5. Making Sense *of* [and *with*] TQM

"Since [1957], countless reports have been issued decrying the condition of our educational system, …. They have come from every side, Republican as well as Democrat, from the private sector as well as the public. Yet for all the talk, little happens. At times, the schools look more like they are being dismantled than rebuilt. How can this be? If Americans over a broad political spectrum regard education as vital, why has nothing been done?"

Benjamin R. Barber, Rutgers University, Harpers, November 1993

America's frustration today -- and not just with schools -- increasingly expresses itself as anger aimed at those who do not seem to know how to deal with the complexity and connectedness of current social, economic, and political conditions. Leaders are supposed to know! But how could we expect anyone to know how to deal with the scope and complexity of problems our organizations must respond to today?

And, as we have seen, because of shifting paradigms the problem has become more than one of just not knowing, but also *not knowing that we do not know*. Our theories -- *Why* we do what we do -- therefore have become more important than the "What's" and "How's." And to compound the problem, we have lost much of the cushion of time that once allowed us to develop new theories from experience. In simpler times, it was said that if you did not learn from the past you were doomed to repeat it. Now, if you can't learn from the present, you are doomed…period!

"We are not living in an 'age of enlightenment,'
but an age of not knowing what to do."
Walker Percy
Thanatos Syndrome

"…'what to do' is increasingly becoming the central challenge facing managements, especially those… that have enjoyed long-term success. The story is a familiar one: a company that was a superstar only yesterday finds itself stagnating and frustrated, in trouble and, often, in a seemingly unmanageable crisis. This phenomenon is by no means confined to the United States.… And it occurs just as often outside of business--in labor unions, government agencies, hospitals, museums, and churches. In fact, it seems even less tractable in those areas."

Peter F. Drucker,Harvard Business Review, Sept.-Oct. 1994

For school practitioners to learn from their daily experience, however, brings them up against another naive theory or outdated paradigm -- that of professional development in schools. Here, teachers and administrators, like students, often are isolated as they work, having limited opportunities to interact with others. They are asked to respond to rapidly changing conditions in their work environment and to the children they teach, but are not given opportunities that help

them figure out how to respond to these new conditions. Their "professional development" traditionally has consisted of series of short-term activities planned by a superior to <u>deliver</u> updated knowledge, skills, and practice, too often in a one-way communication mode, and almost always on top of, and after, their work -- not as part of it.

Trapped in a misperceived paradigm of the work they do -- one in which there is no time in the "delivery-filled" day for the types of trial-and-error reflective learning that physicians depend on when they say "Take two aspirin and call me if…" -- teachers and administrators cannot stretch and expand their content knowledge or instructional and management skills through sustained practice. Without a work culture that promotes their continual learning and professional development, they have no choice but to fall back into the old beliefs and assumptions of what teaching and schools are "supposed" to be, because that is the only way that "makes sense" in terms of what is possible.

Thus we currently have a model of schooling that doesn't work, and a model of professional change that doesn't work, … and the solution to both dilemmas lies in the same new understandings of how the human mind develops capacities to be successful in a changing environment.

…"for our schools to do better than they do, we have to give up the belief that it is possible to create the conditions for productive learning when those conditions do not exist for educational personnel."

…"[The] trap into which almost all educational reformers, no less the public generally have fallen…[is] the assumption, indeed it is one of those unverbalized axioms, that schools do and should exist primarily for students…If questioning that assumption seems strange, it is testimony to the strength of what is now a self-defeating tradition."

<div align="right">

The Predictable Failure of Educational Reform:
<u>Can We Change Course Before Its Too Late?</u>
Seymour Sarason, 1990

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The New Worksite: The Human Mind

A review of both psychological and organizational literature suggests a coming together of these two domains as the human mind increasingly is recognized as the *new worksite* -- the key to productivity.

For example, the "work" that produces quality results [i.e., outcomes that meet or exceed the needs, requirements, standards desired] depends upon a caring worker's ability to continuously "construct meaning" through interaction with the outcomes of his/her specific effort -- the more frequent the interaction, the higher the quality. In today's conditions of dynamic change, workers have had to become continual *learners,* and managers have had to become *teachers* -- i.e., creating and managing environments within which "workers" can learn from their work.

And leaders of complex organizations -- whose results have been termed *World Class* -- have had to learn new leadership strategies that concurrently allow the organization to learn; i.e., develop new capacities that become part of their work processes.

What makes this possible in these successful *World Class* work settings is that their leaders create a <u>connected learning infrastructure</u> in the spaces between the parts of the traditional organizational structure. Between the traditional "boxes" that show who makes the major organizational decisions, they build interactive links to the people whose daily decisions and choices have to carry them out -- the people who represent, in their continuing actions, *the-ways-the-work-gets done*. Principal among these new leadership processes has been a philosophy or strategy called quality management, continuous improvement, and sometimes total quality management (TQM). [Today there are so many different names for these processes and, unfortunately, differing views of whether they are *means* or *ends*, that for our purposes here we will just use the term *quality management.*]

All organizations have learning infrastructures, but usually they are informal and dependent upon happenstance occurrences -- chance meetings, grapevine communication, and ad hoc get-togethers of individuals driven to exchange information by some common problem or need. In contrast, these new purposeful, connected learning infrastructures do for the organization what the mind does for the body. They provide ways to handle challenges to its survival.   They promote and maintain continual awareness through scanning of internal and external environments, and support continued low-risk practice until new processes become the practically automatic new ways-to-do-business. Thus the theory, strategies and processes of quality management increase an organization's capacity to act effectively again in similar situations.

Quality Management as a Learning Infrastructure

The "*Learning Organizations*" required for today's dynamically changing world are not possible until we create connected <u>organizations of learners</u>. Today, many of the beliefs, principles, and strategies related to quality management offer means to lead and manage an organization *as* a system that enables its participants to learn from their work.

What makes this possible is that quality management is a common sense, sense-making approach consistent with people's cognitive processes.   As purposeful, problem-solving beings we are "programmed" for discovery learning. We are intrinsically motivated to learn how to do what we don't know how to do as we go through the experience of trying to do it. This is how we learned to walk, talk, and function as human beings. Over time we grow in capacity to deal with new conditions through continuous short-term trial-and-error experiences in long-term directions.

What we have lacked until now has been a way to employ that same capacity-development process as part of our organizational behavior. Quality management offers several components that can make that attainable:

- a philosophy or belief framework that provides a common theory for the organization's work

- understanding of positive interdependencies within the organization

- a connecting information infrastructure to reinforce and maintain these interdependencies

- access to broader understanding and experience through team-based problem solving

- support for organizationally supported trial-and-error learning.

Because it offers a structure that connects processes to beliefs, quality management can provide a framework for total culture change. As a systemic, goal-seeking, belief-driven, daily management process, both the organization and the individuals in it join in a self-correcting discovery learning process based upon planning, acting, learning from the consequences, and then acting again as part of the ordinary flow of school operations.

Common Theory Frame

From cognitive research we know that the human mind automatically frames problems within paradigms that provide the all-important answer to the question, "*Why?*" People are willing to give up power to have direct effects on results, and to be part of an organization's greater effort, as long as they can see how they're connected to common purposes. Once one knows *why*, total dependence on the "*what*'s" and "*how*'s" becomes less important.

> "How people *think about* their jobs can have more impact than what they actually do…
> Breakthrough thinking comes not from continuing to look through our glasses at our work but taking off our glasses and examining the lens… (Leadership looks at the lens and says, 'Is this the right *frame-of-reference*?'"
> Steven Covey

The theory that supports quality management is a core of fundamental beliefs about organizations -- and the people who comprise them -- that frames the way one perceives, and operates in, any organization. The late W. Edwards Deming, suggesting the level of consciousness at which the beliefs had to function, called them, collectively, "*profound knowledge*."

Positive interdependence

Quality management practitioners from outside of education frequently are surprised when they seek to analyze schools' work *processes*. In the prevailing culture of isolated practice, the person and the process have become practically synonymous. For example, if you want to improve teaching, fix teachers. Until recently, there has been little reason to question these fundamental assumptions because we lacked ways to provide comprehensive, total organizational x-rays of school work processes. We could only take snapshots of a district's various components--here's what teachers do, or administrators, or curriculum developers, etc. How it all fit together was impossible to see.

Today however, we are finding that QM tools and strategies provide a capability to view and support the actual interrelationships and interdependencies.   For example, when school personnel throughout a district engage in an internal "customer-supplier" analysis, they begin to see their work in a flow of time and interconnectedness. They begin to see their "fit," what they influence or could influence, discover the already present influences on each other's work, and how they might be able to extend their influence on common ends by empowering others.

Using this type of total system x-ray, it is fairly easy to see the critical connections, and more importantly, the "disconnects"-- the missing linkages separating dedicated professionals with something to contribute to each other's effectiveness. Also, they can see the points where critical information must be accessible as it is needed, and where new information must be generated from daily experience.

From these and other "pictures" developed through use of quality management tools and processes, we can begin to understand that schools' core-work processes do not differ from those of any organization attempting to produce *quality* results. There is a common nature to quality work in schools--or in every other work setting. Some principles include:

- *Quality* outcomes--those that are appropriate to the needs or requirements they respond to--are the product of an <u>iterative process of informed interaction</u> between caring workers and the "product" of their effort.

- Supporting this core process is the work of *everyone else* in the organization.

- The connections between their functions become the blueprint for the school system's *structure* [and "re-structure"].

- Most significantly, providing the *connecting opportunities*, real time *access*, and *new forms of information* that make possible a continuing process of informed interaction are the very value-adding dimensions of many quality management processes.

Connecting Information Infrastructure

If school practitioners are cognitive beings whose actions are directed by their own conscious and unconscious thought processes; then the *information* that <u>feeds</u> those thoughts and choices becomes a primary resource for effective work. In biology, a *culture* is "a prepared nutrient medium in which growth takes place." In the organizational culture, that nutrient is information. To extend the metaphor a little further, it may be helpful to think of information in its own "food chain:"

  Data [both *quantitative* and *qualitative]* interpreted through a common "frame" of understanding;
> becomes **information,** which when mixed with experience
>> appears as **knowledge,** which if proved valid over time
>>> becomes **wisdom.**

When that wisdom transfers to new organizational processes and infrastructure changes, the organization's capacity increases. **It has learned.**

Outside of schools, the ways that information is generated and exchanged plays key roles in the alignment and flow of work. An organization's structure can be found in the quality and nature of the <u>information exchanges</u> that create, reinforce, connect, and maintain work relationships in the organization.

In schools, however, access to this critical resource for growth has been limited because daily "work" (responding to situations as they occur) is done in <u>isolation</u> from peers and experiences of others. When the know-how and know-what of both leaders and staff lack relevant experience, then the job of the organization is to structure itself to <u>continually generate new knowledge from experience</u>. This is what continuous improvement and quality management is all about.

Access to broader understanding and experience

Quality management, through its internal customer-supplier analyses, provides a way to bring potentials for connectedness to the surface; and then, in its use of cross-functional <u>teams</u>, to make them _manageable_ activities.

From a cognitive perspective, teaming provides access to a wider variety of perspectives on a situation, as well as varying experiences and differing styles of understanding. To enable this, quality management provides teams with two forms of support. The most obvious are the tools and strategies that offer effective ways to analyze and understand problems, and to determine appropriate solutions. Equally important are the processes that facilitate working and making decisions collaboratively, which in schools has an immediate positive impact on the heretofore isolated problem-solving setting.

Working in teams, especially self-directed teams, also can provide a bridge across the "doing the right thing" / "doing things right" dilemma. Organizations have expectations that their staffs will do things "right" based on the organization's values, its experiences of what has worked for them in the past, and resources they believe they have available. At the same time, individuals within the organization want to do "things right" according to their own values, experiences, and knowledge of resources that might be used in unintended ways to accomplish a purpose. In quality management, since the team was created as a legitimate way to get the organization's work done, and has the support and trust to do it, individuals have the organization's sanction to apply their unique knowledge to the requirements of their work.

Trial-and Error Learning

"If you could be doing it, wouldn't you already be doing it?"
W. Edwards Deming

Only in education would one seem foolhardy to talk about learning from activities that do not turn out as expected. Today everyone -- students, teachers, school buildings, districts and even

states -- faces the threat of <u>grades</u> if they are not successful. This environment of fear provides little room for creative problem-solving.

Quality management provides a strategy that reduces the risks of learning from work through support of smaller scale pilots that are sanctioned by, and feed, the learning of the larger organization. This process has been called at times a *Shewhart* cycle, or *Deming* cycle, or PDCA [Plan, Do, Check, Act] cycle. Regardless of what one calls it, the process works because it derives from the human mind's natural inclinations to *anticipate, envision alternatives, act on one, see the consequences of the act, learn from them, and act again*.

> "As a manager, I could take on any project
> without having to know the answer ahead.
> All I had to know was the process for finding it."
> Xerox Manager

> "We've all been trained to look for the perfect solution that fits forever, not order that fits the moment. We believe there is a 'right answer,' and as soon as we get it things will be fine -- but science is suggesting that there are no right answers -- but answers that fit the moment....and how do we find that order that fits the moment?
>
> We find it by creating a relationship-rich environment -- that is rich in information -- where people can focus on what needs to get done.
>
> They have some simple rules of interaction, which I would call values or principles, shared purpose, and that's all. In comes a crisis or opportunity, and people organize around it. This is the fluid, boundary-less organization of the future."
>
> Margaret Wheatley

Quality Management and Systemic Change

What would schools look like if they were structured and operated according to quality management's core belief that *organizations function as interconnected systems of intrinsically driven psychological beings?*

1. There would be common *theories* -- sometimes expressed through visions and missions -- that framed and focused everyone's acts. Everyone would know *Why* things happened the way they did.

2. You would see people -- both children and adults -- seeking to re-experience the natural "highs," -- the internal sense of *joy* that comes from productive accomplishment when you:

- know you are doing your best
- learn something new on your own
- solve a problem or overcome a challenge
- know that your help contributed to something important
- are supported/acknowledged by others.

3. Both children and adults would be working in a *system* purposefully structured to connect them to each other for effective accomplishment of their work.

4. Each would have access to *information and knowledge developed from that work* that could be applied to continually improving it.

Making It Happen

Earlier, we noted that our *"starting assumption is that systemic change…must have ways to work 'in' both the child's and the educator's work systems at the same time."* With quality management we have a way to provide a single, manageable model where students, teachers, administrators, and parents can be viewed through the same lens: as people who need to continuously learn from their work ways to be more effective. Moreover, both teachers and administrators, as well as parents, can address the commonality of their work: t*he creation and management of spaces where others can work and learn from their work*.

The framework provided by a common theory drives these linked processes. For example, when one looks at effective learning practices over the years, you can see that each had at its center a process that touched on the fundamental ways that the children's minds learn:

- The children's minds were <u>engaged</u>, they were allowed to get <u>feedback</u> that led them toward feeling successful and competent.
- They developed their ability to <u>choose</u> their actions and act autonomously.
- They felt <u>connected</u> to the people around them.
- They began to <u>make sense</u> of the world around them and see connections to themselves.

Similarly, when one looks at effective school reform models being promoted today you see attempts to create those <u>same cognitive opportunities</u> for the adults running the programs.

District wide quality management therefore should be viewed as a bridging process -- a process of *strategic management*. Building on the context and direction setting provided by system-wide agreement on outcomes, it focuses the total system's daily attention on the "other end" of the processes -- where the students and teachers do their work; and brings to the work setting tools and strategies necessary to continually generate information required to maintain a journey of incremental improvement between the results we desire and plan for and those we're actually getting.

Establishing a community base

As noted in a previous section, "*the smallest unit capable of maintaining sustained improvement [i.e., changes that do not disappear when people leave] is the <u>school district</u> and its supporting community.*" Because of the present nature of school governance [where system leaders soon may be classified as "migrant labor,"] it is important that this systemic management process be "anchored" in the community. Support from other local private and public sector organizations that are addressing similar organizational issues can be easier than with other educational reform strategies because of the common language and processes of quality management.

Community anchoring offers an additional value. In education, we have had little experience of our own that demonstrates that *total* organizations could change. There are more examples of this phenomenon [but not many] in the private sector. Awareness that it is "possible" to deal with an organization's work processes as a *single* system can be an important motivation to push through the natural strains of learning to work differently.

Changing the "system" for a total school district requires opening minds to the possibility that things could and might be different; then providing sufficient [and this usually requires continuing] experiences to *prove* that they are different. And all this has to be done in a medium of trust that can develop from an understanding of common aims and the need for interdependency in order to accomplish them.

Old beliefs must be challenged through use of data and information that show that they "no longer work." New experiences to help "re-program" beliefs must then be provided. As an example:

- Connectedness of people in a system can be discovered through <u>customer-supplier analysis</u> and participation in <u>cross-functional and/or vertical teams</u>.

- <u>Facilitated</u> group meetings develop trust and understanding of each others' differences.

- <u>Data</u> about the effectiveness of internal <u>processes</u> help people understand what can be "controlled" and what can't.

- Regular opportunities to <u>reflect</u> on the meaning of these new experiences for what an organization *believes* and *does* -- continually *grows* from the inside the organization's infrastructure of roles and relationships.

As a strategy for systemic change, quality management should be seen as the way dedicated professionals would naturally work if they had the *trust*, *time*, and *tools* to do so… and if everyone *believed that it was necessary* because the complex, connected nature of the problems they had to address could no longer be resolved with old, disconnected ways of operating.

"Restructuring appears to mean many different things right now. It should mean starting out with principles of **thoughtfulness** such as those I've suggested (below) and working backwards to create the policy and then the schools within which thoughtful adult and student activity is likely to flourish."

" Thoughtfulness is primarily a process of **making meaning** (not just receiving it) and **negotiating it with others** (not just thinking alone).

It is fundamentally **constructive**, which is to say it derives from a different set of notions about the nature of knowledge and the process of human learning.

The old literacy, if we can call it that for clarity's sake, derives from the assumption that knowledge is objective and can be drilled into passive, blank-slate brains; the literacy of thoughtfulness derives from the assumption that **we are all creating knowledge all the time through social interaction**, and the nature and uses of that knowledge constantly shift.

The old literacy has a mechanistic quality; it can be broken into little parts, taught to individuals one at a time.

The new literacy is organic and can only be acquired in social contexts and through social interaction."

<div align="right">Rexford Brown</div>