- PART ONE -

Minnesota Now Has an Innovation Sector

After forty years in and around the issues in public education, and with the perspective time brings, I've come to some conclusions. To the conclusion of my own work, certainly — which has been a wonderful opportunity both to observe the institution from the outside and to learn from what those inside told me and taught me.

As to conclusions about the system and its future, one dominates**:**

It is that conventional schooling is obsolete. As is the conventional strategy used in the effort to improve school and learning.

To say this is not to criticize the institution or the people in it. Much now obsolete was hugely important in its time. Times change; something better appears, making obsolete what was there before.[1]

The 'something better' in Minnesota's public education is now appearing in what we can call its new 'innovation sector'.

That 'sector' is not an established 'innovation zone'. It is dispersed and diverse. It contains some but by no means all the chartered schools . . . early alternative schools like Plymouth Youth Center[2] . . . the online schools certainly . . . individual districts like, currently, Farmington and Spring Lake Park or

Belgrade-Brooten-Elrosa . . . at times some of the Area Learning Centers and even certain of the juvenile corrections institutions.

It consists of those 'doing differently'; individuals and schools breaking with education's 'givens'. The innovators and their innovations appeared one at a time. Often but not always through legislation. Never as part of any adopted Master Plan.

Earlier no such breakthrough was possible. Forever, there had been ideas for better schools. But the traditional system, held in its conventional form by its voting public and by the policy and political environment in which it lived, was unable to change. 'School reform' — the something-better long sought — could never happen (see page 4).

For public education to become a successful and self-improving system there had to be a new sector within public education in which the 'different' could be tried.

The way is now open for change in the fundamentals

The appearance of this new sector is the most significant feature in our state's broader transformation of public education. What was until recently a classic public utility — a checkerboard of single-purpose organizations each holding an 'exclusive franchise' to offer public education within its boundaries[3] — has become a broad range of public options.[4]

The result is important. *Minnesota has developed choice within public education.*

In the innovation sector different approaches to learning, different roles for teachers and students and different forms of organization have been appearing in its schools, created by the schools and their teachers.

The combination — new-and-different schools, plus the opportunity for parents to choose the schools in which they enroll their children — creates incentives for the mainline district sector to change and improve itself.

And that opens a new strategy that gets beyond what has been traditional; beyond, as Joe Graba puts it, the attempt to achieve "excellence through regulation". It goes beyond additional financing and incremental programmatic adjustments. It opens at last the potential for fundamental change.[5]

Improvements will and should continue alongside the Innovation: It is good to be working at the same time to make conventional school better. Most students will for some time continue in conventional school, whether in the district sector or in the alternative or chartered sector.

Having now the opportunity for schools and teachers to try things within public education, the next step will be to move the innovation into development . . . helping the district sector to adopt the innovative 'technology of learning' now appearing. (Part Three will say more about this strategy of Innovation + Diffusion.)

A successful transition in our district sector will add to Minnesota's record of system-innovation — which is really quite striking. We were the first state to enact inter-district choice (not requiring consent from the district of residence). We were the first to offer juniors and seniors the opportunity to finish high school in college. We were first to create a 'charter sector' within public education.

This unprecedented situation gives us the opportunity now to turn our public education from an inert into a self-improving system.

Bear with me as I try to explain. We will encounter some unconventional perspectives.

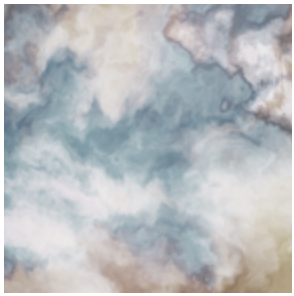
A perspective from outside

On the importance of thinking differently, to show the 'different' is possible

"Not having a background in structures permitted me to adapt some very simple-minded techniques . . . All the serious groups in England had big teams of qualified people that always included aircraft structural designers . . . They built their craft to be strong and, consequently, heavy . . . With human-powered flight there's no need for structural safety. The Gossamer craft were flown ten feet in the air at ten miles per hour.

"When we tried to figure out why we succeeded it came down to a question of attitude . . . People are hemmed-in by their preconceptions . . . There is little in our schools and culture that forces us to look at things in different ways. We need to be skeptical and try different routes to solve problems."

Paul MacCready, Jr., interviewed for the Yale Alumni Magazine, June 1983, about how he won the Kremer prize for human-powered flight in the Gossamer Albatross, 22 miles across the English Channel.



- PART TWO -

A Better Model for Learning Is Emerging

The institution Horace Mann saw and admired on his visit to Prussia in 1843, and brought to America from that rising north German state, was designed by adults to serve adult interests; to serve the interests of the state. Mann, his biographer wrote, was not interested in young people as individuals.[1]

Over the succeeding two centuries its bureaucratic character has been reinforced as its districts grew larger and with the rising centralization in the system. Its essential 'givens' remain: teachers working for administrators . . . students grouped by age . . . curriculum uniform . . . time standardized. 'Batch processing' was Ted Sizer's term for it.[2] Fundamentally, the concept has been for students to adapt to school.

Underlying it was the concept of adults passing on to a new generation the wisdom of its elders. The conviction that adults know what young people need to learn remains strong. That is what the technology of conventional schooling exists to do — using 'technology' here as economists do when they talk about "labor, capital and technology", where 'technology' means simply "the way of accomplishing the task".

That traditional 'way of accomplishing learning' has had adults presenting material to students who read, listen and presumably learn, showing on tests that they have mastered the content. It has deep roots. But its limitations have been obvious.

Inside conventional schooling the assumption has been that what is taught is learned: Some educators and others can still be heard talking of school 'delivering education'. Yet the fact is that while adults determine what's taught (and tested), *students control what's learned.*

It has been fascinating this past year to say that to educators . . . and to have every response, without exception, concur: "Yes". "True". "That's right."

Today we *are* interested in individual young people. Society now sees the need to ensure that today's youth *learn how to learn,* recognizing that through their lifetime they will need to adapt repeatedly in a rapidly changing world. The goal becomes the one Sizer long advocated, of young people "knowing how to use their minds well".

Implementing the new and better 'technology of learning' means shifting the focus of schooling from what adults do to what students do . . . from 'educating' young people to 'helping young people learn'. *It implies schools able to personalize learning.*

This means schools and districts need to emphasize motivation. Young children like to learn. But engagement begins to fall off with adolescence.[3] The schools in the innovation sector are finding ways to build engagement. Not all in the same way, but in the new 'technology of learning' the emphasis on motivation is now clear.

Let's look at what's appearing in what is now essentially a research and development sector for Minnesota public education.

Elements of the 'new technology of learning'

This new technology has four elements.

First: It sees students as co-workers on the job of learning — recognizing that different young people learn in different ways. **Second:** It makes full use of the world of information available online. **Third:** Teachers have the professional autonomy they need to personalize learning. **Fourth:** The outcomes-sought broaden beyond the academic; aim to realize each student's full potential.

Let's take these in order.

1. Schooling is personalized.

The idea is to maximize motivation**.** Motivation matters for engagement and engagement matters for achievement.

Jack Frymier was emphatic and persuasive about this when here in 1999. "If students want to learn, they will. If they don't, you probably can't make 'em. (So) *any successful effort to improve student learning will begin by improving student motivation."* This makes student interests and aptitudes matter more. Students are asked to take responsibility for their own learning.

The fundamental change is that school will now adapt to students.

In some schools personalization means students learning not in courses but by doing projects. With their advisor, parent/s and perhaps a community person they design a project around something interesting or important to them. The advisor's job is to connect into the project its historical, scientific, cultural, political or other dimensions; meeting state requirements in a way that lets the student see things whole rather than abstracted into 'subjects' taught in courses in the manner of conventional 'education'.

Where course-and-class remains it is modified by a shift to competencies. Students move more rapidly if they can; get more time if they need more time.

Why not in academics the concept that exists in athletics?

In athletics young people can move up to the varsity in ninth, eighth, even seventh grade, based on what they can do and how well — in tennis, basketball, hockey, skiing, wrestling, in swimming (Regan Smith set a world record in the backstroke at age 15 while swimming for Lakeville North high school).

If you think about all the things people learn to do, early — from the performing arts to building robots to computer-software to problem-solving — this question becomes quite serious. In *Cybernetics and Society* in l954 Norbert Wiener wrote about the enormous human capacity for learning. That is what we see, looking at the achievement of these young people in fields outside the conventional classroom.[4]

Is it possible that conventional schooling has been suppressing this potential? . . . that today it is still suppressing this potential?

Perhaps it is.

2. Students use the digital world as a major resource for their personalized learning.

Today almost all youth — 95 per cent; everywhere, regardless of income — have and use cellphones. This is commonly regarded as a problem. And in some respects it is.

Almost half those surveyed by Pew Research in early 2022 say they are continually on their phones. More than a third said they are on TikTok, Snapchat, Facebook, Instagram or YouTube "almost constantly". This does have a downside, as is now apparent. Their obsession with social media, Mark Bauerlein complained in his book in 2008, has "stupified" young people. *The Dumbest Generation*, he titled it.[5]

Unarguably, though, the digital world provides them access to vastly more information than can possibly walk in through the classroom door. It makes personalization possible. Now 'artificial intelligence' has come on the scene; another modification in the 'technology of learning'. Its implications are only beginning to be explored.

3. The teacher plays more the role of coach or advisor. Both job and career improve as teaching becomes a professional role.

In the delegated-decision-making that characterizes Minnesota's innovative sector the school becomes the unit of improvement, as John Goodlad had advised. The professional role becomes possible for teachers, giving them the opportunity to personalize learning for students, maximizing their motivation.

"Motivation is individual", Frymier had explained. Different students are motivated by different things. In school only the teacher knows students as individuals. The teacher's job is to relate to those individual differences. Personalization diminishes the 'frontal teaching' of the conventional classroom.

In some schools the teachers have taken full responsibility for 'professional issues', organizing in essentially the partnership arrangement common in vocations we think of as professional (or setting up as a workers' cooperative, as Minnesota New Country School did soon after chartering appeared). It turns out that teachers *can* collegially run a school as other professionals run their partnerships.[6]

Some in the teacher unions have been thinking about a professional future. Albert Shanker did, when president of the American Federation of Teachers. Louise Sundin picked up Shanker's vision when president of the Minneapolis local. She later created the Minnesota Guild of Public Charter Schools, a single-purpose authorizer, to approve schools offering professional opportunities for teachers.[7]

4. The definition of achievement changes; broadening the concept and changing perhaps the method of its measurement.

This is essential: Nothing works more powerfully and perniciously to hold school in its conventional pattern, to suppress innovation, than the assumption that nothing matters but academic performance measured by scores on the state tests.

That narrow notion is obsolete: An effort is now under way to identify those here and elsewhere working to design better ways to appraise student accomplishment.

This will involve the distinction the geologist makes between an *assessment* and an *assay.* A geologist does an *assessment* when interested to know if a rock contains some specific mineral; nickel, say. When wanting to identify all minerals present in the rock the geologist is doing an *assay.*

The conventional appraisal of achievement is an *assessment*. It seeks to learn whether the student is proficient in course content: language, math and perhaps science. That's it.

Personalized learning implies and requires an *assay*; the effort to identify everything a young person is, knows and can do; whether s/he can think critically, think creatively, solve problems, communicate well

and work cooperatively. (That assay can and will, of course, include an assessment of knowledge and skills with language and numbers.)

The idea of an assay was, interestingly, implied in Minnesota's recent debate about establishing a civil right to 'quality education'. Alan Page, former justice of Minnesota's Supreme Court, talked of the goal being "to realize fully the potential of each individual child". That can revolutionize the discussion about achievement: *It redefines 'the 'gap' as the difference between the potential and the performance of each individual student.*[8]

The better model can remove a serious inequity

The principal inequity in American public education, John Goodlad found in his comprehensive study of American schools, was unequal access to knowledge. He wrote this in *A Place Called School*, published in 1984.

This inequality includes race but extends beyond race. The "improving position of the black middle class", William Julius Wilson wrote in *The Truly Disadvantaged* in 1987, cannot be allowed to obscure "the deteriorating position of the black underclass".

Goodlad, too, had pointed to those Wilson had in mind; the young people who through no fault of their own come to school dis-advantaged for what conventional school expects and requires.

His study found elementary schools routinely grouping students by perceived ability, and found the high schools in the study organizing their classes into high-track, medium-track and low-track groups in language, math, social studies and science.

"Effective instructional practices" were more common in the high-track classes than in the low. "Low-track classes devoted a much larger share of their time to rote learning", Goodlad wrote.

Also, "Studies have shown there to be lower self-esteem, more school misconduct, higher drop-out rates and higher delinquency among students in lower tracks".

"Minority students and those from the lowest socioeconomic groups were found in disproportionate numbers in classes at the lowest

track levels, and children from upper socioeconomic levels . . . (found) overrepresented in higher tracks."

His general conclusion: *"Our schools received children differentially ready for learning, educated them differently in their classrooms and graduated them differentially prepared for further education, employment and vocation and social mobility."*

"Increasingly", he wrote 40 years ago, "the issue will be whether students, as a consequence of the schools they happen to attend and the classes to which they are assigned, have equality of access to knowledge."

Today, that inequality, that inequity, persists.[9] It is visible in the accepted, still dominant, concept of 'achievement'. The tests of language, math and science assess mastery of the subjects in a way that shows students in the high track scoring well; presents them — and their schools — as the 'high-performing'.

How to make school better for the truly dis-advantaged

Perhaps the concept of 'failure' should be reversed; perhaps it is school that is failing young people who are dis-advantaged.

Educators and others commonly affirm that 'all children can learn'. If so, and if many do not, then with whom does 'failure' lie?

A study in 2020 explored the experience of Minnesota students who had left school; once, twice perhaps three times; voluntarily or because 'pushed out'; who had quit or had been removed when picked up in the juvenile corrections system. In "Why Do Students Leave School?" they said what they needed. And offered their suggestions about how 'school' could succeed: Relate to our needs and interests . . . give us close relationships with adults . . . personalize your teaching and support.[10]

That is the model around which schools in Minnesota's innovative sector have begun to be designed and to operate.

High School for Recording Arts in Saint Paul enrolls largely students who have had unsuccessful experience with 'regular school'.

It has attracted national attention with its program that has students learning by doing; recording commercials for clients.

So did Ramsey County's juvenile corrections facility, Totem Town, before it was closed. When in charge of schooling there, Theresa Neal had those serving their sentence doing-things. They won competitions in chess, and in 'problem-solving'.

All were glad to get out when their term was up, but it was fairly common, she said earlier this year to Minneapolis' interim superintendent, Rochelle Cox, to hear them ask: *"Isn't there some way I can keep going to school here?"*[11]

"Everything is relational", she said. "Everything is relational."

Making school work better, especially for early-adolescents, has an important practical implication for the current argument about prosecuting or not-prosecuting juvenile offenders.

That controversy is endless — and impossible to resolve as presently shaped by advocates and by the media. Both sides are right. We cannot have endlessly more young people getting criminal records. But the public insists there be consequences for teen-agers shooting people or sticking up citizens and stealing their cars.

What is ridiculous is for this to be a discussion entirely within 'Corrections'; one that begins with the offense, and becomes an argument between those pressing for prosecution and those advocating 'diversion'; the county attorneys caught in between.

There has to be an effort earlier, at prevention. Better school has to be part of that 'prevention'; middle school/ junior high made more engaging for early-adolescents, drawing them into activities they find relevant, more attractive than misbehavior.

In Minnesota the youth group Good Trouble is currently developing a student-based system of 'feedback' for a system that currently does not seek out reactions from those it serves.

At bottom, the problem is the institution of 'adolescence'

The discussion about prevention should go deeper, though; should go on to raise fundamental questions about 'adolescence'. This uniquely

American institution underlies, shapes, youth behavior. Conventional school is deeply invested in adolescence and complicit in its effects.[12]

It came with the reform that ended child labor after 1900. Almost half the 16-year-olds were then at work. What were they to do? The answer was to expand high school; to make compulsory for all young people the education which to that point had served only the privileged minority going on to college. Soon almost all 16-year-olds were in comprehensive secondary schools.

Adolescence . . . the 'artificial prolongation of childhood past puberty', relieving teen-agers simultaneously of adult responsibilities and of adult rights . . . was seen at the time as a good thing: Yet requiring all young people to attend high school produced tracking.

Today adolescence continues, unquestioned: Good people who would never utter an ethnic or racial epithet think nothing of referring to l8-year-olds as 'kids'.

"Our high schools used to be filled with children", Mary Lee Fitzgerald (earlier commissioner in New Jersey) said when heading education for The Wallace Funds. "Today they're filled with young people who are basically adults — being treated still as children."

The reappraisal of adolescence is a job for the future. At the moment the job is to remove that inequity in access to knowledge that comes with its appearance.

Minnesota is doing well at developing the 'technology of learning' that is able to do that; being relevant, offering close relationships and personalizing student work. With now a sector open to innovation we are seeing what works . . . seeing the new sector grow. We are seeing what motivates young people to learn . . . seeing their competencies . . . seeing that the innovations are financially feasible.

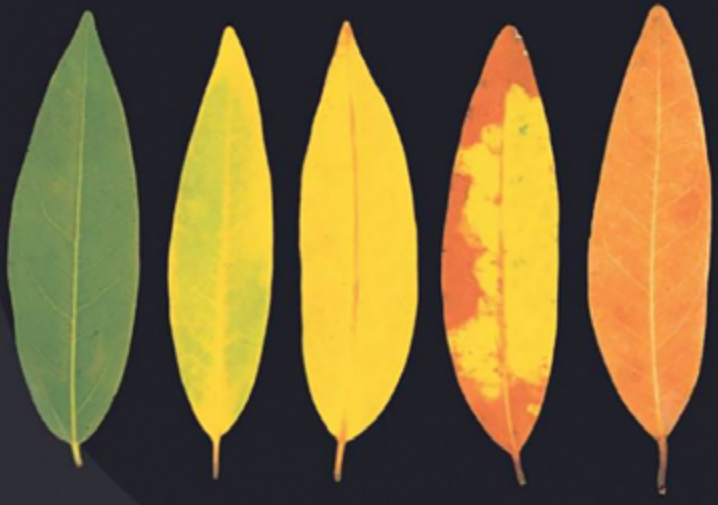
How to extend that model to all who need it, is now the question.

This takes us to the strategy best able to complete the transformation of Minnesota's public education in its district sector.

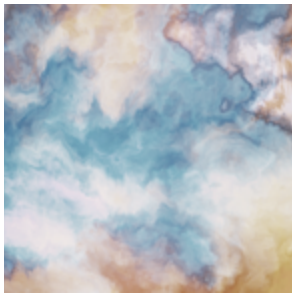
It takes us to Everett Rogers.

DIFFUSION OF INNOVATIONS

FIFTH EDITION



EVERETT M. ROGERS



- PART THREE -

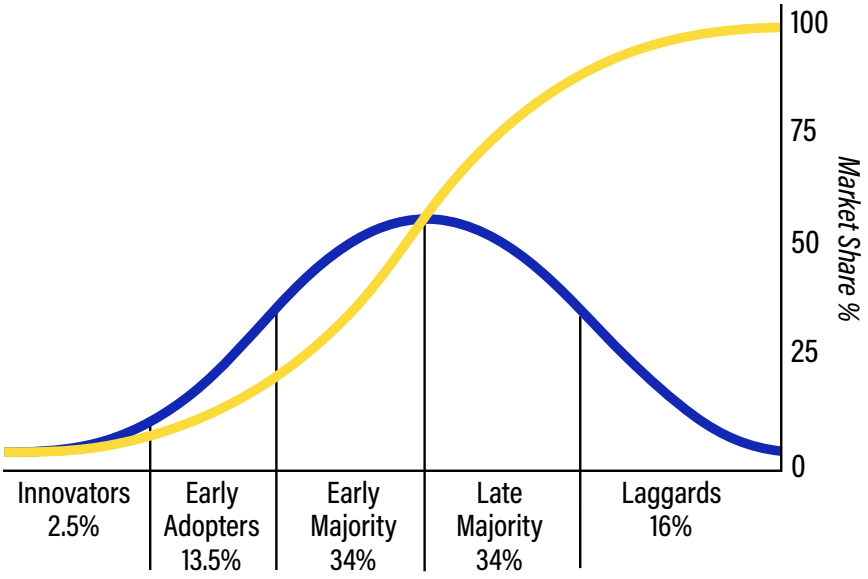
The Strategy: Innovation Gradually Diffusing

Everett Rogers began, in Iowa, with a curiosity about how improvements at the 'experiment station' — the hybridization of seed corn, better cropping practices, better animal husbandry — spread among those in farming.

That interest broadened. It became his life's work to understand and describe the process by which innovations spread; among individuals, into and across industries and through organizations within institutions. A lifetime of research went into the five editions of his *Diffusion of Innovations*.[1]

He found a process similar for innovations of every sort, everywhere. That process — what in practice happens — is better than the one conventionally used for 'change' in public education. All those involved with innovation should think in terms of 'diffusion' as the process for its implementation.

Rogers drew a 'curve of adoption' that both illustrates and explains the process. Something new appears. Adoption is voluntary. The innovators of course go first. Action then spreads to the 'early adopters', rises sharply up the S-curve to form the 'early majority' and then the 'late majority' until finally the 'laggards', too, pick up the new-and-different and the transformation is complete.



Market Share by Segments

With this he is describing, of course, successful innovation. Not every new-and-different idea succeeds. 'Diffusion' works to sort out the good from the not-good; the desired from the not-desired. In the process the successful innovations improve: Think about the first airplane, first telephone, first computer.

Innovation + Diffusion is the process for change

Education's conventional theory of action is not a successful theory.

It has been a process that works through what Professor Charles Lindblom in a discussion at the Humphrey Institute described as 'mechanisms of central authority'. It is an effort politically engineered; 'systemic' because 'everything relates to everything else' and 'comprehensive' because surely everyone should be doing what is found to be right.[2]

Its advocates also want change that 'scales up' quickly. 'Quickly', however, requires compulsion. And saying 'You Must' predictably creates opposition among those not yet ready. Manifestly unsuccessful, that process should be discarded as obsolete.

Here we come to a fundamental challenge to conventional thinking.

The discussion about issues and action has assumed, accepted, that policy is made by 'policy-makers' in the political process. Not so — at least with change of the sort we are contemplating here. Policy in this sense is made by the public. The Legislature, Jack Davies explained when a state senator, is a *responsive* body. Legislation begins with an initiative from the outside.

In a discussion after leaving as governor, Elmer Andersen said: "When the public is clear about what it wants, elected officials are important. When the public is unclear, or divided, legislators hesitate; wait for consensus to develop. At that point those important are the ones developing the new consensus." (Notably, Andersen had by then bought and become publisher of a newspaper group.)

Innovation + Diffusion — the process Everett Rogers identified; what Lindblom called a 'mechanism of mutual adjustment' — develops and demonstrates the public support for change. Being voluntary and gradual it avoids conflict. Also, starting with those who are ready, and so being less compromised, the initiative can be more ambitious. It creates the consensus for whatever legislative actions are necessary.

Here in Minnesota the process of replacing the obsolete system is best thought of as the process of paradigm change. This is clear in the definition: "A framework containing the basic assumptions, ways of thinking and methodology commonly accepted".

A paradigm *is maintained* by its professional organizations, by educators who teach it, by academics researching it, by conferences, by government agencies using it, by the media slow to question it, by the public that grew up in it, and by those who finance it.

Paradigm change is "a major, fundamental shift in the concepts and practices of how something works or is accomplished". This change is not accomplished by modest 'innovations' on old concepts. It is what Joe Graba calls "fundamental change"; a 'revolution" as some say, *replacing* present arrangements.

The process begins as concepts considered 'normal' seem no longer quite to fit; as existing theory can no longer explain things happening, or is unable to handle problems appearing. For a time, these anomalies are dismissed, but as they grow in number and significance the old ways come into crisis. An alternative paradigm is proposed. Debate sharpens. The new paradigm is established not as those holding to old ways are converted but as most people come to find it explains better what is happening and deals better with the new problems appearing.

This describes what is happening in public education. The concept Horace Mann brought here from Prussia has lasted almost 200 years. That paradigm is deeply rooted. But today it is sliding into crisis. Predictably a new and different way of thinking about teaching and learning is appearing, gaining support, beginning to diffuse.

The diffusion need not be slow. How rapidly the innovation spreads depends on how widely it is made known and how valuable it is seen to be by those who learn about it.[3] The keys to success are good communication and skillful persuasion.

That speaks to the process of change. But what about the innovations themselves? Who comes up with the new ideas? What accounts for their appearance?

Innovations come from 'those closest to the action'

Professor Paul Kennedy, a historian at Yale, found the answer in his study of what made it possible to win World War II. Solutions came, he explains in *Engineers of Victory*, from largely unknown middle-level people given encouragement and opportunity to figure out how to remove the obstacles that stood in the way.[4]

His explanation goes like this:

Roosevelt and Churchill had set the objectives: to concentrate on Europe first; to supply Britain from factories in North America; to bomb Germany night and day, to open a second front on the continent as soon as possible.

The obstacles were obvious. In the Atlantic German submarines were sinking the merchant shipping, and over Germany bombers were being shot down, at unsustainable rates. No one knew how to land an army on a hostile defended shore.

Those obstacles were overcome — astonishingly — in about 18 months. Two young graduate students found a way to fit radar into an airplane to locate the U-boats . . . Ronnie Harker, a test pilot for Rolls Royce, suggested putting the Spitfire engine into the underpowered American P-51; creating the Mustang, a fighter able to accompany the bombers to Berlin and back . . . Little-known officers of the U.S. Marines adapted work by the Corps in the 1920s to develop the landing craft that made successful the attacks on Normandy beaches and Japan's Pacific islands.

Currently better ways of teaching math — Sal Khan's Academy and Joel Rose's Teaching to One, for example — come up as comparable innovations being developed outside the schools and now needing ways to come into the system.[5]

Leaders set the objectives. They cannot themselves find the 'how' of its implementation. Leadership's role, Kennedy saw, was to create *"a culture of innovation"* that encouraged those close to the action to use their initiative and ingenuity to find the 'how'. Leadership then acted to see that the innovations were adopted.

This, Kennedy says, is the role for leadership, in all fields, always.

It is impossible not to notice the contrast with public education.

Committed as education policy has been to the theory that it is for 'leadership' to come up with the answers; telling schools and teachers what to do and how to do it, this country has been struggling *for 40 years* to deal with the problems that keep us from improving teaching and learning.

The essential delegation of autonomy to schools and teachers exists in Minnesota's innovation sector. We are in the process of broadening the objectives. We know the 'how' of getting it done.

The remaining question is, How is the system transition made? Who specifically does what specifically?

A perspective from outside

On districts' difficulty in relating to their students' needs

"The pressures, or perceived pressures, on urban districts to be 'legitimate institutions' so preoccupy the board and central office that they are unable to be responsive to their clients — because to do so they would need to reconfigure their ways of delivering services so radically they would no longer be considered legitimate school districts . . .

"An appropriate agenda for urban districts would require reform characterized by the design of client-centered, authentic, respectful organizations that build from the needs and interests of the students, not the conventions of traditional schooling . . . There needs to be an effort to reeducate the funding public . . . that legitimacy cannot be wholly defined by those outside the community."

James H. Lytle, writing in an education journal in 1992 while a senior administrator in the School District of Philadelphia. Not long afterward Lytle was asked to become superintendent in Trenton, NJ. He was there for eight years, replicating the non-traditional program he had created and led as a principal in Philadelphia.

PART FOUR

Responsibility Lies On the District Sector to Act

In trying to have the district sector pick up the innovations it seems logical to look first to individual districts . . . and, to encourage their response, to their associations.

The latter means looking toward MSBA, the association of school boards, and toward MASA, the association of superintendents ('*school administrators*'). Also toward the teachers union; formerly MEA, the Minnesota Education Association, now Education Minnesota. Possibly also toward AMSD, the Twin Cities area districts and MREA, representing the districts in 'rural' Minnesota.

Easier said than done. Like organizations in other institutions, school districts are sometimes slow, or unwilling, to act in what seems from the outside to be clearly their interest. But these organizations are closest to the workings of the system. They can be expected to know its problems and to see the needs for change. The public, and the state, can reasonably expect them to make the changes needed or to ask for help if help is required.

Realistically, change cannot happen without the support of at least some of those inside. Developing that support, conducting the needed discussion with members about the need for change, is the role for those heading the associations.

In practice, though, the heads of membership organizations are often more balancers than change-agents.[1] So it is important to

examine their behavior, and the incentives that shape it. That should let us then consider the forces now at work that might lead districts to become more affirmative about picking up the new model of schooling presented in Part Two.

1. We do need to acknowledge that incentives for change were not part of the design as public education was initially constructed. In this sense the district sector can hardly be faulted for resisting change: Literally, there was no 'have-to'; nothing that required them to change or to feel change was necessary.

Schooling was mandatory. Students went to school where they lived. In each given area the district had an exclusive to operate the public schools. Student learning was not an obligation of the district. Whether the students learned was up to them. The constitution charged the Legislature only to create a system of schools. For years there was no measurement of results. The system imposed no accountability. No concept of malpractice has ever been successfully asserted.[2]

It would have been impolitic, however, for districts to defend their reluctance to change by saying "We don't have to". Some more acceptable explanation had to be constructed. What appeared was the assertion that change takes money and that "the Legislature doesn't give us enough".

How much would be 'enough' was never spelled out. In lawsuits challenging the adequacy of state financing consultants for districts commonly testified simply that "Money makes a difference". A legislator who did once put the question to the MSBA lobbyist was told, "All you've got, plus 10 per cent". A chair of the Senate education committee who offered to get them enough if given the figure, never got a figure.

It was unusual to hear the kind of statement a former chair of the Minneapolis school board made in one of Mayor Fraser's 'achievement gap' discussions. She described "the problems this organization has" as *"not the kind of problems money solves"*. That honest and insightful comment brings quite a different perspective to the question of 'adequate financing'.

Legislators who challenged the 'not-enough' assertion tended not to have long political careers. The message from the MSBA to legislators continues to be: "Give us the money and leave us alone."

Kappan polls show the general public has come to accept that the system *is* underfunded, having been told this so often and with no other explanation having been established. As a result, districts were able to go on not-doing the things well-performing organizations do; soliciting feedback from their 'clients', for example; learning from that. The district was "Taking its customers for granted", as the president of the American Federation of Teachers put it at the Minneapolis Foundation's Itasca Seminar in 1988.

As time passed, the contrast between the modernization elsewhere in Minnesota state and local government and the passivity in conventional public education became conspicuous.

The change elsewhere has been impressive. The Legislature redistricted and, seeing it needed to use its biennium more sensibly, went to annual sessions . . . The executive branch got new departments for administration, finance, management and budget, economic development . . . For the judicial system an intermediate court of appeals was created . . . Counties, often acting individually, got most administrative positions moved from elected to appointed status . . . Municipalities, with legislative help, moved to city-manager and city-administrator arrangements . . . Responding to an initiative from private groups and local-government officials, the Legislature created a metropolitan government for the Twin Cities region.

The school district has remained in its old standard plan of organization.

2. Today changes are appearing that challenge conventional schooling. The question now is whether the district sector will see these as a 'have-to'; will understand and respond.

Even a brief recollection will bring to mind the dramatic change in the nation's economy, the youth culture that developed in that new prosperity, and the resulting changes in parent and public attitudes . . . all challenging the conventional 'technology of learning'.

Three of their effects are surpassingly important.

a) Expectations have risen. A sense has grown that schools, districts, do have an obligation to ensure that students learn. Along with this is the sense that changes in the economy require students to know more; that a basic education is no longer good enough. Measurements and comparisons showing what students know and can do, and how well have reinforced this conviction.

The pressure to do-better appeared in the effort to amend the constitution to establish a civil right to a 'quality education'. It is visible also in the commitment of the Legislature now to a research-based approach to the teaching of reading (which raises the possibility that districts not complying could face suits alleging malpractice).

The conventional response . . . that expectations cannot be met because the district sector does not get the resources . . . might now be wearing thin.

b) Districts are expected to address the inequity visible in the disparities in student achievement. This means there being schools as different as the differences in their student population require. Can districts do this? *Will* they do this?

What James Lytle wrote (see page 20) catches the powerful incentive that produces the problem for districts considering how to serve 'nontraditional' students. These young people need and want non-conventional school. But a district that became too different would no longer be seen as a 'legitimate' district. So radical a departure from 'real school' would risk losing essential political and financial support. Few districts are willing to run that risk.

The internal politics of the district also work against 'different' — the power of the superintendent and central office combined with the pressure for 'sameness' exerted by board members; their felt need to tell everyone "We treat all schools the same" that Tom Nelson found during his superintendencies.

What then results are the inferior learning opportunities provided to those who — through no fault of their own — come dis-advantaged for what conventional school expects and requires; the 'inequality' — today, 'inequity' — to which John Goodlad pointed in *A Place Called*

School (See Part Two). This then produces what Lytle described as the boredom, disengagement, low academic performance and 'inappropriate behavior'; the disruption evident in conventional classrooms today.

The practice has commonly been to move those not learning well into 'alternative' schools. Attempts by districts to create new schools notably 'different' are seldom successful: Few if any of the teacher-cooperative schools Bill Andrekopoulos allowed into Milwaukee, for example, survived his successor. This does not affect urban schools only: In Minnesota, the new school of choice that Tom Nelson created in Buffalo did not last; nor did the one Lisa Snyder let a teacher create in Lakeville.

The behavior is general. Nationally there has been no implementation of the contracting strategy that Paul Hill designed; an arrangement under which a district would assemble a variety of schools tailored for their students.[3] Minnesota districts do not use the state's chartering program in which the 'portfolio' arrangement, especially as used by the single-purpose authorizers, seems precisely what Paul Hill proposed and is manifestly working.

These pressures, imperatives, now arguably represent a 'have-to' that requires the conventional district to change. They should be . . . should be made . . . powerful enough to persuade the district of the virtues of having different schools.

c) <u>Along with the need to respond, districts now can see the potential to respond,</u> using the 'something different and better' that has developed in Minnesota's innovation sector and is making conventional schooling obsolete.

This is the 'new technology of learning' described in Part Two: **(i)** the concept of achievement broadening, and focusing on the realization of the individual student's potential; **(ii)** the personalization of learning that recognizes it is the students who control what's learned; **(iii)** the resources available online being made fully available for student work, and **(iv)** teachers given the professional autonomy required for this new model of schooling.

Both the need and the opportunity are visible in this situation.

The need exists for districts (and for their associations) first of all because choice exists . . . now for the general public as well as for those who could always afford to move to what they were advised were 'the best' districts.

The Kappan found in its earliest testing of public opinion that the support for choice is strongest among people who have not gone beyond (or not finished) high school, persons of low income, people of color and residents of the cities. These now-enabled Minnesotans are using the public options the Legislature has provided. In some conventional districts enrollment has recently been falling.

Nationally, a discussion has begun about the possibility that over time the options available might gradually replace conventional school. 'Replacement' was one of the 'scenarios' considered in the project on "The Futures of School Reform" organized by the Harvard Graduate School of Education more than a decade ago.

It seems unlikely the conventional district would disappear: Conventional school will remain the choice for many middle-class families. Obviously, though, the digital world is a powerful competitor for any institution in the business of gathering, organizing, distributing and presenting information — which 'school' is.

The opportunity exists because the 'how', the different and better way of doing schooling, is known, and can be picked up by others interested in offering schooling to Minnesota's young people and especially to those dis-advantaged.

School has no exclusive on non-conventional learning: That ended in the early '90s with the almost-concurrent creation of the World Wide Web and the browser, and with Congressional legislation broadening to the private sector the use of the Internet that had to that point been reserved for government and for universities.

Public financing of private schools might or might not be approved by the U.S. Supreme Court. What seems most likely is that commercial organizations will see the opportunity to make new forms of online learning available to families dissatisfied with conventional schooling; perhaps publicly financed but, if not, then privately-paid; this regardless of the inequity it would create.

Both the need and the opportunity are . . . or ought to be . . . obvious. There is a history, though, of organizations and industries unable to see, or to act on, the obvious. Western Union dismissed the telephone when it was invented; the telephone industry said 'no' when DARPA offered to give AT&T the Internet.

Reflecting on the subprime housing finance crisis that broke in 2007, Robert Shiller quoted a colleague at Yale, the psychologist Irving Janis, whose book *Groupthink* pointed to the ability of experts to make 'colossal mistakes'. People "worrying about their personal relevance and effectiveness feel that if they deviate too far from the consensus they will not be given a serious role. They self-censor personal doubts", Shiller wrote in the *New York Times* in November 2008. He himself, he confessed, had expressed his concerns "very gently", conscious he "felt vulnerable".

Together, the need and the opportunity provide reasons for the district sector to move. In a process of gradual diffusion it should be able to overcome the 'groupthink' that constrains conventional education from seeing, for example, the importance of motivation in any effort to improve learning, or the determination in Minnesota now to remove the inequity to which Goodlad was pointing.

3. There *are* signs that some in public education see and understand this changed environment. And some districts are moving.

The "A Nation At Risk" report was a warning. Albert Shanker saw it; used it to urge there be a professional role for teachers. Bob Chase when president of the NEA urged a new role for unions (for which he was severely criticized by its largest local). Across all of public education, and in nonprofit organizations across the nation, there are individuals, districts and sometimes states that clearly understand the need for a process of change and the opportunity to pick up innovations appearing.

In Minnesota some individual districts are moving to adopt some elements of the new 'technology of learning'. Some districts are themselves starting the language-immersion programs popular in the charter sector; Saint Paul is proposing a school tailored for families

from East Africa. Recently it has been mainly educators from districts coming to the national meetings organized by Education Evolving to spread the creation of 'teacher-run schools'.[4] Some individual superintendents are taking the initiative to do-different; Patrick Walsh at Belgrade, for example, who asks an interesting question. "Now", he says, "we tell students they have to work harder on what they like least and do least well. Why aren't we telling them they can work more on what they like most and do best?"

A particularly ingenious approach to introducing 'the new technology of learning' has appeared in Farmington and Spring Lake Park; not to create a new and different school but to tell individual teachers that to graduate students with the characteristics the board wants they may if they wish, in any way they wish, change the way they work with students.[5]

4. Other things can be done that would speed the district sector's response to these changes, encouraging it to adopt the four elements of the new 'technology of learning' set out in Part Two.

An incentive is a reason to act combined with an opportunity to act. For an incentive to be effective in shaping its behavior the organization must also see the reason as compelling.

Sometimes the reason is not taken to be compelling. School superintendents, for example, might believe they 'cannot' delegate decision-making to the schools. Or might feel they do not have to respond to the personalization that students want: The voice of the young people who see themselves as having been failed by school might become insistent, yet still not be acted-on.

Boards might not feel moved to respond to what parents or the public wants. The Kappan found in its 2015 survey that the public is now less interested in scores on tests than in seeing children truly engaged in learning. Eight in 10 Americans want districts accountable for engaging students. Districts continue not-doing what the public wants.[6]

The job for those concerned for the improvement of public education is both to enlarge the opportunity for districts to change and to

increase their appreciation of the consequences should they not respond when the opportunity is presented to them.

One simple action would be for the MSBA to do now what the League of Municipalities did when it asked the Legislature to provide a process by which general local government could strengthen its capacity to act.[7]

In the late 1940s, with the war over, the Baby Boom beginning, and its central cities almost fully developed, the Twin Cities area was about to see its suburban area grow rapidly. Out beyond Minneapolis and Saint Paul was old 'village' government; its staff an elected clerk and treasurer, no way prepared for what was coming.

Suburban officials and leadership in their association saw the need for a more capable local government — and suggested to the Legislature it put into law three 'optional forms' a municipality could adopt. That worked: Quickly 'villages' did adopt one plan or another. Competent management came to the suburbs, just in time.

MSBA could now ask for comparable legislation; at a minimum for a plan of school-district organization in which the chair would be elected district-wide, as a mayor is elected city-wide. The proposal would be put on the ballot for adoption by action of the local board or by citizen petition should the board itself not take the initiative.

Suburban mayors played the critical role in preparing their municipalities to handle the wave of development after World War II. Twenty years later, the leadership of suburban mayors was critical in shaping agreement on a metropolitan agency. Change of this sort would not have happened had the cities been represented only by their professional managers.

To make the transition to personalized learning and professionalized teaching the district sector will need political leadership — which it now lacks. This means leadership that does not have its job, income and career at stake. *It means directly electing the chair of the district board. The institution of the superintendency cannot do it.*

What needs to be done probably can be done

Here in Minnesota the conventional action, politically, is to support early-childhood, make incremental adjustments within the traditional 'givens' and put money on the formula. Remaining within 'the consensus' changes nothing fundamental. "Everybody wants education to be better", Joe Graba likes to say, "but almost no one wants it to be different."

We deplore the low achievement and vow to do better . . . as if being-concerned and meaning-well by itself accomplishes something. But the problems remain. Our aspirations for public education are not met.

It is time for a successful strategy; time for the one that will have the districts picking up the 'new technology of learning' that has developed in Minnesota's innovation sector.

In this — to say it again — the associations in the district sector need to play a leading role.

It will be essential at the same time to keep the innovation sector trying things; generating new approaches, testing for example new ways of learning math. Each sector will need to be kept invested in the other's success.

Establishing and overseeing the process of innovation-gradually-diffusing will be a challenge for all of us concerned; for state leadership, to be sure, but mainly for the public.

How to establish that new policy, that process, is the important, complex, question that Minnesota now needs to discuss; to think about.

Let's consider how that public discussion can be developed.

- PART FIVE -

Let's Start Thinking Seriously About How To Speed the Diffusion

Minnesota has been innovating, developing a model of schooling that is more effective and more equitable; better at engaging students and offering teachers a personally and professionally rewarding job and career. How do we now get it to spread?

A wise European once said that in America every major decision is preceded by a period of public discussion. That certainly has been true at key points in Minnesota's recent history; with public finance, with environmental issues, with governmental restructuring, with public education.

So making it happen is less a matter of legislating than of building a general public awareness, understanding and support. The challenge is to get that process of 'diffusion' working . . . to get the new 'technology of learning' known and understood and to get the district sector to begin picking up its innovations.

The essentials seem obvious. **First:** Do everything possible to get the district sector to pick up the new 'technology of learning' . . . while those not yet ready can of course continue with traditional school. **Second:** At the same time, keep the innovative sector innovating, evolving, trying new things.

Everyone has a contribution to make

Up front, the challenge is to make the innovative sector and its new 'technology of learning' widely known. "We dare not believe in creative discoveries until they have happened", Albert Hirschman wrote — and in a real sense something 'has happened' only when it becomes known.

This need to build awareness and understanding is a challenge for **the media**.

To write about the chartering idea was hard for even the best newspapers. For example, I have a note dated November 9, 1990 from Joel Kramer, then executive editor of the *StarTribune*, saying: "I personally find the (chartering) idea fascinating. We haven't written about it in the news pages, but we have trouble, frankly, turning ideas of this type into readable news stories. I'm still discussing it with some editors."

When chartering came into law in California in 1992 something of national significance 'had happened'. Through the '90s it was largely the interest of the education writers that spread the chartering idea across the country; into 40 states by end of the decade . . . education writers and editors seeing it responsive to the deep desire in the American public for some different and more successful kind of school.

The new 'technology of learning' developed here in Minnesota is now a reality. It can be reported; described, explained. Reporters have not been accustomed to writing about individual schools; covering largely the districts that have multiple schools. That will continue because many of the high-profile controversies are appearing in the districts. But it is in the individual schools that the future can best be seen. A good education 'beat' will pick this up.[1]

Our **academic institutions** also have a responsibility.

Research is one dimension. Partly the problem is their inattention to local innovation generally. Partly it is that research is not much interested in single cases of new-and-different. Things that start small do, however, sometimes turn out to be important. Researchers also need to be evaluating, continually, how well things are working . . . and to be willing to report what they find.

Schools of education are another dimension. All post-secondary institutions training people for careers need to keep up with changes in the field. The new 'technology of learning' presents such a requirement for those training teachers, and student-centered learning has implications for those training administrators.[2]

Beyond communication the need is for persuasion, to get the essential goal, concepts and strategy understood and accepted. This is something the associations — MSBA, MASA and Education Minnesota — bear a responsibility to do.

Outside the operating system leadership in shaping public understanding of innovation and support for its diffusion needs to come from the **foundations**, now largely replacing business' earlier role in civic leadership. The Bush Foundation's encouragement of student-centered learning is a good early example.

The new **organizations of young people** will be important. The student voice, long disregarded, is rapidly becoming influential.

The state should commit to building that "culture of encouragement for innovation" as its new concept of 'local control' . . . should introduce a different kind of oversight for the innovative sector, and might consider enacting an optional forms statute on its own initiative should the system associations not ask the Legislature for it.

Confirming our sense of direction

We will be embarked on the reshaping of our public education.

We can be getting far more than we are from both our young people and their teachers. We want to make that happen.

The way to equity and improvement is to create a "climate of innovation" that allows and encourages schools and teachers to keep finding ways to maximize the motivation of individual students to engage in serious learning.

This will replace the obsolete institution. It will create a self-improving system that will make Minnesota's public education beyond question the nation's best.

NOTES AND REFERENCES

In the text I have deliberately not identified people mentioned. or explained or referred to things that obviously need explanations and references. I wanted to keep the text brief and clean.

I am writing for people in education who are familiar with the subject under discussion. Also, of course, readers today have the world of information at their fingertips: Google Search will take a reader to whatever book, article, person or link might be sought.

Part One

1. Obsolescence. Examples: incandescent light bulbs (replaced by LEDs) . . . vacuum tubes (transistors) . . . pay-telephone booths (cell-phones) . . . Rand McNally maps (Google maps; Google Earth.) Some of us heard Bruce Dayton saying, much later, that when he and his brothers took over Dayton's, "We knew the department store was a dying breed of cat". Public media, radio and television, are both transitioning from broadcasting to streaming; perhaps also thinking of escaping the old business model that has involved giving the service for free and then appealing for contributions.

2. Jim Long's description of "The PYC Alternative School", written in 1990 when the school had already been operating for 20 years, appears on the **Redesigning Systems** website.

3. The 'range of public options' is fully described in "Minnesota Is Creating a Self-Improving System", a paper on the website of the Center for Policy Design. Go to '**centerforpolicy.org**' and ask for 'Publications'. Subsequently referred to in these notes as **CPD website**.

4. The concept of the traditional system as a public utility, each district 'franchised' to offer public education within its defined territory, appeared in "The State Will Have To Withdraw the Exclusive"; a paper from the Public Services Redesign Project at the Hubert H. Humphrey School of Public Affairs at the University of Minnesota. The text is on **Redesigning Systems**.

5. In 2012 I went with the American delegation to Finland. Its schools were then attracting worldwide attention. There is a tendency in some quarters to look at well-performing organizations/systems/nations and say, "We should be like them". So, look at Finland:

   Public education is a municipal responsibility. Helsinki (twice Minneapolis' size) has a department of education along with its departments for public works, public parks, public safety, etc. Pasi Sahlberg estimated the Helsinki department of education has perhaps 40 employees. The city gets a block-grant of revenue from 'the state' and apportions money among the various functions. There is no elected board of education.

   Child care, early learning, is universal. School starts at age 7; is compulsory (now) to age 18. Upper Secondary (17-18) is competitive; students admitted based on their academic record. Standards are set in the schools. The standard is the teacher's judgment about the potential of the student. Finland does not do 'accountability': If you want to know how well the student is learning they say, 'Ask the teacher'.

   There are schools not run by the municipality; 'charter-like' specialty schools, as for families that want an option for their children: to learn Swedish, or have some educational alternative, or are Catholic (Finland having a state church; Lutheran). Youth sports are not school-based.

   They still do vocational education in secondary school. Upper secondary is Y-shaped; a student can choose either the academic or vocational side. Above the academic are the general colleges; above the vocational are the technical institutes.

   Teaching is a prestigious occupation. Finland has five teacher-education universities. Each runs a 'lab school'. Only about 10% of the applicants are admitted. All teachers have a master's degree. Turnover is minimal, though teaching is not especially highly compensated.

   A single teachers' union bargains at the state level with representatives of the municipalities (in something like the

process we have between the building trades and the general contractors). There is a single salary contract. There has been one strike in the past 20 or 30 years.

Part Two

1. The biography of Horace Mann — titled simply *Horace Mann* — is by Jonathan Messerli. His specific comment in Chapter XIV is that Mann "thought of children not as individuals but as masses of pupils or an entire generation needing to be trained". For Mann, descended from the early English Puritan immigration, the prospect of the diversity created by the Irish emigration to America that began in the 1820s was a concern; made him want to "create an institution capable of providing all children with a common experience".

2. Theodore Sizer was a young dean of Harvard's Graduate School of Education who later drifted out of the mainstream, to create the Coalition of Essential Schools and, with his wife, to create a charter school in Massachusetts.

3. John Kostouros' explanation of 'engagement' is on the **CPD website**. At **http://68.77.48.18/RandD/Phi%20Delta%20Kappan/PDK%20Poll%202015.pdf** you can see the report from The Kappan's polling of Americans' attitudes toward their schools in which 'engagement' appears as what the public most wants to see . . . test scores ranking last.

4. In 1954 Wiener published a revised version of his *Cybernetics and Society*, originally written in 1950. 'Cybernetics' has been defined as "the art of steeringship". Weiner saw an enormous ability in humans to learn. But everything depends on feedback: People act, see results, correct based on information fed back, do better as a result. He envisioned machines also designed to be self-correcting; receiving feedback. Young people once were given as much responsibility as they could handle and allowed to progress as fast as they could go: Read the stories Paul Johnson tells in *The Birth of the Modern* about youth from terribly deprived backgrounds who went on to do amazing things in England in the early 1800s. "Today," Weiner wrote, "the channels of apprenticeship are largely silted up. Our elementary and secondary schools are more interested in formal classroom discipline than in the intellectual discipline of learning something thoroughly." We assume high level of accomplishment is for later, for advanced,

education; not for youth. See page 132 of the Anchor paperback.
In this revised version, *The Human Use of Human Beings*, published in the early years of computers, Wiener was highlighting the similarities of and the potential for enlarging learning by humans — and by machines; envisioning what today we call 'artificial intelligence'.

5. *The Dumbest Generation* was Professor Mark Bauerlein's title for his 2008 book. It got much attention, as a look at the entry for him online will show. The Pew report on student use of social media is at **https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/**.

6. A fuller explanation of the teacher partnership as a critical element of the New Technology of Learning appears in Chapter 20 of *Thinking Out the How*; a free pdf of which is on the **CPD website**. A nice summary, which includes a report on a site visit in November 2022 to the first 'teacher-run' school — New Country School, at Henderson MN — is in *Making the School the Teachers' School*, also on the **CPD website**. Education Evolving works to spread the professional arrangement nationally. A recent book focused on this innovation is Curtis Johnson's *A New Deal for Teachers. Accountability the Public Wants; Authority the Teachers Need.*

7. Teacher unions were exposed to the possibility of the professional-partnership during the meetings of the Teacher Union Reform Network. In its meetings from 2002 to about 2012 Joe Graba explained how in Minnesota's charter sector teachers are able to create schools in which 'professional issues' are fully devolved to them. Louise Sundin was a long-time president of the AFT's Minneapolis local. The AFT Innovation Fund helped her start the Minnesota Guild of Public Charter Schools, the single-purpose authorizer she then created in 2011. The NEA knows about the professional model as well. Its director of strategy is John Wright.

8. The 'amicus brief' dealing with the failure of 'the Page initiative to define 'quality education' is posted on the **CPD website**.

9. The persistence of the inequity is documented in the 2013 report from the Brown Center at Brookings: "The Resurgence of Ability Grouping and the Persistence of Tracking". The

report is especially helpful in distinguishing the two.

10. The report is on the **CPD website**.

11. There is much about High School for Recording Arts online. Notes of Theresa Neal's description of the program she ran at Totem Town can be found on the **CPD website**. The idea of young people 'wanting to keep going to school' at their correctional institution is astonishing.

12. Chapter Six in *The Split-Screen Strategy* (a free pdf on the **Education Evolving website**) discusses the institution of adolescence. A good overview of the criticism of this uniquely American institution is psychologist Robert Epstein's book, *Teen 2.0*, initially titled *The Case Against Adolescence*.

Part Three

1. The Wikipedia entry is **https://en.wikipedia.org/wiki/Everett_Rogers**. Other entries focus on his research on the diffusion of innovation and on his theories of change. *Diffusion of Innovations* is one of the most-cited works in all the social sciences.

2. Lindblom's well-known book is *Politics and Markets*. My notes of his presentation and of the subsequent discussion that day are on the **Redesigning Systems** site. Conscious that he was meeting with people whose business is politics, Lindblom talked not of 'markets' but of 'coordination through mechanisms of mutual adjustment'. He did not spare the advocates of central-authority, however. "*The process of what I have called mutual adjustment is messy and untidy, and is therefore unappealing to many persons. As a consequence the most logical and intelligent people tend to underrate its potential. This continues to be one of the major intellectual problems in the organization of human action.*"

3. The Internet is an important case of diffusion . . . for some considerable time spreading hardly at all and then in the '90s, as the U.S. Department of Commerce wrote, displaying "a pace of adoption that eclipses all other technologies that preceded it". In 1998 Internet usage was doubling every 100 days. The change resulted from opening the network for more than academic and governmental use, and from the creation of the World Wide Web in 1990 and the browser in 1993. The shape of the 'S-curve' for the 'new technology of learning' might be low initially, then take off sharply. It depends on

how serious we are about the improvement.

4. Professor Kennedy is quite serious about the general application of his conclusions about the usually-unappreciated contribution of the 'middle people' to winning World War II. The five examples he presents "carry a significant transferable message into other fields, other disciplines, other great contestations", he wrote.

5. Sal Khan offers interesting thoughts about education and artificial intelligence in this video: https://youtu.be/A7REVn9gzgs For an introduction to Joel Rose's "Teaching to One", see https://youtu.be/A7REVn9gzgs

Part Four

1. One notable case of an association executive asserting leadership was the effort by Alf Johnson when heading the American Association of State Highway Officials. The Interstate program had suddenly drawn his member organizations, long accustomed to building straight-line roads in the country, into cutting through urban neighborhoods. Intense criticism appeared, from Boston to San Francisco. Day after day, in state after state, Johnson was telling state engineers that "if we do not change, the planning of urban roads will be taken away from us".

2. The absence of a 'have-to' was the central assertion in the 1990 memo, "The States Will Have To Withdraw the Exclusive". Its text is on the **Redesigning Systems** website.

3. Hill set out his proposal for a contract district first in 1995 while still with RAND Corporation. *Reinventing Public Education* was reissued two years later after he had moved to the University of Washington to set up the center (carrying this name) that still operates there. The contract arrangement exists in what Hill would likely consider perfect form in Minnesota's charter sector, visible in the 'portfolios' assembled by the non-district authorizers. School districts were not alone in dismissing his proposal: Elected public bodies generally resist going to contract for the operation of what they regard as their mainline service.

4. These districts basically tell individual teachers that in order to graduate students with the characteristics the board has said it wants to see, they may change the way they work with students in any way they wish if they wish; the district giving

them space, time and financing. Asked about opposition, Jay Haugen, who introduced this innovation while Farmington superintendent, says: "What's to oppose? Nobody *has* to do anything." Interviews with teachers and administrators at all levels in both districts appear on the **CPD website** in "Teacher-Centered + Student-Centered" by Charles Kyte, MASA's executive director for about 10 years.

5. The story of the Optional Forms of Local Government legislation and the explanation of its possible application to the school district appears in "How the State Can Deal with the School Boards' Inertia", a paper on the **CPD website**. There is also a rough draft of a legislative bill.

6. Asking Google Search simply to look for 'Kappan polling of public attitudes toward the schools' will bring up most everything you'd want to know about the findings in any given year.

7. Education Evolving's national initiative for 'teacher-powered schools' — where the current national network is mapped — is at **https://www.teacherpowered.org**.

Part Five

1. Emily Hanford, a journalist with American Public Media, played a major role in publicizing the weakness of the whole-language approach to literacy and in explaining the research-based 'scientific' approach. See **https://www.apmreports.org/episode/2019/08/22/whats-wrong-how-schools-teach-reading**. The Minnesota Legislature established a priority for the research-based approach in 2023. How the districts implement it is a question APM and other media should now pursue.

2. This was the view presented by John Witte of the University of Wisconsin/Madison in a panel discussion at the American Educational Research Association in 2003. Someone pointed out it was the 100th anniversary of the Wright brothers' flight. At that point one heavier-than-air craft had successfully flown.

ABOUT THE AUTHOR

Ted Kolderie was a member of Governor Quie's task force on education policy in 1982 and of Governor Perpich's Discussion Group from 1984 to 1988. With Joe Graba he founded Education Evolving.

He had earlier been a reporter and editorial writer for the Minneapolis Star and Tribune, executive director of the Citizens League and a senior fellow at the Hubert H. Humphrey School of Public Affairs at the University of Minnesota.

In 2007 the National Alliance for Public Charter Schools made him an inaugural member of the Charter School Hall of Fame. In 2011 he received The James Bryant Conant Award given by the Education Commission of the States for "outstanding contributions to American education".

He went with the American delegation to Finland in 2012.

His thinking about education policy can be traced through his four earlier publications: in 2004, *Creating the Capacity for Change - How and Why Governors and Legislatures Are Opening a New-Schools Sector in Public Education*. . . in 2014, *Improvement + Innovation - How To Get Education Changing the Way Successful Systems Change* . . . in 2015, *The Split-Screen Strategy - How To Turn Education into a Self-Improving System* . . . and in 2021, *Thinking Out the 'How'*, his recollections of his time in public affairs.

IMPLEMENTING THE OBVIOUS

Remarkably, surprisingly, the 'alternative' education created by Minnesota's Legislature has produced the new 'technology of learning' that is making conventional schooling obsolete. This book sets out the four elements of this 'better way of doing things' and explains their potential.

They involve: **1)** Broadening the concept of student achievement to focus on realizing the potential in each individual child; **2)** Personalizing learning to motivate student effort, recognizing that students control what's learned; **3)** Ensuring teachers have sufficient autonomy to work with their students in this different way, and **4)** Providing both teachers and students full access to the world of knowledge available online.

This different way of doing things is generating innovations that show how much can be achieved by all students . . . especially by the teenagers too long left behind by conventional schooling. It is creating for teachers a personally and professionally rewarding job and career. It can transform our public education into a self-improving system; the nation's best.

The importance of introducing the different-and-better should be obvious. The next step is to get this innovation to spread through the district sector.

Seeing and adopting the obvious does challenge the prevailing consensus, the 'real school' that the new technology of learning makes obsolete. But having the innovation diffuse voluntarily and gradually will make the transition possible.

The process will require the understanding and support of the public. That discussion needs to begin now.