



# Walter McClure, Chairman of the Center for Policy Studies

Civic Caucus, 8301 Creekside Circle #920, Bloomington, MN 55437

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**Present:** Verne Johnson (Chair); David Broden, Janis Clay, Marianne Curry, Bill Frenzel, Paul Gilje, Joe Graba, Jim Hetland, Jan Hively, Sallie Kemper, Dan Loritz, Jan Malcolm, Joe Mansky, Tim McDonald, Jim Olson (phone), Wayne Popham (phone), Dale Shaller, Bob White, John Mooty (phone)

**Summary of McClure's comments:** McClure opens his remarks with an overview of large system architecture, followed by an articulation of the formal theory and methods behind its practice. He closes by describing how Minnesota can support efforts at large system design in multiple industries into the future.

**A. Context of the meeting** -The Civic Caucus, and now candidates and organizations throughout the gubernatorial campaigns, have been talking about the need to rethink and redesign how Minnesota does things as a state. Walt McClure has spent a career in the design and change of large systems, and argues that the term 'redesign' actually needs to be defined further to distinguish between innovation that takes place inside an existing system, and that which modifies the structures of the system itself.

McClure prepared a paper on the topic ahead of today's discussion, together with examples of large system architecture applied to K-12 education and health care, that may be found here: <http://tinyurl.com/2fstymw> .

**B. Welcome and introductions** - Walter McClure is chairman of the Center for Policy Studies, a policy research organization, based in Minneapolis but working nationally, that develops and helps apply system reform strategies for health care and public education. Its public education reform project Education|Evolving is more commonly known nationally, and is a joint venture with Hamline University.

McClure received a BA in philosophy and physics from Yale in 1959 and a PhD in theoretical physics from Florida State in 1967. He worked on rocket engine problems and nuclear cluster theory before switching in 1969 from physics to health care reform policy. He worked at InterStudy on the HMO strategy under Paul Ellwood's leadership until leaving in 1981 to start the Center for Policy Studies. He directed the Center until his retirement in 1990.

At the Center McClure developed Large System Architecture, which is both a general theory of why organizations do what they do, and a set of methods to design and carry out system reform strategies. The Center has not been active in health care system reform since his retirement, but has been very active in public education system reform under the leadership of Ted Kolderie.

**C. Comments and discussion** -During McClure's visit with the Civic Caucus, the following points were raised:

### Overview

Minnesota, like the nation generally, confronts a seeming double-bind: either raise taxes or cut important programs. The resulting political squabbling back and forth has been interminable. But a third alternative exists and is finally getting some currency, namely: redesign our important large social systems - education, health care, criminal justice, welfare, etc. - to get more for less. In fact, redesign has suddenly become a buzzword and many of the people using the term have only a vague notion of what it means. In this discussion I will try to bring some precision and practicality, born of three decades of experience, to this concept. Minnesota has always led in progressive thinking and action, and I hope to suggest a few ideas on redesign that might keep us in the forefront for the foreseeable future.

### **Two types of redesign are possible**

The first, and simpler, is "**omnibus tinkering**": if a system appears reasonably sound, we simply look for every place that improvements seem possible that raise its performance or reduce its cost. Omnibus tinkering allows continuous fine-tuning, and in some cases, over time, can achieve quite worthwhile savings and performance improvements. The disadvantages are that such efficiencies tend to be small and one-time only. Worse, the system requires continual external policy surveillance and intervention. The system is not itself hunting for these improvements and efficiencies (if it were, tinkering from the outside would be unnecessary). Often as soon as external vigilance is relaxed, a system may begin to return to its less efficient ways. And, in the worst cases, organizations in a seriously malperforming system simply resist all external private and public attempts to improve their performance and efficiency.

For example, despite decades of tinkering in education and health care, the two largest items in State budgets, where we absolutely know from research excellent measures to improve each of these systems, the organizations - schools and school districts in the one, providers in the other - have simply evaded, distorted, or diluted to tokenism, all such measures. None of the improvements have taken hold in any substantive way. These systems have remained stubbornly resistant to change, so that more of the same old policy efforts (only harder and better this time) seem fruitless. So what's missing, and what can be done?

Which brings us to the second and more difficult approach to redesign, namely: "**system reform**." I think we all have intuitive notions about what comprises system reform, but I would like to sharpen our ideas and make the term quite precise. And this brings me to the notion of **Large System Architecture**: Large System Architecture comprises two components, first, a theory of why organizations do what they do; and second, if they are not performing as society wishes, methods for designing and executing strategies to alter their behavior to the desired performance. I will discuss

three things: the theory first, next the methods, and finally some of the ingredients that seem to me necessary if Minnesota is to be a leader in system reform.

## **Why organizations behave the way they do**

Let us start with the theory - why do organizations behave the way they do - and begin with a little insight-building. How often have you heard that malperformance of various poorly performing large systems is due the moral failings or corruption or incompetence of the organizations and people in the system. Take, say, the health care system: its variable quality and access and especially its runaway cost escalation are variously ascribed to greedy providers or the big bad for-profit insurers or the unhealthy-living, over-utilizing patients.

Let's examine such explanations with a counter-example: a really well-performing system, say, the auto industry. The world simply couldn't make better cars for the money in the variety that people want than the auto industry does today, and its productivity keeps rising; it keeps doing better for less. Now, does anyone think this is due the altruism and purity of auto executives? Further note: it is a profit-making industry. And: it has as much greed (and as much altruism) as any other large group of human beings. So it can't be greed or profits that stops a system from performing well. In the auto industry if a company can't make a car that people want for the money, that company is out of business - ask General Motors, whose incompetent leadership over several decades ran this great company into the ground, requiring a government bail-out and overhaul to save it - giving new meaning to the term welfare capitalism.

Clearly, the motives of the people in a car company make no difference; whatever their motives, whether altruistic or greedy, if their company can't make a good car, they are not around very long. The companies that survive and prosper in this industry must perform well.

Surprising to many people, the flip side is equally true, as we shall see shortly. In a malperforming system, no matter how dedicated or selfish the people in an organization may be, if the organization does not malperform in the way observed in that system, it is not around very long, and soon the only organizations that survive and prosper are the malperforming ones.

So what determines why organizations in good systems perform well and organizations in bad systems perform badly? That is what the theory is supposed to tell us, because if we understand that, then we know what to change to make the system perform the way we want.

Let me jump ahead of the formal details for a moment and put the conclusion in a nutshell. The reason organizations do what they do is not because of their "**innards**." It is because of their "**out-ards** ." The larger system places powerful incentives on them that determine what they must do to survive and prosper, and they have no choice about it. The innards of any particular organization merely determine whether that organization will adapt to these incentives or perish. This is an enormous simplification for policy. We do not have to beat up on the thousands of organizations in one of these malperforming large systems. We "only" need to architect - i.e. intentionally design and restructure - the large system so that its incentives reward the organizations within it for doing what society wants them to do. This is what I define as ***system reform***, and it is a quite precise notion.

Policy has yet to really become aware of the presence and power of these underlying incentives. The great error in much policy effort to date has been to order organizations to act counter to the incentives of their macrosystem. Organizations cannot seriously comply with such orders or the macrosystem will hurt or kill them, which is why many malperforming macrosystems have so strongly resisted decades of policy attempts to improve them.

And system reform design, we have learned from experience, is a complex professional discipline. An effective system reform plan can no more be cobbled up in a legislature or citizens committee than a moonrocket. To pursue system reform successfully, Minnesota will have to foster policy analysis groups specializing in system reform strategy, to whom public and private policymakers can turn, reserving, of course, final say on any strategy not to these architects but to our legitimate, established public and private decision makers.

### **The Theory**

Now let us lay out the theory in a little more formal detail. Please forgive the didactic formalism; it's the way I think. I came to health care reform from theoretical physics and found myself the only hard scientist in the field. If you ask a physicist to solve a problem, the first thing he looks for is a theory that explains why the problem is occurring so he knows what to change.

We shall begin with three empirical observations that make up the starting assumptions (postulates) of the theory, from which we will be able to explain and predict the behavior of organizations.

**Observation 1.** Organizations exist in a larger system - call it a macrosystem - whose structure they cannot alter by their own action alone. Thus schools and districts exist in a larger macrosystem we call the public education system, which has a very definite structure. And health care providers exist in a larger macrosystem we call the health care system, which also has a definite structure (quite different than the education system). If you doubt these larger macrosystems have a definite structure, you haven't tried to change it.

**Observation 2.** The structure of this larger macrosystem creates and places powerful incentives and restraints on the organizations within it, powerful enough to punish or kill organizations the more they act counter to them, and to make prosper organizations the more they act consonant with them.

Now, if a macrosystem's incentives reward the organizations within it for performing as society wishes, and punish them when they stray, then we have a well-performing system. The auto industry is one such macrosystem. Organizations in such a macrosystem do what society wants; they do it on their own volition; and they do it far better and more innovatively than policy outsiders could ever order them to do. And if they do not do it, they are not around long. In this felicitous situation the only policy task is oversight - to make sure that the structure of that macrosystem remains sound and is not inadvertently (or deliberately) altered.

But of course in the less happy situation, the converse is equally true: If the incentives of a macrosystem punish the organizations within it for the performance society wishes, and reward them for some other behavior undesired by society, then we have a malperforming macrosystem. No matter how well intentioned the organizations within it, they survive and prosper only if they engage in the

undesired behavior, and if they do not, they are not around very long. In such a case the policy task is much more demanding. It requires system reform as defined above: i.e. systemic change in the structure of the macrosystem to alter the incentives and align them with the goals society has for that system.

And thus arises the name Large System Architecture. We must architect unsound macrosystems; that is, we must: (A) come up with a future design for the structure of the macrosystem that would, could we wave our magic wand and have it replace the present structure, place stringent incentives for the desired performance on the organizations within it; and, since we lack any such magic wand, we must also (B) come up with a practical strategy to leverage the system from here to there. In short, we must first know exactly where we want to go, and then devise a way to get there.

Which brings us to the third observation:

**Observation 3.** The structure of a macrosystem can be altered by sufficient collective action.

In other words, while one organization alone within a macrosystem cannot alter that macrosystem by its own actions, if enough organizations within and without it act collectively, it can be restructured. Organizations already know this, whether policymakers do or not. You will note that virtually all macrosystems are rife with multiple trade associations of the organizations within them. And one of the chief aims and activities of such collective activity is to alter the structure of their macrosystem in ways favorable to the organizations; these may or may not be favorable to the public. Public policy must be given the tools to assure that all collective action, including its own, is brought to bear for the public interest.

A theory is nothing but a small set of postulates (starting presuppositions) from which by deduction one can explain and predict an enormous number of empirically observed effects. These three observations, whose empirical truth (and limits) the reader can see for himself, constitute the postulates of Large System Architecture Theory. By examining the structure of a macrosystem, we are able to discern the particular incentives and restraints that it exerts on the organizations within it, and from those incentives we can predict the performance of those organizations for good or ill.

Once you look through the lens of this theory, you no longer need blame the malperformance of any macrosystem on moral failings, stupidity, incompetence or corruption of the organizations and individuals within it. You do them grave injustice if you do, and you haven't a prayer of altering their behavior because you are looking in entirely the wrong place for a solution. No large group of human beings has a monopoly on the virtues or vices of the race. There are quite as many brilliant, exceptionally competent and highly motivated people in the education system and health care system as in the auto industry, and just as many incompetents and miscreants. The difference is not the people, it is the incentives of the macrosystem structure they operate in: what performance it rewards, and what it punishes. You cannot change human nature, but you can change the incentives of a macrosystem and then the same people will act differently.

### **Methods: Designing a Future Model**

In addressing a malperforming macrosystem, the large system architect has two main tasks: The first is to come up with a "future model": a design for the macrosystem's structure that will place stringent

incentives for the desired performance on the organizations within it. The second task is a strategy to make the future model happen: to devise "change strategies" that move the present system to the future model, and to assist those in position to help make this happen. We'll start with devising the future model and address change strategy below.

To devise a future model, the architect must (1) determine the problem behavior of the organizations in the system and then (2) identify the underlying cause of these behaviors, namely: the underlying incentives selecting for the problem behavior, and the macrosystem structural elements that give rise to these incentives. (Using a medical analogy, before we can prescribe a therapy  $R_x$  we must identify the symptoms  $S_x$  and determine the diagnosis  $D_x$ .) This faulty underlying structure is what must be altered in the future model in order to correct the performance of the system.

A **macrosystem** may be defined as ***a set of organizations which interact strongly to accomplish a definable purpose for society***. That purpose is spelled out by the performance goals society desires for that system. A **problem** may be precisely defined as ***a discrepancy between goals and actual performance***. Thus before we can determine the problems (symptoms) of a macrosystem, we must determine the goals society desires of that system. Then we can seek performance measures to see how well the system is doing against the desired goals. Thus to identify all problems and the perverse underlying incentives creating them, the first step for the architect is to specify a complete set of goals for the system.

Having a complete set of all goals is even more important when we begin devising a future model with correct incentives. Politicians are always eager to work on the easy and more popular goals and defer on the politically more difficult goals, thinking they can be added later and become someone else's headache. This is usually a recipe for failure in system reform. Because goals often conflict and require trade-offs, it is usually impossible to tack on additional goals to a completed future model design aimed at only one or two of the desired goals.

In this sense macrosystem design is like rocket science; the design must incorporate all goals simultaneously. If you have a rocket design, and afterward decide you want to double the payload or double the range, you cannot just tack on a fix. You must redo the entire design because all parts depend on all other parts. Macrosystem design is similarly complex and requires professional expertise, study, and experience. A future model can no more be cooked up in a legislature or lay citizens committee than a rocket or an automobile. What legislatures and citizen groups can do is express what they think are the goals society desires and set the large system architects to work, and then approve, or reject, or request further study and work, when the architects submit a proposed future model and change strategy.

Note, this is what Congress did when it created NASA to conduct the moonshot; it did not try to design the rocket itself in committee. Because lay groups have more familiarity with macrosystems, they usually assume, with unfortunate results, that they can jerry-rig together a strategy themselves. That is why we have made so little progress on our most difficult problem systems like health care and public education despite decades of effort. Akin to NASA, we need a profession of ***large system architects*** - policy analysts and researchers who specialize in study and development of reform designs for particular problem macrosystems - to whom this specialized work can be delegated, while all final approval remains, as it should, in the hands of established public and private decision-makers.

For example, just arriving at a complete set of workable goals and measures is complex and may require months of work, iterating between problem analysis, incentive diagnosis, and potential future model designs, before resolving into a practical set of goals. In practice, in many cases we must settle for proxy goals and measures. Society seldom speaks with a uniform, let alone informed, voice, and each special interest group has its own notions about what the goals should be. The architect must arrive at his own best formulation of the goals he believes society has expressed desire for, goals that serve the public interest rather than some particular special interests. He can then state that if society wishes the goals he has set out, here is a proposed future model design likely to achieve them. Legislatures and citizens groups can then select amongst rival designs for the one that best reflects their opinion about the goals and of how likely the design is to work in practice.

Once the goals, problems and underlying causes have all been identified, there is no recipe for devising a future model, only knowledge of what needs altered to eliminate the existing perverse incentives, and knowledge of all the performance goals that the new incentives must select for. Arriving at a structure that entrenches stringent new incentives for these goals depends on the skill, imagination and experience of the architect.

### **Methods: Devising Change Strategy**

Future model design follows a fairly definite iterative procedure - identifying goals, problems, underlying causes, and then design - which proceeds more or less as a research and analysis project. But change strategy - to move the present system to the future model - puts us immediately in the world of action; it is much more of a moving target and may require shifting gears frequently. Nevertheless certain principles offer useful guidance.

**The first rule is to *have the future model design in hand at the start*** . All parties involved in facilitating the change must know with precision where we are trying to move the present system. Thus we can constantly monitor if actions are leading in the right direction, and alter course when they are not.

**The second rule is *always work on the front log in the jam*** . We may liken the task of change strategy to breaking up a log jam. Working on a back log does nothing to unstick the jam. We must find the front log and move that one. By "front log" I mean the step or action most likely to unbalance the status quo holding the macrosystem in its present form and produce the most response in the direction of the future model.

**"Working" on the front log means *finding and persuading those parties of interest with the power and motivation, to take the needed action*** . Parties of interest may include public and private interest groups and various levels of government or its agencies. This usually requires a lot of educational work, diplomacy and consulting assistance, to show the advantage to a party of interest of taking the action, and the disadvantages of not taking it, and then to help in actually taking the action. If successful, and the action is taken, the log jam shifts, sometimes predictably but often not.

The shift usually brings a new log to the front of the jam. Again the architect must identify this new front log and then identify the coalition of interested parties with the power and motivation to move it. Those parties interested and capable of moving the new front log may be the same or a completely different coalition of interested parties as took action on the first front log.

The architect is now chasing a fluid situation, attempting to identify each new front log as it comes to the fore; then identifying the interested parties that might move it or fortify the action; continually assessing whether the resulting movement is in the right direction toward the future model or has resulted in a reversal of progress; and altering and adapting course to keep the change strategy moving and homing on the future model.

***Government may play a more useful role by leadership than by legislation***, depending on the nature of the problem macrosystem and the desired future model. Legislation tends to reduce flexibility. Often a coalition of public and private leadership can produce better, faster, more agile progress. But also in some cases legislation done well can help or be crucial.

**The architect and advocacy groups working for reform must *always also work steadily on the rhetoric battle***. Rhetoric addressing all relevant parties as well as the general public must be created to build understanding and support for the proposed system reform. Every special interest will attempt to capture the rhetoric and try to put its own spin on it to favor itself and oppose change threatening to it. Interest groups may expend considerable effort and money on propaganda and disinformation to muddy the waters. The forces advocating for system reform must be prepared to counter such efforts with equally frequent and skillful rhetoric.

**Finally, wherever and to the extent feasible, *it is best that change strategy be staged***. As much as possible, one would like to create discrete local demonstrations of any proposed new future model and test and refine it before scaling up to more widespread implementation. One does not build a new moonrocket and load the nation on board on the first launch; one runs tests and gradually scales up as the design is refined and proved out. For the same reason, given the complexity of a macrosystem design, we would prefer, to the extent possible, to establish limited test beds first to assess and refine a proposed future model, and then gradually implement it more broadly, monitoring and refining it along the way if and as problems emerge.

### **Supporting System Reform**

If Minnesota wishes to be in the forefront of system reform efforts, then it may wish to see to the fostering, care, and feeding of large system architecture groups here. The Center for Policy Studies is such a group and has developed and assisted interested parties across the nation with proposed system reform strategies for each of the two largest items in State budgets: public education and health care (a capsule description of each is appended). In other words, this discussion is not about some ivory tower exercise; for three decades we have been doing in the real world what I have been talking about here. I would like to share a bit of our experience in playing large system architect to indicate what such groups need.

Our senior associate Ted Kolderie has led our Education/Evolving group on public education system reform strategy. He began in 1982 and he and his colleagues are still at it, working on change strategy to move our proposed future model for public education into being here and around the country. Minnesota's State government and private leaders recognized early the promise of this reform strategy and have been bringing it into being with our assistance. Minnesota was thus the test bed for the strategy and it has been refined and improved with our growing experience. An important part of the strategy involves state-authorized chartered public schools, and we have assisted many



States in enacting chartering legislation based on the Minnesota model. We have also developed many tools to assist charterers and organizers of charter schools.

I was responsible for our proposed health care system reform strategy. I started on the problem in 1969 at InterStudy under Paul Ellwood's leadership and then left to start the Center in 1981. Our first big initiative at InterStudy was to get HMOs started as new integrated health care players to compete with the traditional fragmented provider system. I wrote the enabling legislation for Medicare and the HMO Act in the early 70s. Later, at the Center, I was finally able to crystallize Large System Architecture theory, and realized that introducing new actors like HMOs, even if they had better "innards", into a system with the same old perverse incentives was not going to solve the problem.

Also the insurance industry was rapidly eroding the HMO concept of integrated managed comprehensive care providers into policed insurance plans with bureaucrats second-guessing doctors. In retrospect, our HMO work was a good thing that I now feel was a false start. Thus the appended strategy, tagged with the unlovely name Buy Right, was developed to alter the perverse incentives in health care to reward providers for better care for less. During the '80s we got the first step, severity-adjusted outcomes assessment, implemented in three places: Medicare, Pennsylvania, and Cleveland. The remaining two steps, cost assessment and consumer insurance incentives, were not taken because I fell prey to major clinical depression in 1986 and was knocked out of the saddle by 1990 and progress ground to a halt. Remarkably, a remnant effort continues in Pennsylvania, but Medicare and Cleveland abandoned outcomes assessment under industry pressure.

### **What can we conclude from this experience?**

**First** , some macrosystems have obvious reforms, or an excellent reform design has already been demonstrated elsewhere. For example, the British have shown how to reduce prison violence while virtually eliminating the barbarous practice of solitary confinement, producing better performance for fewer prison dollars. These easier cases we can move on right away. On the other hand, developing and implementing a workable system reform design for a really difficult macrosystem can take years, with not much to show for it for some time. And one can expect some false starts, though we now have theory that may reduce such occurrences. Thus *we will need architects, and knowledgeable funding support, willing to stay the course*. And we will need leaders ready and proud to take initiatives that may take beyond their tenure to complete, and proud to claim them as their legacy.

**Second** , the difficult macrosystems require immersion and a team. I did not try to work on education; Ted did not try to do health care. We have to get architects up to speed. One tries to build a team: a creative system reform architect, coupled with an experienced veteran professional of the system who knows how it really works, along with a "go to" guy with diplomatic, executive, and political savvy, to assist with the consulting and change strategy. These people will need adequate staff, all of whom will need considerable on-the-job training. (A problem is that this training and experience will make staff quite valuable to organizations in the macrosystem, which can offer them salaries not possible in the usual shoestring non-profit outfit like an architect group. This is loss of a heavy investment for the architect group. Thus care must be taken to bring on highly committed staff who also want to stay the course.)

**Third** , large system architecture seems to need its own independent home. It doesn't work well housed in academia. The time demands are heavy and irregular and cannot accommodate teaching

schedules and faculty committee meetings and academic overhead. Moreover, if effective, the work can be controversial, making a university department skittish. Ted tried a university base for a few years and then, to my great delight, asked if the Center might want to give him a home - it did, instantly. For similar reasons, an architect group is not well housed as a sidebar in some larger organization with a different operational mission, particularly one in the macrosystem under study.

### **A group doing large system architecture needs steady core funding**

They have great trouble with capricious support that is big on them one year and on to something else the next. They do not need, say, a million dollars for a year, they need a hundred thousand for ten years. This has three effects: It provides support for the kind of basic research and spadework that no one else will pay for. It allows them to hire and train staff without fear they will have to be laid off at the end of short-term grants whose renewal is problematic. Finally, the group can spin up the core grant, often effectively doubling it, with project contracts when a client is found who wants assistance acting on the reform strategy. But the presence of core support allows the group to choose only projects that move the strategy. One is not left scrambling for irrelevant projects just to cover payroll, nor figuring out whom to charge when you go to the bathroom.

We pioneers of this profession have had a tough time making it. We had to come up with the ideas, a time-consuming exercise; we had to educate and seek potential clients (those who could move the front log) all over the country; we had to conduct consulting projects assisting them to implement our reform ideas; we had to run a small non-profit, non-profitable organization; and we had to beg for core money all over the country from a largely uninformed foundation community for ideas considered controversial. A knowledgeable community of government and private leaders and foundations could assure a much stronger, vibrant set of architect groups, who could work both locally and nationally.

### **Concluding remarks**

#### **The key ingredient in any architect group is the lead architect**

In the final analysis I believe the key ingredient in any architect group is the lead architect. I had the intention for the Center, as soon as I knew it might survive, to add education and welfare as program areas along with the health care program that I was laboring on, since the theory, which arose out of the health care work, seemed to me quite generally applicable. I thought the Center could become a place that would train up new large system architects by letting them learn on the job from experienced architects who were actually engaged in reform work. But to start such a program, what I needed first was not money or staff or a proposal, but the guy - a guy with imagination and experience, a committed visionary with a visible track record. When Ted Kolderie approached me looking for a home, I knew I had my education reform program and instantly accepted.

#### **Foster and support one or more system architecture groups to work on each**

So I suggest to everyone - public, private and foundation leaders and citizens - whoever wishes to foster system reform in our several problem macrosystems in the state, you need to foster and support one or more system architecture groups to work on each. (Perhaps government should have besides a council of economic advisors, a council of large system architecture advisors.) You need to build public understanding and support for such work. To build such a group, bet on the man, or

woman, not a proposal. (Basically the proposal is, this guy will think about reforming macrosystem X for five years and tell you what he comes up with; that's what you're betting on, so try to find the right kind of guy.) What's his or her track record of innovative thought, deep and lasting commitment, and accomplishment; if it's there, that person is worth a bet. Find that person - they are rare - and help them build a group and give them their head; stay informed of progress and as long as you see promise there, provide steady core support. I venture if you build several such capable groups around proven, imaginative lead architects, to work on system reform for problem systems in the state, they will cross-pollinate and keep Minnesota ahead for years.

## **Questions and Discussion**

**Q:** Can you describe further what Pennsylvania has done in health care that is so interesting?

**WM:** In the 1980's we were trying to get our Buy Right future model in place (<http://tinyurl.com/29mjlab>). I must have given 100 speeches a year to interested groups. These brought in unrestricted funds that we could put in the center. In every case we were looking for partners, asking: would your town want to do this? I ran into Bill Roper who had started political life in the Executive White House as Reagan's health care staffer and was interested. So I'd go to his office and we'd talk about it. Then all of a sudden he got made head of Medicare.

Buy Right has three components: can you measure severity-adjusted outcomes, publish cost vs. quality reports, and provide incentives to choose for value.

We got Roper's support from Medicare. We got it in Pennsylvania when the executive director of the Pennsylvania Business Round Table got us to decision-makers at the top, and got it in Cleveland because a senior vice president of a major company got us to the top.

The strategy began in five Pa. cities, but the State started a state agency. That may not be the best idea. Don't legislate outcome assessment-it will freeze technology. Understand, it is important to avoid legislation whenever possible. The systems we worked to create began to come unwound after my retirement.

**Q:** When a system relies on a single individual-a super human architect-the project risks failure. That's a problem with top-down design. What about grassroots pressure for change? In K-12, people that have voted with their feet, opting-out.

**WM:** I don't disagree with that at all. With the budget I had, I could scarcely mobilize leadership let alone grassroots. Grassroots is a heavy lift, and to get public to understand is difficult. Alternatively I advocate trying to take actions so that organic grassroots exercises push the system changes. For example, choice in public education makes it possible to open more good schools and drive out bad schools. In health care providing information about who is better for less allows people to make the kinds of decisions that change behavior of providers.

**Q:** Does there need to be a way to limit consumption, with new technology and new advances expanding the scope and breadth of services?

**WM:** There are tools to limit consumption, so that people are not consuming more than the system can provide or afford. The architecture assumes people will make reasonable cost/benefit decisions.

The key is to make consumers aware that they have to judge value-quality for money. If I gave you auto purchase insurance and the premium was fixed, would you buy a Mercedes or a Yugo? It matters when you're spending your own money. For many a Honda is enough, and they will move on and spend money elsewhere instead of on premium maintenance.

**Q:** What about early childhood?

**WM:** I'm not an expert on that. But I do know that research says it's not about early-childhood education, but early-parent education. A chapter in the book *Disrupting Class* reports that the most important age is 0-1, and how much the parents talk to the infant. Chatter about what's going on, causing connections in neurons.

**Q:** Is early parenthood a separate system design strategy from K-12?

**WM:** Yes-The best model I've seen was set up by Ann Ellwood, who set up the MELD system with support groups for new parents. It didn't survive her because there were no incentives to keep it going intrinsically. It is critical to institutionalize changes so that they live beyond the individual.

The best educators are in the video game industry. Every healthy infant wants to learn. Kids want to learn if they're motivated. Video games have found how to engage students intrinsically-not by force. That is the essence of institutionalizing improvement.

For-profit schools, and in particular online universities, need to be carefully studied to see their strong points and weak points to serve the nation's interest.

**Q:** What would you say if you were advising the people behind the candidates for governor? They are facing a challenging situation, and it does not seem they have any idea where to go.

**WM:** That's a fascinating question, because you don't want a candidate fed a sound bite who doesn't know what it means. Candidates are using term 'redesign' and 'system reform' and don't have the foggiest what they're talking about.

**Q:** Okay, so let's go a step beyond the election. Imaging you're the Gov, and you've just been elected. We've got this McClure guy that has this large system architecture proposal. What would we do to start working in the process?

**WM:** If we want to reform the health care system we need a czar in the Twin Cities. We've got all the components here, but they're disparate and isolated. We need to focus on the region. I wouldn't pass any legislation in health care-I'd find a czar, and find people in the business and foundation community, and have them put their weight behind him, to put the pieces together properly.

Understand, it is about finding the right people with the capacity to come up with the right kind of proposals. The process of large system design does not easily lend itself to sound bytes, but the proposals that come together as a result of the process of redesigning in turn may.

To capture a vision for long-term reform of a large system, President Kennedy's statesmanship of the NASA program could be a model. He knew upon launching the moon shot that he was sowing the seeds of an initiative whose fruits would manifest after he left office. Such a charge might look like this:

***"I am going to put in place a staged process that in ten years will completely transform our public [education/health-care/etc] system for superior performance at a cost we can afford. I don't expect to be in office when it's complete. It will be my legacy."***

**Q:** Is what Michelle Rhee's trying to do in Washington, DC omnibus tinkering, or system reform?

**WM:** I think it's omnibus tinkering-unless it leads to a change in the system. There are all these people who have done and are doing good things in the district. Here's a way to test whether it's tinkering inside the mal-performing system or if it is systemic reform: You've got a good model but when you leave-or the mayor leaves, in the case of DC-does it go back to the way it was? Without change of the system, that's most always the case.

Relatedly, the charter sector has allowed for different schools to form. That systemic reform didn't itself improve student learning, because students don't learn from reforms. They learn from what they do and experience, hopefully improved by a school. If school has to fundamentally improve, then it will need to be able to change. The chartering strategy makes change possible, and through the right of parents to choose schools it puts a powerful incentive for those schools to change toward for better.

To close, a participant posed a question about the conditions for system design in Minnesota's fiscal climate. **Q:** A challenge of your strategy is the length of time. We don't have the culture of patience, as a public or community. How do we do find the commitment to stop changing direction every 18 months?

**WM:** This is a critical question, and I don't have an answer. In the scientific area nobody minded that it took us 10 years to get to the moon. Somehow we've got to teach people that the macro system is just as complicated. Back to Kennedy's example, the guy who sets the goal will likely be setting it to occur after his term. Politicians want to get returns while they are still in office. We've got to convince them it's worth being the person who started the process, not the one who was around when it came to fruition. This may be possible.

## **D. Closing**

Thank you to Mr. McClure for the visit.