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ABSTRACT

Most administrators agree that school improvement and change are needed. Disagreement among administrators arises over how the improvements should be made. Total Quality Management (TQM) is a powerful tool in bringing about change and should be considered as an effective alternative in improvement efforts. The TQM approach is designed to address the barriers to change, and most importantly TQM teaches organizations to learn. Total Quality Management consists of three basic principles: (1) systems thinking, a way of agreeing on a shared understanding and picture of the interrelationships among purpose, people, methods, environment, materials and other factors that influence the organization's work; (2) management by data, ways of gathering and using data to understand how well a system is doing; and (3) continuous learning, a disciplined method of inquiry that allows everyone in the school to test ideas about how to change the way they work so that the school as a whole benefits. Before implementing the TQM system educators will find it helpful to do a self-assessment using the Baldrige criteria. The Baldrige criteria are designed to bring about quality improvement of the entire system and enable the identification of all the independent pieces that fit together. These criteria describe the behaviors that exist in any organization that accomplishes quality results. They are: leadership; information and analysis; strategic quality planning; human resource development and management; management of process quality; quality and operational results; and customer focus and satisfaction. These criteria, provide a framework for TQM learning. The worksheets necessary for conducting the assessment using Baldrige criteria are included. (KDP)

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TOTAL QUALITY MANAGEMENT

# TQM

## HANDBOOK

Applying the Baldrige Criteria to Schools

EA 025 666

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# The Joyce Foundation funded it...

Development of these materials was made possible by a grant from the Joyce Foundation, a Chicago-based institution that supports the development and promotion of public and private policies aimed at finding innovative solutions to the central issues facing the Midwest. The grant allowed the Michigan Partnership for New Education, a non-profit collaboration of business, government and education, to support the process of developing the handbook.

# On Purpose wrote it...

The handbook was written by **On Purpose**, a non-profit organization dedicated to the continuous improvement of public and non-profit organizations through the application of Total Quality Management principles, practices and tools. **On Purpose** principals John Cleveland, Joann Neuroth and Peter Plastrik have a rich history as managers in public organizations--governments and schools. Our own experience in applying TQM to the public sector--and our own conviction about the power unleashed when it is successfully done--led us to propose the development of this tool in the hopes that it can accelerate our collective learning curve. **Articulations,** a Michigan-based graphic design studio, designed and produced the booklet.

# Our reviewers improved it...

Deeply thoughtful critique of the handbook throughout its development was provided by the following reviewers. You can help us through the next round of continuous improvement by sending in the feedback form on page 73.

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TOTAL QUALITY MANAGEMENT

# TQM

## H A N D B O O K :
## Applying the Baldrige Criteria to Schools

Designed for use by
Teachers
Students
Parents
Neighbors
Employers
Principals
Superintendents
School Board Members
Taxpayers

This book introduces Total Quality Management core concepts and provides a framework for K - 12 school districts to assess their own progress based on Malcolm Baldrige National Quality Award criteria.

Joann Neuroth
with Peter Plastrik and John Cleveland

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**TIPS ON HOW TO BEST USE THIS HANDBOOK:**

Pick your starting place carefully. The arrows on this page are designed to show you where to find the part you're most interested in.

Browse through the book first. The bold-faced topic sentences at the head of many paragraphs are designed to flow in a kind of executive summary that will give you an overview.

Periodically, we'll summarize for you. On page 10 you can see what we've covered in Systems Thinking. Page 14 summarizes Management by Data. Page 18 wraps up Continuous Improvement.

The Baldrige Criteria can be intimidating and discouraging because they describe a truly EXCELLENT organization--one that has deeply internalized ways of working that most of us are just beginning to learn. Please remember that the purpose of the self-assessment is not to point out to readers that they have a score of zero, but rather to help them see next steps. Stay irreverent and cheerful as you read. Tomorrow's students need your transformational energy!

If you're not sure what all the TQM fuss is about, start here:

If you're intrigued by TQM's promises, but need to know more about what "it" is, here's your starting point:

If you already "get" the theory and want to start DOING the practice, plunge in here:

If you're looking for resources and references, here they are:

## I. Connecting Education Reform and TQM Page 2

This section introduces you to Total Quality Management (TQM) and explains why it helps people who are working to improve schools.

## II. Explaining TQM Basics Page 6

This section explains the disciplined method of inquiry-and-action used by TQM to find the way through an organization's problems toward deliberately chosen goals:

**Page 6: Systems Thinking**: A way of agreeing on a shared understanding and picture of the interrelationships among purpose, people, methods, environment, materials and other factors that influence the organization's work.

**Page 11: Management by Data**: Ways of gathering and using data to understand how well a system is doing.

**Page 16: Continuous Improvement**: A disciplined method of inquiry that allows everyone in the school to test ideas about how to change the way they work so that the school as a whole benefits.

**Page 20: Schools at Work on Systems Thinking:** Application of TQM principles to K-12 work.

## III. Using Baldrige Criteria as a Framework for Self-Assessment Page 26

This section uses the criteria developed for the Malcolm Baldrige National Quality Award to lay out an "aerial view" of the territory to cover using TQM methods. It also helps you find your own location on this map, so you'll know what there is ahead.

| | |
|---|---|
| A. How to use the Self-Assessment | Page 29 |
| B. Leadership | Page 31 |
| C. Information and Analysis | Page 35 |
| D. Strategic Quality Planning | Page 39 |
| E. Human Resource Development and Management | Page 42 |
| F. Management of Process Quality | Page 48 |
| G. Quality and Operational Results | Page 54 |
| H. Customer Focus and Satisfaction | Page 59 |
| I. Scoring Profile | Page 66 |

## IV. Resources for Further Learning Page 68

This section identifies resources for TQM users.

# I. Connecting Education Reform and TQM

*Making a compass?*

*Who's got time when they've got a forest to get through?*

**A growing consensus about school improvement goals...**

Many people are working hard to improve schools. Making progress often feels like hacking a hard-won trail through a tangled and overgrown forest of undergrowth: growing poverty and crime, disintegrating family support, hampering regulations and bureaucracies, racism and classism, and changing and unclear expectations. But in spite of the obstacles, people are making progress. There is a growing consensus among those who are pushing through the forest that, in order to improve the quality which schools achieve,

- Everyone in a school system must agree on the purpose of education.
- Outcomes of the learning process must be clearly defined.
- Outcomes must be relevant to a student's future success.
- Outcomes must meet the high standards of the people with whom the students will live and work.
- Learning outcomes must evolve because the world keeps changing.
- Learners and teachers must be free to use their best judg ment about how to accomplish those outcomes.
- Students must be enlisted as active co-producers of learning rather than seen as passive recipients of knowledge.

**...But there are many barriers to change.**

Moving from schools as we now know them toward this consensus vision is trail-blazing work. People brave enough to tackle it soon discover that even when they accomplish a piece of their change agenda, resistance springs up and throws them back to where they started. Meanwhile, the pressure to change can seem noisy and obnoxious when everyone (whether or not they've been inside a school in the last 20 years) believes they have an authoritative opinion about what needs to be done. Inside the schools the adversarial temperature rises as people blame each other for problems. Everyone knows they're working as hard as they can, and are being kept from better work by constraints they don't directly control. Worse, there's no way to shut schools down for a while, think it through and start with a clean slate--school change has to be accomplished while everybody's up to their ears operating schools in the old ways! Not only is it a jungle out there, it's a

jungle that's alive and bites back when it's attacked. So it's no surprise trailblazers can feel like the last thing they've got time for is learning some abstract theory about organizational change!

Perfect! This is exactly the kind of environment to which Total Quality Management (TQM) brings powerful tools for rapid, demonstrable, profound and continuous change. TQM is a way of working which has provided complex organizations (most of them businesses or government agencies so far) with a way of responding to just such urgent, conflicting, adversarial pressure to change. Many school people are finding it promising for three reasons:

- It supports educators' own change goals.
- It responds to barriers like those found in schools.
- It helps ***schools*** learn.

**TQM supports educators' growing consensus on change goals.**

As you read through the TQM explanation that follows, you'll find a coherent theory that is not only compatible with the themes of educational reform mentioned above, but which actually builds the case for them. For instance,

- TQM insists that the first responsibility of management is to establish and hold a ***clearly defined purpose or vision***, and it provides practical tools for leaders to do that.
- TQM uses the purpose to ***define outcomes*** for each process in an organization. For schools, this includes the learning process. Thus outcome-based education is an essential part of TQM improvement for schools.
- A major focus of TQM is to build a responsive relationship with the people who need schools, and to provide a process for agreeing with them about ***standards*** (called quality requirements) which would satisfy or delight them.
- TQM frees students and teachers to ***use their best judgment.*** It does this by insisting on a clear purpose which can be used to hold individual and team effort accountable, and by redefining the role of administrators and managers away from control and oversight, and toward building the systems within which people can work freely and accountably.
- TQM makes progress toward its goals by improving the ***processes*** by which work is done. When this kind of thinking is applied to the learning process, it becomes clear that ***students are active co-producers*** of learning.

**TQM is designed to deal with barriers to change:**

- TQM's systems-thinking explains how and ***why systems resist change***, so that improvement efforts can understand and build around resistance rather than push against it blindly and futilely.
- TQM anticipates that people outside of schools will have strongly held opinions about how education should be done. TQM offers processes to listen to these people, and prioritize ***their opinions about what they need*** (about which they are authorities). . . and to separate those from opinions about methods, which only people who work ***in*** the system can test and verify.
- TQM ***removes blame from individuals*** by focusing instead on the system they need to be able to do work they're proud of.
- TQM works in schools ***in parallel with existing best known practice*** by making each student, teacher or administrator's job description include experimentation and research into better practice.

**TQM creates learning organizations where work is thought of as learning.**

Most businesses and governments wouldn't describe their work as being learning or teaching. But when organizations like these internalize TQM, every person in the organization has to learn ways of continually improving what they do--they literally carry out research and develop new knowledge as a part of their job description. The disciplined inquiry skills required by TQM have caused many organizations to invest in developing their people's learning skills. Schools, as organizations that **have** traditionally thought of learning as their primary mission, can bring a rich set of experiences about learning to the TQM process.

As the destination on the other side of the forest--the direction and purpose of educational change--becomes clearer, how to get there becomes the relevant question. This handbook offers a basic understanding of a method of trailblazing--TQM--which accomplishes change without exhausting the changers or damaging the ecology, and which is capable of self-renewal.

## Summary: Why TQM Matters

- There is a growing consensus about school improvement goals.
- But there are many barriers to change.
- TQM supports educators' growing consensus on change goals.
- At the same time, TQM is designed to deal with barriers to change.
- TQM teaches organizations to learn.

# II. Explaining TQM Basics

*Trailblazing skills:*

*Learning from the land*

Total Quality Management offers the trailblazer three basic principles about how best to move through the forest:

**Understand the "whole" to which any "part" you're working on belongs.** Until you understand the web of inter-relationships that are part of the thing you're working with, even enormous amounts of effort will result in very little permanent change. This principle is called ***Systems Thinking.***

**Base your choices on real world information.** When lots of people have lots of contradictory opinions about what would help, it's important to rely on objective criteria to help know what is going on, and to help decide when an improvement needs to be made. This principle is referred to as ***Management by Data.***

**Find a way to continuously respond to new conditions.** This forest goes on forever. One big leap won't get you to the "right" place. Your school needs to become a place where, at any given moment, hundreds of small experiments are testing possible ways of doing things better. This principle is known as ***Continuous Improvement.***

These three core concepts correspond to the triangle in Figure 1, known as the Juran Trilogy (see page 70 for more of Juran's work).

## *Systems Thinking*

Systems thinking tells us that every piece of work is an "ecology" --a web of interlocking factors that depend on each other and that center around a common purpose. Much of the time, we focus on only the part of the web that we control. . . or the part that is problematic at the moment. . . or the most obvious part. But systems thinking tells us that breaking things down and just focusing on parts is dangerous unless we are also aware of the "whole." Remember the last time you "solved" the problem of being cold in the middle of the night by pulling the covers to your side of the bed. . . and got for your pains a vigorous yank in the other direction by whoever occupied the other side, leaving you more exposed than ever? You had failed to understand all the inter-relationships that formed a system around the body temperature you were trying to change.

**Parts must be understood in the context of the whole.**

And these inter-relationships are very important. Most of how the system behaves and the majority of its problems come from

the ***design*** of the system--how the web fits together: in this case, how much blanket there was, how wide the bed was, who else was depending on the blanket as well, what its thermal properties were, etc. The part we usually focus on--behavior of the individuals working ***in*** the system--is responsible for only a small portion of the system's results. In this case, changing how the blanket is shared can have some impact on whether you stay warm or not. . . but not nearly as much as changing the system design.

**Systems resist change to any part.**

When your partner yanked back on the blanket, that was "resistance"--a common occurrence when you try to change one part of a larger system. Whether you thought of it or not, the blanket was part of a system designed to do more than keep you warm. When you "fixed" your problem, some other part of the system (your partner's side of the bed) got abruptly worse, and forces were set in motion (i.e., a tug of war, at the most extreme) to minimize disruption from you and your meddling! The system recalibrates itself back toward keeping ***everyone*** warm when you try to capture too much of the heat for yourself. "Fixing" one problem without thinking in system terms often results in the "fix" being cancelled out by resistance from another part of the system.

**Improving a part can *harm* the whole.**

Besides provoking resistance, several other bad things can happen when people fail to think in system terms. One is that people solve a problem in one part of a system ***at the expense of*** other parts---causing the overall system to get worse instead of better. This would happen, for instance, in the example above if the person responsible for purchasing in the household saved $25 by buying a cheap blanket without good thermal properties, and the resulting tug-of-war led to turning the heat up at night, costing an extra $10/month. By ignoring other parts of the interrelated web, within 3 months, the purchaser's decision could ***cost*** the system.

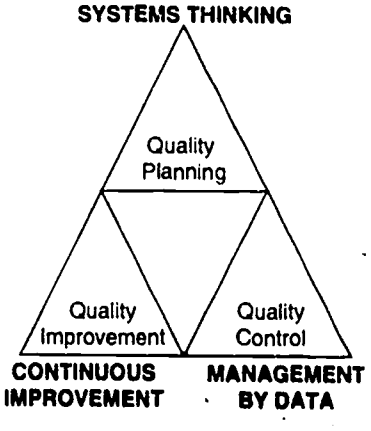
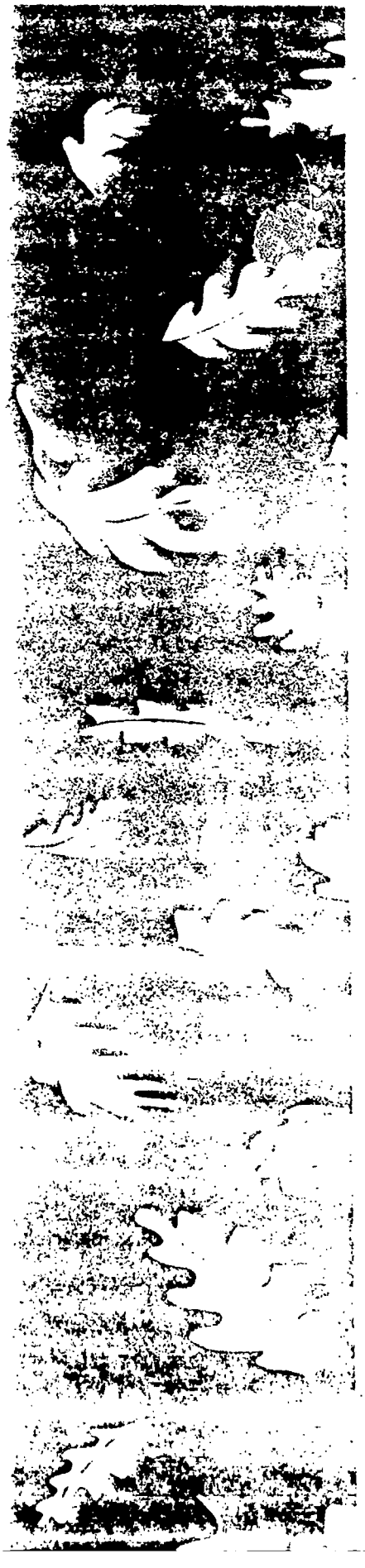



***Figure 1***



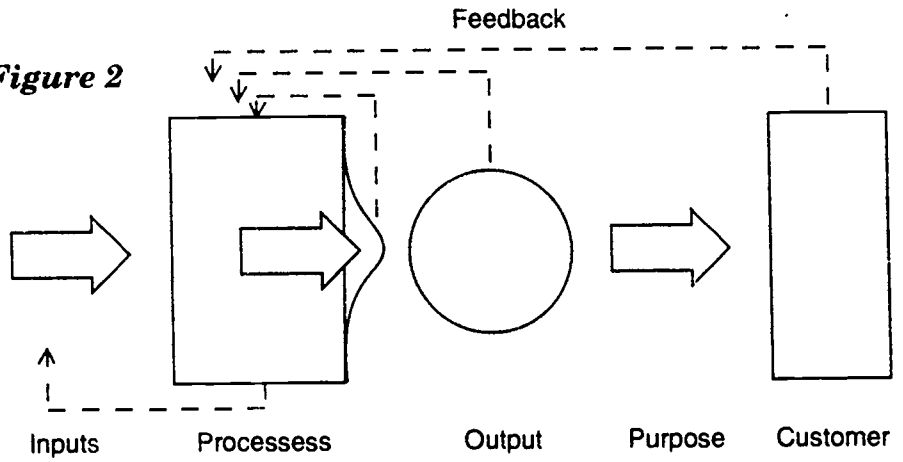
**Micro-systems "nest" within larger systems.**

Systems thinking operates at many levels at the same time. The forest can be considered as a system; so can a growing tree; so can the photosynthesis process being carried on by a leaf. Systems "nest" within other systems. Building a shared system picture at any level of work involves asking some basic questions. They are the same questions, whether you're thinking about the school district as a whole, the budget and finance division, a classroom, cafeteria scheduling, your individual work within the school or even how to keep your body temperature warm at night! These questions are:

**SYSTEMS THINKING QUESTIONS**

1) Who uses this work? How would they define their need? (Customer)
2) What results from my work to meet that need? (Output)
3) How do I produce my results? (Processes)
4) What resources do I depend on to do my work? How do I know if they're good? (Inputs)
5) How do I know if the work is good? (What feedback tells me?)

*Figure 2*



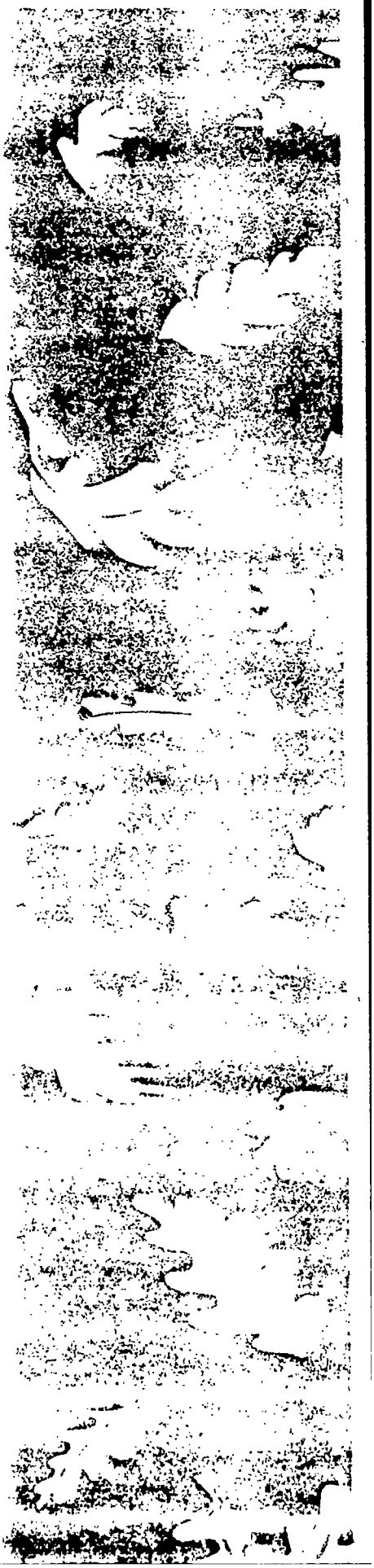

The answers form a "system picture" which helps people working in a system understand, agree upon and remember their system. It could be drawn to look like Figure 2.

**Systems "recalibrate" themselves.**

Information that comes back into a system ***changes*** the way the system acts. This is why your partner yanked on the blanket. That sudden action was precipitated by information about suddenly cold feet, information delivered through a "feedback loop." Feedback loops are also what causes deciduous trees in temperate forests to stop making chlorophyll and turn into an autumn glory: information about changing length of days and solar temperature averages prompts the change so that the tree-system can adapt to new conditions and still stay alive. TQM ***uses*** this feature of systems by very deliberately choosing the kinds of information which get fed back into work systems. This includes information about:

- How satisfied the people who need the system are (Customer Satisfaction information),
- What the result of the work looks like (Output information),
- What's happening while the work is being done (Process information), and
- The quality of the resources (Supplier information).

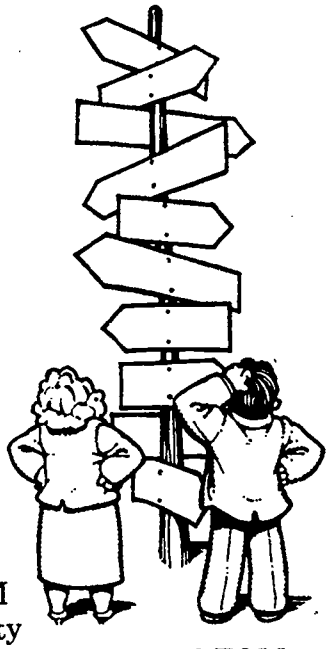
Information about these "quality measures" is deliberately brought back into the system, so the system ***can*** recalibrate itself--adjust to new conditions while making sure the system's purpose continues to be satisfied.



## Summary: Why Systems Thinking Matters

- ➤ The relationships among parts in the system are more powerful than the individual parts.
- ➤ You must understand the whole to know the purpose of any part.
- ➤ The system resists change to any part.
- ➤ Improving a part without regard for the others can make things worse.
- ➤ The system uses "feedback" to recalibrate itself dynamically.

# Language Issues with Systems Thinking



Because TQM users draw "system pictures" so often, they've developed a shorthand language for speaking about the principle of how pieces fit into the whole. It allows people to move easily back and forth between thinking about the whole system and working on a part, using both kinds of thinking whenever each is appropriate. Some school users of TQM find this language helpful--especially if they're using TQM concepts with people in their community who have learned this language when they've applied TQM to other organizations. Others find its commercial, business flavor distracting and not helpful; these people need to find other words of their own to represent the elements in a system picture. We have provided this glossary of standard TQM terms so that you'll at least recognize them, and can decide within your own school system whether you'll retain or replace them.

| | TQM Terms | Alternate Vocabulary |
|---|---|---|
| Why work is being done: | **Purpose** | |
| The person who needs the work: | **Customer** | |
| What results from the work: | **Output** | |
| The sequence of steps that accomplish work: | **Process** | |
| The resources needed and used in the work: | **Inputs** | |

# Management by Data

Once people share a common system picture of their work, they can be clear about their purpose. The next question is **how to manage the organization's daily work to ensure that the purpose is accomplished** and the things that matter get done reliably and well. Total Quality Management accomplishes this by insisting that for an organization to be sure that it's ***delivering*** what the system picture tells it the customers need, it must:

1) Understand the theory of **variation,**
2) **Document all systems** to display and control their variation, and
3) Empower **workers to manage decisions** about variation.

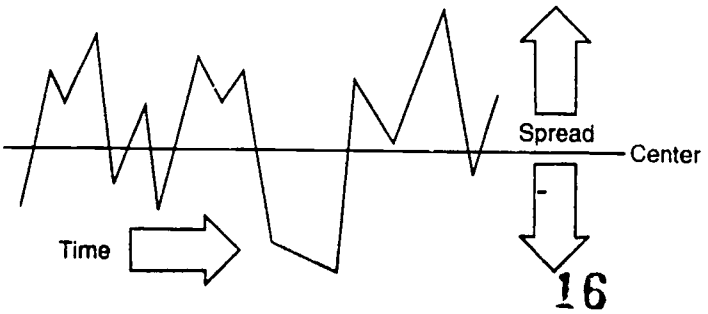
**Variation theory: Everything you care about will differ over time.**

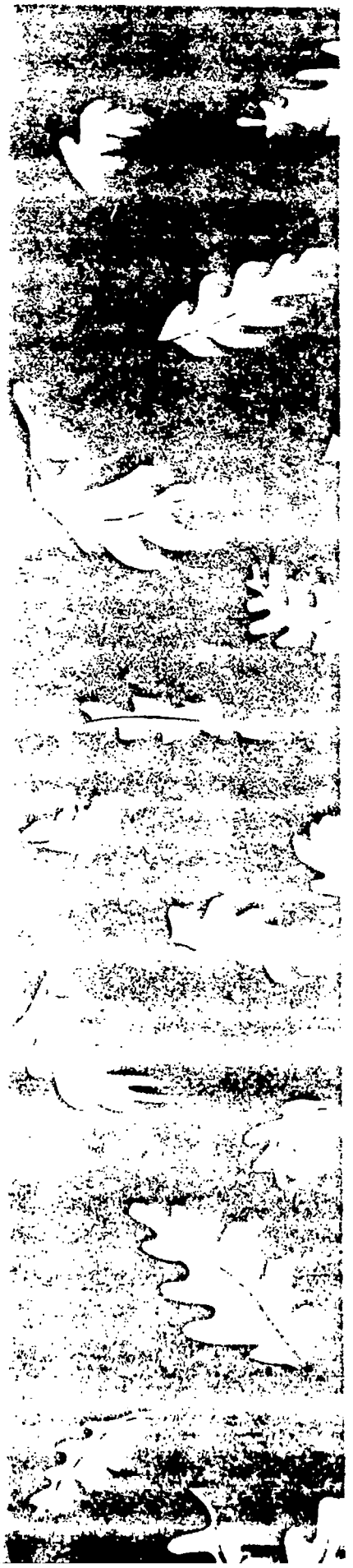
No matter what it is that a customer cares about, no system will be able to do exactly the same thing every time.You care that your morning paper arrives on time, but it is highly unlikely that it will arrive at the identical micro-second two mornings in a row. Teachers and students in a school care about tardiness, but it is unlikely that any two days will have exactly the same number of people tardy for the same length of time.

Differing by a couple of people might not matter, but if some days have 50 tardy people and some have 3, it's hard to even tell how they're doing on this thing they care about, much less improve it! The way to get a clear, shared picture of what's happening when something you care about is differing over time, is to understand the ***system's variation.*** It requires some basic statistical understandings--ones that TQM organizations have found almost anyone (even the statistics-phobic) can learn.

When any measure (like the number of tardy people) varies, that variation can be tracked. You could record the count each morning, and you'd end up with a set of data. That data will have three features which define its variation: All the values (days' counts) will ***center*** around some point. Most people are used to

***Figure 3***



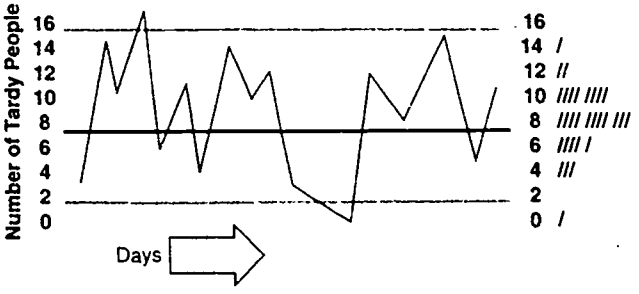



finding that center by "averaging" the values--calculating a mean, represented by the horizontal line in Figure 3.

The times will cluster around that point either tightly or loosely. Statisticians call this the ***spread or the range*** of the data. If the worst day has 5 more tardies than the average, and the best day has 7 less than the average, the spread is 12.

The set of daily counts you record will also have a ***shape***, and this is not so easy to tell just by glancing over the numbers. You'll be able to see it roughly if next to each value you put a hash mark each time that value occurs in your data (as has been done to Figure 3's data set in Figure 4). There are several characteristic shapes that can occur. One of the most common is shown here: the one we know as a "bell curve." When that happens, more of the data points will cluster near the center point, and fewer and fewer of them will occur as distances get farther and farther from the center point.

***Figure 4***




**Documenting a system shows how it varies, and possible reasons why.**

Being able to describe the variation in a system gives people a powerful advantage: with this information, they can predict with some degree of faith how this system will do, on average over time, as long as the interlocking web of system factors now in place continues to operate. For instance, the data pictured in Figure 4 indicate that as long as the same people use the same methods of getting to school on time from the same addresses, tardiness is likely to keep on varying between 2 and 13.

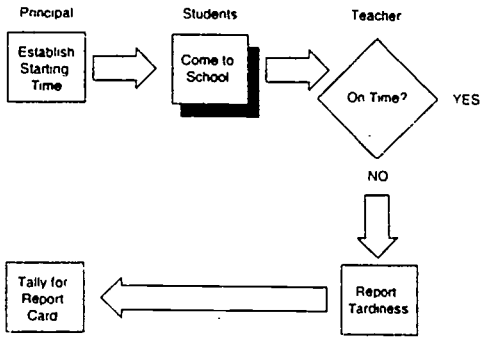
As a trailblazer, this is invaluable! It is the equivalent of knowing how steep the hills are and how deep the rivers are in the forest, so you can plot a course and prepare. To get to this kind of understanding with a practical, hands-on piece of work like managing tardiness requires what is called ***system documentation.***

First the process needs to be clearly defined. This involves agreeing upon a commonly held "**system picture**" like the one

described in the last section. For managing tardiness, the system's purpose might be to avoid wasting each other's learning time; customers could be all the learners who share classrooms in the system. The system's output could be defined as learners' arrivals, and quality measures might be timeliness as well as readiness to learn. Inputs would include alarm clocks, transportation methods, recordkeeping forms and disciplinary methods. Take time to go back to the system picture on page 8 to think through all the system elements that figure into tardiness.

Documenting the system also includes developing a flowchart of the detailed sequence of steps in the processes which are a part of the current system picture. The very basic one illustrated in Figure 5 includes a shadowed box which signals more detail available--here, a generic set of processes students use to "get to school" which could be further flowcharted.

***Figure 5***




Since timeliness is one quality measure, documenting the system means using a tool called a Shewhart Control Chart (which looks like Figure 6) to track it over time. In addition to plotting each day's count of tardiness, a control chart includes **upper and lower "control limits."** Control limits allow an observer to see the range within which the system can be expected to perform reliably, given the current interlocking web of system factors. When variation is within these limits, the system is "stable"; causes "common" to its current web of factors are generating the variation. When a day has more or less tardies than these limits, it's likely something unusual (a "special cause"") went on: a late night before or an exciting event first period.

***Figure 6***

**People *in* the system are best able to keep the system performing as well as it can, given its current mix of factors.**

Responding to these special causes makes the system more predictable--it "stabilizes" the system. Total Quality Management asserts that only the students and teachers whose arrival is being managed can be responsible for making sure the system works consistently at the level of which it is currently capable. And for them to be accountable for maintaining performance within that range, they need to be free to use their best judgement about how to react when something unusual happens or is going to happen. So workers need to be ***self-managed***. That is, everybody in an organization needs to have four things:

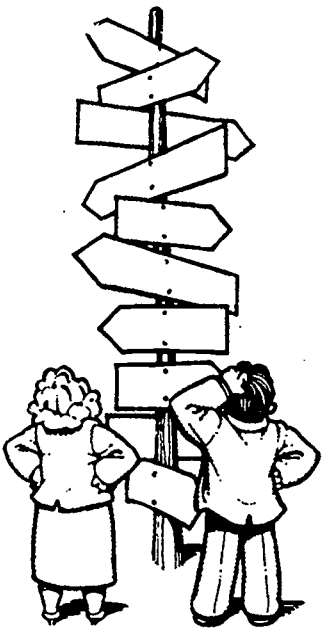
1) A clear understanding of what success (Quality) would look like;
2) Information about how s/he's doing now on those measures;
3) Authority to change how s/he works in order to respond when something unusual pushes results outside the expected range of variation;
4) A way to get help when they need it.

## Summary: Why Management by Data Matters

- Understanding variation statistically allows us to describe how a stable system currently performs...and can be expected to perform as long as current common causes are operating.
- Documenting systems makes their variation visible to those involved in the work.
- Workers need both information and authority to act if they are to be accountable for keeping a system performing as well as it can.

# Language Issues with Management by Data

There is also a specialized language for speaking about "management by data," which sounds technical at first, but which can be adapted if necessary for different age groups and experience levels.



| | TQM Terms |
|---|---|
| How a feature a customer cares about differs over time: | **Variation** |
| A description of the center, range and shape of variation: | **Statistical Analysis** |
| The range within which a system has varied and can be expected to perform until changed: | **Capability** |
| Relationship among a system's customers, output, input, processes and quality measures: | **System Picture** |
| Relationship among steps in a system's processes: | **Flowchart** |
| Having information, tools and authority needed to keep the system working as well as it currently can: | **Self-management** |

# Continuous Improvement

Now--and only now--is a trailblazer really ready to address the question of how to make ***change*** in the forest: improvement can be planned only after people

- Are seeing the forest rather than the trees (**Systems Thinking**) and
- Know where the steep hills and deep rivers are in the forest (**Management by Data**).

**Setting goals grounded in process changes.**

Effective continuous improvement needs to wait until systems have been defined and stabilized because setting improvement goals in the absence of knowledge about processes is an exercise in fantasy or cheerleading or exhortation. Decreeing a change in dropout rate or test scores without a method, for example, is a sure prescription for frustration and disappointment. But for a system that is managed by data, and whose current capability is known, the goal can be ***improvement*** in that capability. Specific ideas about changes in processes and inputs can be tested to see whether they change the **center** of the data set or its **range** of variance.

Total Quality Management approaches continuous improvement by setting up ***teams*** to repeatedly apply the disciplined method of inquiry known as the Shewhart or Deming Cycle: ***Plan-Do-Study-Act.***

**Getting the whole system in the room while improving.**

Individuals can make some progress in continuous improvement, but ***teams*** **are the most powerful users of the Plan-Do-Study-Act cycle, which is designed to address the interlocking web of factors that constrain the system's performance to its current range**. Because these factors are many, information about them does not reside exclusively in any one head. (Certainly not in an administrator's head, but actually not even in any one of the worker's heads). Workers and administrators need to pool their information about how the web interlocks in order to form viable theories about how to change it.

Working in truly collaborative teams requires a whole set of new skills and tools. These include group decision-making techniques, ways to balance participation and ensure that everyone's information gets listened to, process facilitation skills, meeting management skills and an understanding of group dynamics. Fortu-

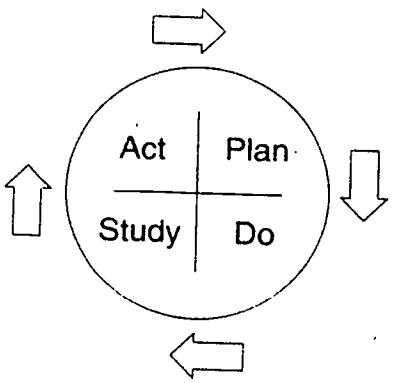
nately these can be learned. Unfortunately, learning them takes time. Fortunately, once learned, they can be used over and over again in all improvement team work.

### Using a disciplined method of inquiry

What teams ***do***, once they have these skills under command, is to apply to their particular work system a generic sequence of inquiry steps. These steps are called the Plan-Do-Study-Act cycle, often shortened to the PDSA cycle. It can be used to improve a school district as a whole (where it is called hoshin planning--a customer-centered version of traditional strategic planning), a building, a classroom, a teaching method or an individual's process for getting up and getting to school in the morning.

Different practitioners of TQM have different versions of the basic Plan-Do-Study-Act cycle. Here is an explanation of the 7-step process used in the ***Total Quality Transformation*** materials (described on page 70). It is typical of most of the continuous improvement methods.

*Figure 7*




### Step 1: Define the System ... and Step 2: Assess Current Situation

A team that has already documented its system will come to the improvement process having completed most of the first two steps in the process. Often, however, an improvement team will be documenting the system for the first time as a way of developing and testing its improvement theory. So as improvement projects spread throughout an organization, they leave documented systems behind them.

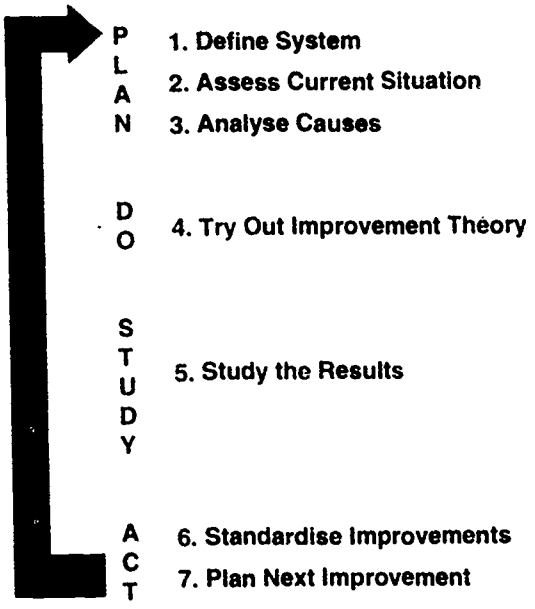
### Step 3: Analyze Causes

A number of TQM tools and techniques help the team to brainstorm, probe for root causes, and weigh the relative importance of each and verify their likelihood with data. The team as a whole determines the improvement theory which they believe has the

greatest chance of making a demonstrable improvement in one of the system's quality measures. A team working on tardiness, for example, would explore causes such as late nights, not knowing the time, and lack of interest in what's going to happen at school to determine which seemed to be the deepest "root cause": the one that will have the biggest impact on results if changed. Then they'd have to decide on a change theory: for instance, they might settle on planning an activity of high interest to students first period.

### Step 4: Try out the Theory

The team then is responsible for implementing its recommendation (perhaps in a classroom or two) and continuing to collect the data used to define the system's original capability. If the improvement theory is correct, a statistically significant change will occur in the classroom's data: either the spread will change (as variation clusters closer around the target) or the center will shift (as the whole bell curve moves up or down on the scale).




### Step 5: Study the Results... and Step 6: Standardize

Statistical principles must be used to see whether any change in the data is significant, or whether the subsequent data points still fall within the range that would have been predicted by the original web of system factors. If the new experiment has been shown to make a difference in previously stable system performance, then it becomes the currently best known way to deliver what the customers want: the fewest number of tardy students possible. So the team works with the organization to "standardize it," takes steps to prevent back-sliding and recommends the method to any other classrooms that weren't part of the test, so that overall, the organization can "capture" the gain from the project.

### Step 7: Plan the Next Improvement

Planning for the next improvement means building on the understanding developed by this team to determine whether the next PDSA cycle should tackle the same problem again--further improving the same thing the customer cares about--or should undertake to improve another feature (cost, timeliness, safety, customer satisfaction) while holding the gains in this one steady. For instance, this improvement team could recommend another round of work on reducing tardiness, or could recommend attention to improving how **ready** students were to learn when they arrived ***while maintaining the current rate of tardiness.*** It could also choose to delegate responsibility to the system owners and operators for maintenance and control of this variable. This would free up the team to reform and work on other areas of opportunity.

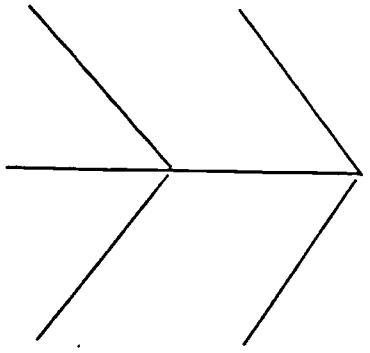
## Summary: Why Continuous Improvement Matters

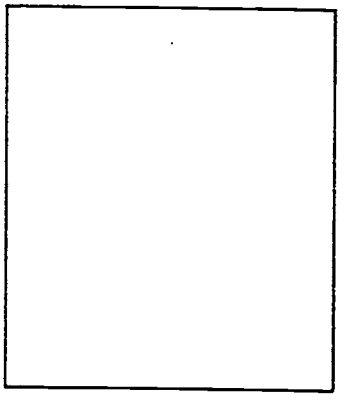
- Teams have information from all parts of the system.
- Each revolution of the Plan-Do-Study-Act cycle makes an improvement (or else gains new information about why something ***won't*** work).
- Organization improvement comes from repeated revolutions of the PDSA cycle, as each improvement project ends by planning for the next priority improvement.
- Continuous and disciplined inquiry becomes a job expectation of everyone.

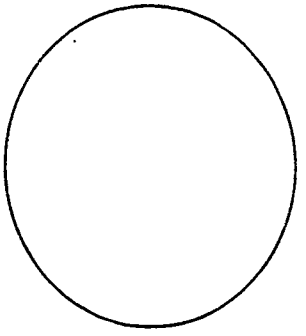
## *Schools at Work on*

# Systems Thinking

The shift to systems thinking may not sound revolutionary in the abstract, but thinking this way about schools is profoundly revolutionary. Here are a few of the implications reported by schools which are thinking in terms of forests rather than trees. As we offer you these real-world discoveries, it is important to emphasize that system pictures built by different schools will differ from each other, as people in each school construct the description that is most useful to them. What is important is not that a uniform system picture be applied to all of education, but rather that each set of people responsible for an educational system (classroom, building, district) agree upon a picture which is shared by and meaningful to them.







**INPUTS:** Some examples of "suppliers" to schools include families, community and social services (such as police and mental and public health agencies) and legislative policy makers as well as textbook publishers, vendors and teacher training colleges.

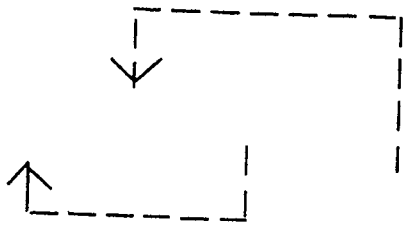
Schools are finding they can use data about the impact of such suppliers on a school's quality of work to negotiate their own "quality requirements" with these suppliers.

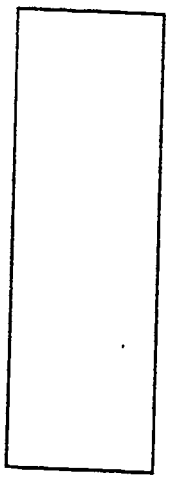
**PROCESSES:** TQM uses its data about results to identify and improve ***methods*** (or processes) by which these results were obtained. Close attention to the key processes of teaching and learning indicates that key "co-producers" of learning are ***students***, who work to change their mental models in response to new information, and ***teachers and parents***, who support the learning process by structuring the experiences from which students gain new information.

TQM offers structured ways to learn about and improve these processes.

**OUTPUT**: If the output of schools' work is increased human capacity, or more useful mental models of the world, then it is "possessed" in an unusual way by one customer--the student in whose brain it resides.

For that reason, some school systems thinkers prefer to think of the students themselves as output, but others find that this blurs important consideration of students in their other roles as customers and co-producers.





**QUALITY MEASURES**: These indicators answer the questions "How would we know a good result from a bad result?" and "How can we tell whether the output satisfies the customers' needs?"

Many schools that have been working to define outcome-based education processes find that these measures serve as the quality measures of outputs which serve as the feedback loops in system terms.

But additional feedback is needed not only about whether a competence is accomplished, but also whether its accomplishment is important to customers.

**PURPOSE**: In TQM, naming the purpose of a system is no idle task, since the efforts of everyone in the system will be deliberately aligned to making demonstrable progress toward this aim. Some now being used by schools:

*To increase human capacity for success in a dynamic, global society.

*To open up the greatest number of lifetime options for its students.

*To enhance the intrinsic desires to learn and to contribute.

**CUSTOMERS**: Some examples of customers for schools include ***students, families, employers, communities, taxpayers, the next educational institution and certification institutions.***

The important task is to name these customers' needs in their own terms: how do they experience their needs? For instance, William Glasser in ***The Quality School*** (see page 68) suggests that students need fun, safety, power, love and freedom. It is when ***these*** needs are met that students as customers are delighted.

## *Schools at Work on*

# Management by Data

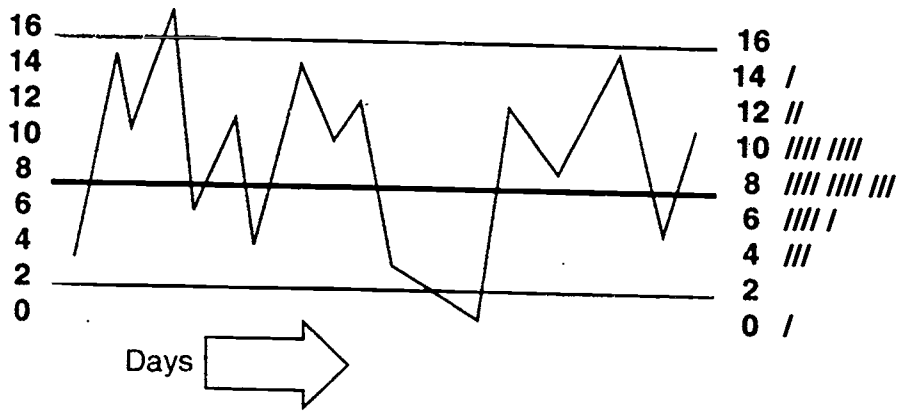
As schools begin to understand and use the theory of variation, many common assumptions about schools get challenged. A school that truly unlocks TQM's power for systemic change must be open to thinking in new ways about many things. Some examples of implications discovered by schools which are exploring Management by Data:

**HOW PEOPLE ARE HELD ACCOUNTABLE:** Accountability changes radically when people think in terms of variation. Teachers and students (who are the workers who co-produce learning) are no longer held accountable for accomplishing results beyond the system's current capacity.

Instead, they ***would*** be held accountable for using their judgment to see that the system always delivers the results of which it is currently capable. System improvements that change the system's capacity are the responsibility of leadership, using information and analysis generated by workers.

**WHAT INFORMATION GETS COLLECTED:** Very different sorts of information are gathered when an organization is using Management by Data. Instead of building data gathering systems to accumulate reports for people at the top of the hierarchy or for state agencies, TQM defines the information ***needed by workers in the system*** to keep their daily work delivering what the customers want. Because this includes tracking results, the agencies and hierarchies can often get what they need too, but the focus is different.

**FEAR AS AN INHIBITOR OF ACCURATE INFORMATION**: A major source of incomplete, inaccurate or misleading data is fear (on the part of those who need to collect it) that they will be blamed or punished if it does not "tell the story"authorities want to hear. Managing by data requires an organization (in the words of W. Edwards Deming) to "cast out fear." Blame and punishment must be replaced with real organizational curiosity about the root causes of the phenomena being observed, and systems questions must be asked to probe for the constraints and barriers that keep the individuals in this system performing at its current level. Without a commitment to problem solve instead of shooting the messenger, attempts to manage by data will flounder as people make it show what they believe is wanted.




**BELL CURVES:** Normative grading theory says we use the natural variation of the teaching-learning system to rank the students.

When a system's variation is displayed and analyzed, Management by Data insists that what we know is ***something about the* system**, not something about individuals in the system. If we removed the current individuals, and replaced them with others, but did not change anything else in the system, we would probably get the same distribution of results. For that reason, bell curves should be used to provide special help to any students who lie outside the system, and to work with all students to improve the system.

**GRADES:** TQM requires serious rethinking of the purpose of grades as a system indicator. What is the purpose of the feedback tool? Who is its customer? Whose behavior is it designed to change? Does it provide the right kind of information to shape decisions?

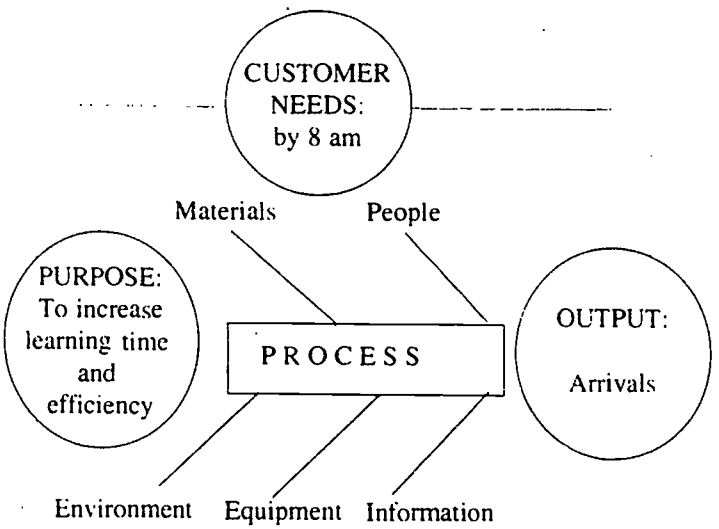
**DISCIPLINED INQUIRY AS A JOB REQUIREMENT:** TQM expects everyone in a system to do what many teachers in many schools are already doing: gather information regularly about their methods and use it to improve their best practice. Some names for it are reflective practice, action research, and formative evaluation. Total Quality Management expects the same thing from students, administrators and parents as well and provides tools for testing conclusions.

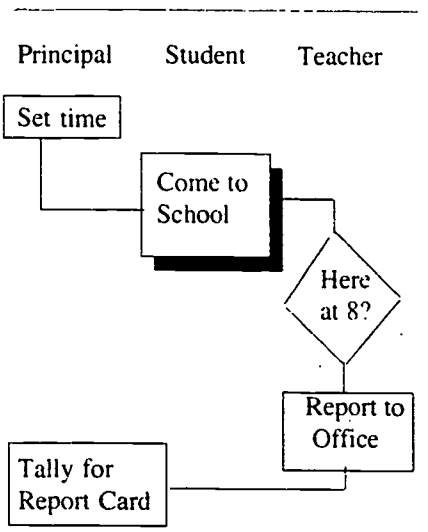
*Schools at Work on*

# Continuous Improvement

## 1. Define System

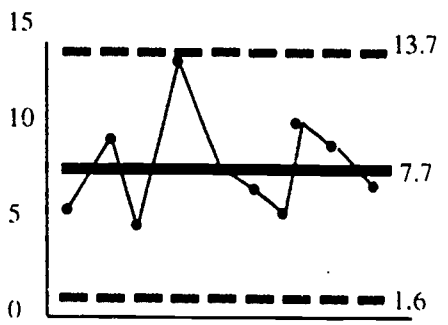
AIM: To reduce tardiness, as measured by the number of students in their assigned classrooms at 8:00 am by the classroom clock, each morning.




## 2. Assess Situation

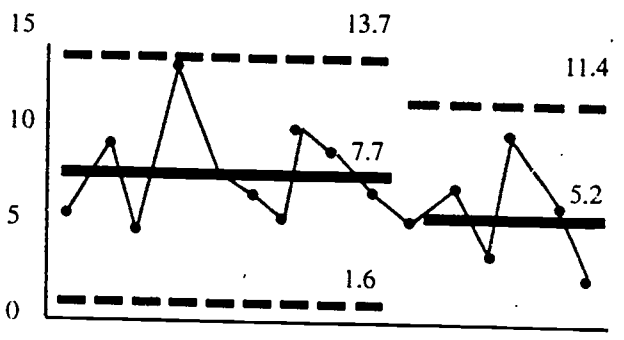
| | 10th | 11th | 12th |
|---|---|---|---|
| Sept 15 | 1 | 3 | 2 |
| Sept 16 | 4 | 3 | 2 |
| Sept 17 | 1 | 2 | 1 |



## 6. Standardize

PLAN:
The class made presentations to other homerooms explaining their conclusion and recommending Monday a.m. activities.

## 5. Study Results




## 7. Plan Next Project

RECOMMENDATION:

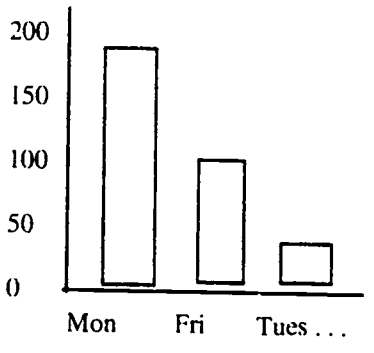
The team believes there are other process changes to test which could bring tardiness down again--at least as much as this improvement accomplished. Then it believes the improvement focus should turn to ***readiness to learn*** as another quality characteristic of Arrivals, while holding timeliness steady.

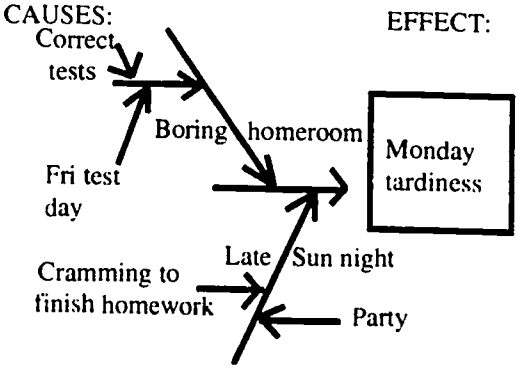
## 4. Try Out Theory

THEORY:

If we plan an interesting activity for Monday morning homeroom instead of correcting last week's tests, the number of tardy arrivals will decrease.

## 3. Analyze Causes



# III. Using Baldrige Criteria as a Framework for Self-Assessment

***Mapmaking:***

***Using Malcolm Baldrige as a trail guide***

Now that you have a basic understanding of how TQM works, you're equipped to set off through the forest of change dynamics to get to your objective: schools that delight the people who need them. You'll need to:

- Clarify your shared picture of the system you're in,
- Gather information that will allow you to predict its performance as it currently operates, and
- Begin to improve it in a disciplined and systematic way.

Think of the self-assessment tool that follows as an aerial view of the territory you will explore together with your colleagues--a menu of the topics about which you will want to learn--a list of the learning paths you'll be moving on all together. It's a little like listening to an experienced guide describe the terrain you'll encounter if you head toward a particular corner of the forest. Plotting your current location on this map is a way of seeing what there is to learn next--rich areas where your curiosity might profitably lead you.

### Who in the World Is Malcolm Baldrige?

The assessment framework used here has been taken from the Malcolm Baldrige National Quality Award examination material. The Baldrige award was developed in 1987 at the direction of Congress to do three things:

1) Increase awareness of quality as a business issue,
2) Recognize businesses who have used TQM to become world leaders in their industries, and
3) Transfer knowledge about successful quality efforts.

The award was named for a United States Secretary of Commerce, who died while in office. Over a hundred companies that aspire to quality excellence submit an application each year. From the written applications, finalists are selected, and a team of independent examiners visits each finalist on site for several days, exploring philosophy, practices, systems and quality results. Based on an understanding of how the applicants do business, the examiners select up to six recipients each year which exemplify excellence in continuously improving their ability to delight customers.

## Why would people who are working in schools care?

The criteria used by the examiners describe the behaviors that exist in any organization which accomplishes quality results. The examiners use them to take an objective, outside look at organizations and to diagnose areas for improvement as well as strengths. But the criteria can also be used as we are suggesting here--to provide a framework for your TQM learning. It works this way because the Baldrige Award designers thought about quality improvement as a ***system*** itself, and have identified all the interlocking pieces that fit together to accomplish the purpose of an organization that is:

- Tightly tied to customer needs and desires,
- Deeply rooted in the operational practices which determine and can improve system capability,
- Highly supportive of people acting as agents of improvement, and
- Continuously and creatively self-renewing.

## Territory to be covered in your transformation efforts.

The Baldrige Award quality-building "system"is divided into seven **categories:**

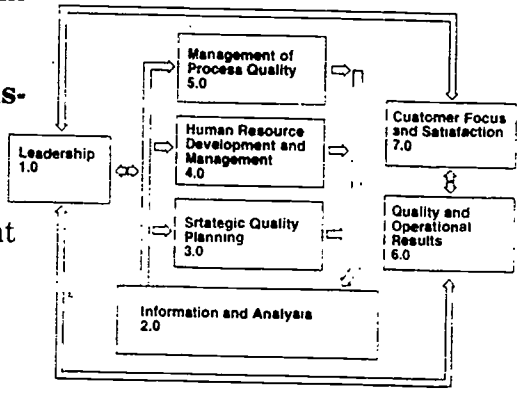
**1.0) Leadership**
**2.0) Information and Analysis**
**3.0) Strategic Quality Planning**
**4.0) Human Resource Development and Management**
**5.0) Management of Process Quality**
**6.0) Quality and Operational Results**
**7.0) Customer Focus and Satisfaction**

The arrows in the diagram on the next page indicate which categories influence and are influenced by other categories, which are suppliers of some input to others and which are customers of others' output. **Leadership (1.0)** describes the role of top school district officials, which shifts from oversight and control to working <u>on</u> the system others work <u>in</u>, to make it more supportive of people's efforts to serve customers better and better.

This "drives" or supplies guidance and support to categories 2.0 - 5.0, which make up the district's system: **Information and Analysis (2.0)** supplies data continuously to planners, people-developers, and workers. **Strategic Quality Planning (3.0)** takes the expectations that leadership has derived from customers and the data about current methods and capability, and sets practical long- and short-range goals for improvement. **Human Resource Development and Management (4.0)** uses data to improve people's capability to work in a quality way--determining what would be helpful to them and how fast they are getting it.

**Management of Process Quality (5.0)** looks at the work processes themselves--teaching and learning, business support services, management of suppliers of all kinds. This is the heart of the system--where workers use their training and their information to move toward their strategic goals.

**Quality and Operational Results (6.0)** tracks the key indicators which are set by the strategic planning and worked on by people doing process management. If 2.0 - 5.0 are working well, it will show up here. And if the strategic planning has been done well, the indicators tracked in 6.0 will accurately predict customer satisfaction. So **Customer Focus and Satisfaction (7.0)** asks about how your organization gathers information from customers to validate current indicators and anticipate future needs.




**No right answers.**

For each of the seven categories, the award names from 2 to 6 "**items**" which need to be examined, so that there are 28 items in the framework. The questions we've associated with each item generally ask whether a TQM-based behavior is used widely in your school. **They do not tell you what the behavior should be.** The Baldrige Award structure is deliberately non-prescriptive; examiners are open to finding any number of sound approaches and behaviors in response to a question. And although this handbook surrounds the Baldrige Award language with hints, tools, suggested sources and possibilities, we too mean to stop short of describing our idea of the perfect answer to any question. There is no answer book for this assessment; many different answers can lead to quality results.

The categories and items **really are** just a checklist of the kinds of behavior that each school has to develop as it responds to its own situation and its own customers. As you develop each behavior, the choices you make will be what gives your TQM school its uniqueness. Just as each architect chooses the doors and windows, roofing material, heating system, building height, etc. which make each building unique, so every TQM user will have different answers to the questions. What the assessment tool asks is how deeply and soundly you've thought about the wide variety of choices you have to make, and how widely you've applied the approach you decide upon...and whether you know if your choices are making your customers more and more delighted.

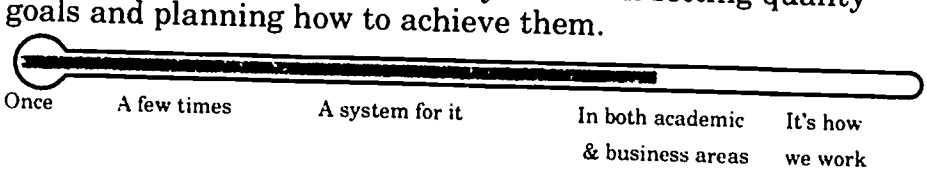
# How to use the self-assessment

1) Get a magic marker and use it as you read each item to color in the thermometer from the left as far toward the right as you think your school belongs on each descriptive phrase. The scales are different for each item, but in general they ask whether the behavior is

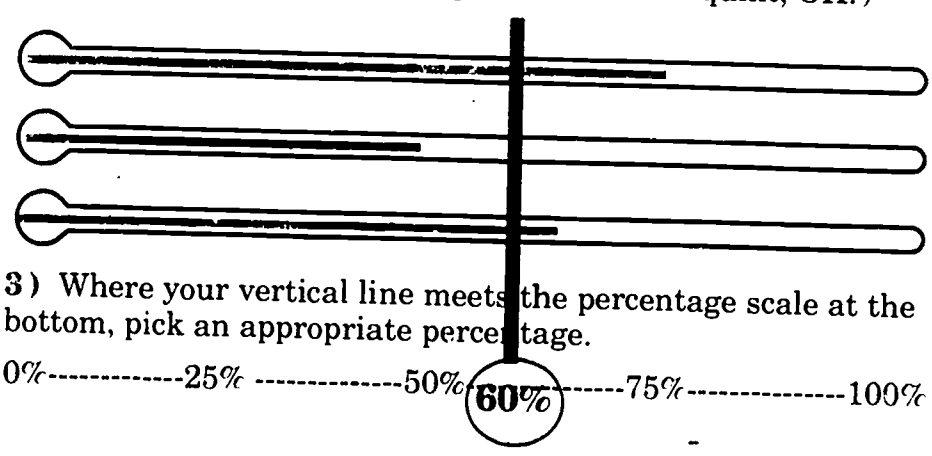
| | | | | |
|---|---|---|---|---|
| anecdotal or hasn't even started | beginning to take hold | supported by routine processes, methods--i.e., systematic | deployed widely in both learning and business environments | integrated as a part of normal work |

For example:

A. Administrators are personally visible in setting quality goals and planning how to achieve them.



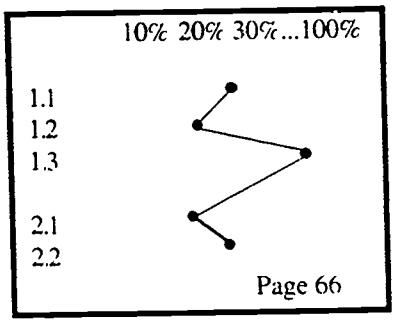

2) When you finish each item, notice where the shortest thermometer ends. Also the longest. And where the rest of them fall in between. (This is the hardest part.) Squint at the set of thermometers and draw a vertical line in what you consider to be the center of that range. (If you're already addicted to statistics, you'll be figuring out by now how to calculate the mean. But remember how rough and subjective the input data was, and beware of false precision! Just squint, OK?)

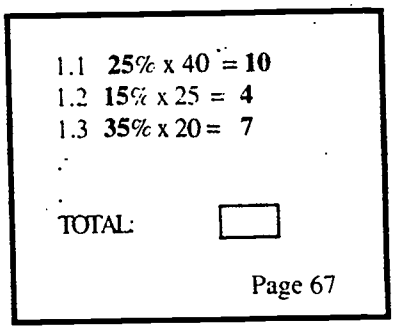


3) Where your vertical line meets the percentage scale at the bottom, pick an appropriate percentage.

0%----------25% ----------50%----------60%----------75%----------100%

4) Transfer the percentage to page 66 and use page 67 to calculate the weighted score. Each item's percentage becomes one dot on a chart that will show you a rough kind of profile of your own accumulating opinion of where you've got the most learning to do. Then each percentage gets multiplied by a weighting factor in a chart that will eventually total up to an overall score. This can help you monitor overall progress if you review the self-assessment at regular intervals.




5) Now get a friend (or an enemy) who knows your school from another perspective to do the same thing you just did. Talk with your buddy about the similarities and differences of how you each see your school. If you run out of topics for the conversation, try these:

1) How are our pictures of the school alike?
2) Where do they differ significantly? What differences in experiences contribute to our different pictures of the school?
3) Which things didn't we know about? Who *would* know?
4) Who besides us might have yet another differing profile, based on their experience from a different vantage point?
5) Given the profile as each of us sees it, which categories seem like the next things the school would work on if it wanted to increase its composite "score"?
6) Who besides us might be interested in reflecting on these pictures of our experience in the school?

# 1.0 Leadership (90points)

***The Leadership category examines how school board members, administrators and principals create and sustain clear and visible quality values along with an administrative system to guide all activities of the district toward educational excellence. Also examined are the administrators' and the district's quality leadership in the external community and how the district integrates its public responsibilities with its quality values and practices.***

Leaders in a TQM school are responsible for clarifying and holding steady the system's purpose. . . and for ensuring that quality values (such as Systems Thinking, Management by Data and Continuous Improvement) are being used by everyone to accomplish the system purpose.

These items examine how visible the leaders are in reinforcing these values, and in personally participating in creating strategies, systems and methods for improving quality. The leaders are the people who challenge managers and workers to focus on the system's customers and who expect outstanding progress toward delighting those customers.

Item 1.1 operationally defines "top leadership" as the district's highest ranking official and those who report directly to him or her. Others may lead parts of the organization, but these specific people have a special responsibility for guiding and supporting the ***whole***, and are looked at separately here. Many of the same questions are asked about students, teachers and other workers later in Section 4.0.

**Imagine a school where...**everyone shares a common plan (The Graduation Profile) for far exceeding the expectations of students, parents, local and national employers and colleges.

**Imagine a school where...**
one of the goals is that 100% of the students will succeed at the Graduation Profile and will experience joy and excitement in learning...where there were data about current status of success and joy...and where there was a plan for improving success and joy...and a deliberate plan for improvement.

**Imagine a school where...**the superintendent's customers (building principals and teachers) have defined their quality requirements for his/her leadership...where these requirements include more time for substantive dialogue... and where the superintendent is control charting and improving his availability.

# 1.1 Top Leadership (45 points)

Examine administrative leaders (the district's highest ranking official and those reporting directly to that official): their personal involvement and visibility in developing and maintaining a customer focus and an environment for educational excellence.

**A. Top administrators are personally visible in efforts to learn about and focus on the customers.**

Once | A few times | Routinely | In both academic & business areas | Couldn't be an administrator here w/out it

**B. Administrators have noticeably high expectations for us all.**

Once | A few times | Routinely | In both academic & business areas | Couldn't be an administrator here w/out it

**C. Administrators personally review progress toward quality goals.**

Once | A few times | Routinely | In both academic & business areas | Couldn't be an administrator here w/out it

**D. We use a written mission/vision/purpose statement about the aim of education to guide operational decisions.**

Once | A few times | Routinely | In both academic & business areas | Couldn't be an administrator here w/out it

**E. Administrators are leaders in communicating quality values to community, state, national, educational, business, professional, human services, standards and government organizations.**

Once | A few times | Routinely | Includes a wide variety of groups | Couldn't be an administrator here w/out it

**F. Administrators use data to improve their own leadership and service.**

Once | A few times | Routinely | In both academic & business areas | Couldn't be an administrator here w/out it

0% ---------- 25% ---------- 50% ---------- 75% ---------- 100%

# 1.2 Management for Quality (25 points)

Examine how customer focus and quality values are integrated into day-to-day leadership, management and supervision of all the district's units.

**A. Supervisors know and use quality principles in managing their people's work.**

| Not at all | Sometimes done well | They're trained & supported to | In both academic & business areas | Couldn't supervise here w/out it |
|---|---|---|---|---|

**B. Supervisors work with other units as customers and suppliers to define requirements and improve quality.**

| Not at all | Sometimes done well | They're trained & supported to | In both academic & business areas | Couldn't supervise here w/out it |
|---|---|---|---|---|

**C. Top administrators know which units in the district are achieving their quality goals.**

| Not at all | Sometimes done well | There's a process for reviewing it | In both academic & business areas | This is what they see as their work |
|---|---|---|---|---|

**D. People and units not achieving their quality goals get problem-solving attention rather than blame.**

| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | It's the way everyone works |
|---|---|---|---|---|

**E. We're using data to improve supervisors' ability to use quality principles & values.**

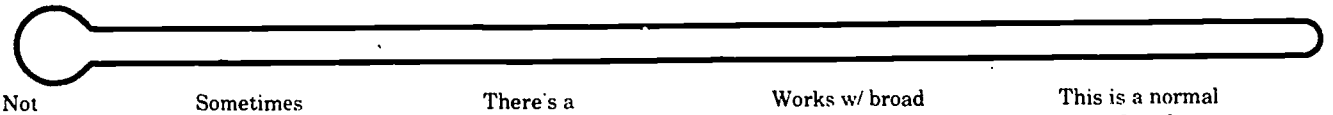
| The ones who care | Quite a few | They're trained & supported to | In both academic & business areas | Can't supervise without it |
|---|---|---|---|---|

0%---------- 25% ---------- 50% ---------- 75%---------- 100%

# 1.3 Public Responsibility (20 points)

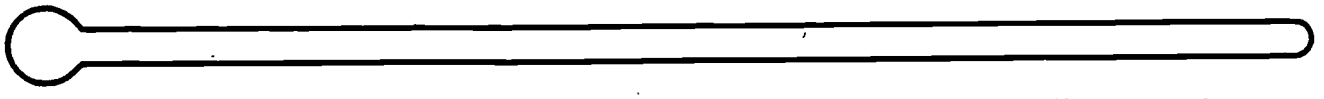
Examine how the district uses its quality policies and activities to contribute to public health, safety, environmental protection and ethics, and how it provides leadership in external groups.

**A. The district supports school employees/students other than district administrative leadership to promote quality awareness with community, state, national, educational, business, professional, human services, standards and government organizations.**



| Not at all | Sometimes done well | There's a deliberate plan | Works w/ broad range of groups | This is a normal part of work |
|---|---|---|---|---|

**B. District quality efforts contribute to (or lead) community efforts to improve public health, safety, ethics and environmental protection.**



| Not at all | Involved in several | There's a process for choosing which | In both academic & business areas | This is a normal part of work |
|---|---|---|---|---|

0% ---------- 25% ---------- 50% ---------- 75% ---------- 100%

# 2.0 Information and Analysis (80 points)

***The Information and Analysis category examines the scope, validity, analysis, management and use of data and information to drive quality excellence and improve competitive performance. Also examined is the adequacy of the data, information and analysis to support improvement of the district's customer focus, services and internal operations.***

Many kinds of information are required for people to "manage by data" and "continuously improve" how satisfied customers are, what features of the school's service customers care about, current performance on those features, what indicators will predict customer satisfaction early while still in process, current performance on those process indicators, what constitutes quality from the district's "suppliers," morale and well-being of the workers in the system, and cost of service, for instance. These items ask first how well these measurements have been chosen, and then how meaningful information is extracted ("analyzed") from the data.

Another theme here is identifying "benchmarks" for the key indicators the district has chosen to gather data about. Although businesses think of benchmarks as showing them how competitors are doing on the things their customers care about, the concept is also used--even in business--as a way of "stretching" an organization's vision. The idea is to identify the best performer in the world on each factor the district cares enough about to measure. . . and then getting new ideas from that organization about the processes they use to achieve that level of performance. That use of the term seems most useful for schools. For a good explanation of benchmarking, see Robert Camp's article on page 70 in the resource section.

**Imagine a school where...**
no grades are used to rank student performance. Instead, the class works until every student succeeds. The number of questions right on quizzes and exams are expected to fall into a (tight) normal distribution. But information about where that distribution falls is used instead to analyze and evaluate the teaching/learning methods being used.

**Imagine a school where...**
a student boredom index provides teachers and students with a mid-class session process indicator which they have found goes up as mastery of the day's learning objective goes down. . . and where the class is problem solving and testing methods which reduce student boredom and increase mastery levels.

# 2.1 Scope and Management of Quality Data and Information (15 points)

Examine the district's base of data and information used for planning, day-to-day management, and evaluation of quality. Examine also how data and information reliability, timeliness and access are assured.

**A. Decisions about what data to collect are guided by consistent criteria.**

| Individuals decide | There's some consistency | There's a process for deciding | In both academic & business areas | We're improving our criteria |
|---|---|---|---|---|

**B. Data is collected about a wide enough range of indicators that everyone has what they need to know how to improve.**

| Not at all | Some people have some | Important things are measured | In both academic & business areas | We're improving data availability |
|---|---|---|---|---|

**C. Data is statistically reliable.**

| Not sure | Some is | There's a process for ensuring it | In both academic & business areas | We're improve reliability |
|---|---|---|---|---|

**D. The data is immediately available to the system workers who need it to make decisions about work in process.**

| Not at all | Some is | Routinely | In both academic & business areas | We're improving our timeliness |
|---|---|---|---|---|

0% ---------- 25% ---------- 50% ---------- 75% ----------100%

# 2.2 Comparisons and Benchmarks (25 points)

Examine the district's approach to selecting data and information for comparisons and world-class benchmarks to support quality planning, evaluation and improvement.

**A. We know where in the world customers are most happy with their schools.**

| Not at all | We have some heroes/models | We have data to support our choices | In both academic & business areas | Can't work without it |
|---|---|---|---|---|

**B. We know where in the world schools are getting the best service from their suppliers.**

| Not at all | We have some heroes/models | We have data to support our choices | In both academic & business areas | Can't work without it |
|---|---|---|---|---|

**C. We know where in the world school employees are most satisfied.**

| Not at all | We have some heroes/models | We have data to support our choices | In both academic & business areas | Can't work without it |
|---|---|---|---|---|

**D. We know where in the world the best business and support practices are accomplished.**

| Not at all | We have some heroes/models | We have data to support our choices | In both academic & business areas | Can't work without it |
|---|---|---|---|---|

**E. We're improving the quality of our benchmarking information.**

| Not at all | Made a few changes | There's a process to ensure it | In both academic & business areas | Can't work without it |
|---|---|---|---|---|

0% ---------- 25% ---------- 50% ---------- 75% ---------- 100%

# 2.3 Analysis and Uses of District-Level Data (40 points)

Examine how quality and performance-related data and information are analyzed and used to support the district's overall operational and planning objectives.

**A. We analyze customer data to extract information we can use to improve.**

| Not at all | Sometimes done well | There's a process to ensure it | In both academic & business areas | Can't work without it |
|---|---|---|---|---|

**B. We analyze operational data to extract information we can use to improve.**

| Not at all | Sometimes done well | There's a process to ensure it | In both academic & business areas | Can't work without it |
|---|---|---|---|---|

**C. We analyze cost data to extract information we can use to improve.**

| Not at all | Sometimes done well | There's a process to ensure it | In both academic & business areas | Can't work without it |
|---|---|---|---|---|

**D. We're improving our capacity to analyze data quickly and effectively.**

| Not at all | Made a few changes | There's a process to ensure it | In both academic & business areas | Can't work without it |
|---|---|---|---|---|

0% ---------- 25% ---------- 50% ---------- 75% ---------- 100%

# 3.0 Strategic Quality Planning (60 points)

***The Strategic Planning category examines the district's planning process and how all key quality requirements are integrated into overall business planning. Also examined are the district's short-term and longer term plans and how quality and performance requirements are deployed to all work units.***

Once leadership has clearly defined the customer-focused purpose and built an information system around the things that customers care about, the next question is how all that preparation gets translated into practical reality. What do people work toward today, this year, in the next 2 years, for 3 years from now? The answer is arrived at by quality planning, which defines short- and long-term goals, and ties everyone's daily work to them. These items ask first how the planning process works, and then what goals were arrived at by that process.

**Imagine a school where...** the fifth grade teacher and his/her students know exactly what 100% of them need to accomplish during this year to position students to achieve the Graduation Profile. They hear regularly from sixth and twelfth grade student mentors about how this year's success fits into later work, and from employers and neighbors about what graduation success means to the community.

**Imagine a school where...** the bus drivers have a clear picture from parents, administrators and students of what constitutes quality work in bus driving. . . and have reduced variation in pick-up and drop-off time by 15% while providing games for on-bus use that have reduced fights by 50%.

**Imagine a school where...** students, teachers and administrators all have quality goals for the year. . . based on knowledge of their performance last year on indicators their customers care about. . . and tied to process improvements they believe could achieve the goal.

# 3.1 Strategic Quality Planning Process (35 points)

Examine the district's strategic quality planning process for short-term (1-2 years) and longer term (3 years or more) quality leadership and customer satisfaction. Include how this process leads to performance requirements and how plans are assigned to people.

**A. We've used customer needs data as the basis for our planning.**

| Not at all | Some data | There's a process for ensuring it | In both academic & business areas | Can't plan without it |
|---|---|---|---|---|

**B. We have identified how we think customer needs will evolve in the near future and the longer term future.**

| Not at all | Some data | There's a process for figuring it out | In both academic & business areas | Can't plan without it |
|---|---|---|---|---|

**C. We've identified the new skills or technologies or competencies we'll have to develop to respond to evolving customer needs.**

| Not at all | Some data | There's a process for agreeing on it | In both academic & business areas | Can't plan without it |
|---|---|---|---|---|

**D. People know what the strategic plan requires of their daily work.**

| Not at all | Sometmes done well | There's a process for ensuring it | In both academic & business areas | Can't plan without it |
|---|---|---|---|---|

**E. The budgeting process allocates resources to key strategies for accomplishing the strategic plan (such as capital expenditures and training).**

| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Can't budget without it |
|---|---|---|---|---|

0%---------- 25% ---------- 50% ---------- 75% ---------- 100%

# 3.2 Quality Goals and Plans (25 points)

Examine the district's quality and performance plans and goals for the short term (1-2 years) and longer term (3 years or more).

**A. People in the district know our major quality goals--the things we believe our customers care about and in which we intend to excel.**

| There's a document | Many people know them | People use them routinely | In both academic & business areas | Can't work here w/out it |
|---|---|---|---|---|

**B. We know what has to be done in the next 1-2 years to accomplish those goals.**

| There's a document | Many people know what | We determine this regularly | In both academic & business areas | Can't work here w/out it |
|---|---|---|---|---|

**C. We've told our suppliers what we need from them to accomplish our 1-2 year plan.**

| There's a document | Many people use the document | We determine this regularly | In both academic & business areas | Can't work here w/out it |
|---|---|---|---|---|

**D. We know what we'll have to do in years 3-5 to accomplish our goals.**

| There's a document | Many people know | We determine this regularly | In both academic & business areas | Can't work here w/out it |
|---|---|---|---|---|

0% ---------- 25% ---------- 50% ---------- 75% ---------- 100%

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# 4.0 Human Resource Development and Management (150 points)

***The Human Resource Development and Management category examines the key elements of how the district develops and realizes the full potential of the work force to pursue the district's quality and performance objectives. Also examined are the district's efforts to build and maintain an environment for quality excellence conducive to full participation, and personal and organizational growth.***

Once the plans described in Category 3.0 are in place to accomplish the customer-based quality requirements, the question becomes whether the people in the organization are equipped and supported to do what they need to do. Are they given enough information and autonomy to be able to control their own work? Are they expected and prepared to continuously improve the capability of the systems in which they work? These items ask how workers (including students, teachers and administrators) are involved, educated, appraised for performance and recognized for contributions.

**Imagine a school where...** the new assistant superintendent, a cafeteria worker and three parents join a seventh grade biology class which is scheduled to attend this week's Quality Concepts class which teaches an overview of systems thinking, management by data and continuous improvement.

**Imagine a school where...** merit pay for teachers has been discarded as an anachronism--left over from before it was clear from data analysis that systems problems, not lazy or incompetent workers, are responsible for most of the barriers to school improvement.

**Imagine a school where...** a quality indicator for leaders is their ability to gain the trust and respect of the people who work for them, and where top leaders track data about and continuously improve their trust index.

# 4.1 Human Resource Management (20 points)

Examine how the district's overall human resource development and management plans and practices support its quality and performance plans. Examine all categories and types of employees, including the classification system used by the district, bargaining units and demographic makeup (such as gender, age, minorities and the disabled).

**A. The district's hiring process supports the school's quality goals.**

| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

**B. Staff development resources are consciously directed to support the school's quality goals.**

| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

**C. Personnel transactions and services to employees delight our internal customers.**

| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

**D. Labor-management cooperation brings people from both sides of the bargaining table to work as partners (customers and suppliers) toward the quality goals.**

| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

**E. The district uses data to analyze and ensure that employees and students in various demographic groups, bargaining units and employment classifications are all doing well.**

| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

0% ---------- 25% ---------- 50% ---------- 75% ----------100%

# 4.2 Student and Employee Involvement (40 points)

Examine the means available for all students and employees to contribute effectively to meeting the district's quality objectives; summarize trends in involvement.

**A. The district has mechanisms to actively encourage students and employees to contribute to accomplishing its quality goals.**

| Not many | Some | People believe they're real | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

**B. Students and employees take this seriously and really do actively contribute to accomplishing district quality goals.**

| Not many | It's getting more common | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

**C. When students and employees recommend system changes to accomplish quality goals, they get timely, substantive action or feedback.**

| Rarely | Sometimes | There's a process for ensuring it | In both academic & business areas | This is administrators' work |
|---|---|---|---|---|

**D. Students and employees have authority to stop their work processes and problem-solve when systems (including the classroom) aren't working to their demonstrated capacity.**

| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

**E. We use data to ensure that demographic groups, bargaining units and student/employment classifications all participate in quality improvement well.**

| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

0% ---------- 25% ---------- 50% ---------- 75% ---------- 100%

# 4.3 Student and Employee Education and Training (40 points)

Examine how the district determines what quality and related education and training is needed by employees and students, and how the district utilizes the knowledge and skills acquired; summarize the types of quality and related education and training received by employees in all categories.

**A. The district uses data to determine what quality education is needed for each employee/student to do their work.**

| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

**B. School employees (both academic and business) receive some quality education during the year.**

| 10% do | 25% do | 50% do | 75% do | 100% do |
|---|---|---|---|---|

**C. Student curriculum includes quality education each year.**

| For 10% of students | For 25% of students | For 50% of students | For 75% of students | For 100% of students |
|---|---|---|---|---|

**D. The district uses data to improve our quality education and training.**

| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

0% ---------- 25% ---------- 50% ----------75% ----------100%

# 4.4 Employee Recognition and Performance Measurement (25 points)

Examine how the district's employee performance, recognition, promotion, compensation, reward and feedback processes support the attainment of the district's quality and performance objectives.

**A. The district recognizes individuals and groups who contribute actively to accomplishing quality goals.**

| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

**B. People find the recognition meaningful and value it when they get it.**

| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

**C. Student performance measurements are tied to quality improvements.**

| Not at all | In some classrooms | There's a process for ensuring it | In all curricular areas | We're improving our measures |
|---|---|---|---|---|

**D. Employee performance measurements are tied to quality improvements.**

| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

**E. Employees and students are involved in developing performance measurements.**

| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

0% ---------- 25% ---------- 50% ----------75% ---------- 100%

# 4.5 Student and Employee Well-Being and Morale (25 points)

Describe how the district maintains a work environment conducive to the well-being and growth of all employees; summarize trends and levels in key indicators of well-being and morale.

**A. Employee morale factors such as health, safety, satisfaction, and ergonomics are included in the district's quality improvement activities.**

| Not at all | Sometimes done well | There s a process for ensuring it | In both academic & business areas | Couldn t work here w/out it |
|---|---|---|---|---|

**B. Student morale factors are included in the district's quality improvement activities.**

| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

**C. The district supports and encourages mobility, flexibility and retraining of teachers and administrators.**

| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

**D. The district supports employees with special programs and facilities such as counseling, recreation, cultural, non-work related education and outplacement.**

| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

**E. Data show that the trends for employee well-being and morale are:**

| Getting worse | Stable | Improving | Improving rapidly | Achieving leadership |
|---|---|---|---|---|

0% ---------- 25% ---------- 50% ---------- 75% ---------- 100%

# 5.0 Management of Process Quality (140 points)

***The Management of Process Quality category examines the systematic processes the district uses to pursue ever-higher quality and performance. Examined are the key elements of process management, including design, management of process quality for all work units and suppliers, systematic quality improvement and quality assessment.***

These items look at the methods the district uses to do its work: how well they are **managed by data** (i.e., documented and kept stable at the current level of system capability) and then **continuously improved**. It attends to the processes operated by the district itself (for example, teaching and learning, purchasing, etc.) It also addresses the key processes used by the district's suppliers to provide key inputs (for example, families, social service and health care agencies, textbook publishers, etc.) These questions concern how the district knows when a process is in control and/or improving. The actual results (and trends in those results--which should be upward if continuous improvement is working) will be reported in the next category.

**Imagine a school where...** teachers are guided by the school's constant purpose and the operational outcomes included in the success profiles for each year, but are unhampered by prescribed methods... free to innovate in classroom practice, and expected to publish research results which indicate the effectiveness of the methods they and their students have invented.

**Imagine a school where...** a team of parents, teachers, neighbors, administrators and students is assigned to the priority quality goal of improving elementary students' readiness to learn; has developed a root cause analysis of unreadiness, formed an improvement theory which they believe could affect the baseline data, and has enlisted the help from everyone needed to test the theory.

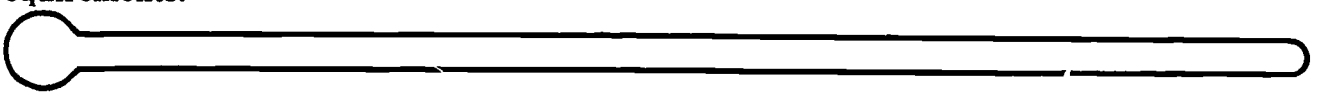
**Imagine a school where...** every student tracks his/her progress daily toward this year's milestones on the Graduation Profile by means of a control chart, invents 100-200 improvement ideas each year (2-4 per week) and uses statistical analysis to know when significant change has occurred.

**Imagine a school where...** teachers and students experiment as part of their daily work with various classroom practices and methods which they believe will help them achieve faster or more uniform mastery. . . and document which ones do that and which ones do not.

# 5.1 Design and Introduction of Curriculum, Services, and Activities (40 points)

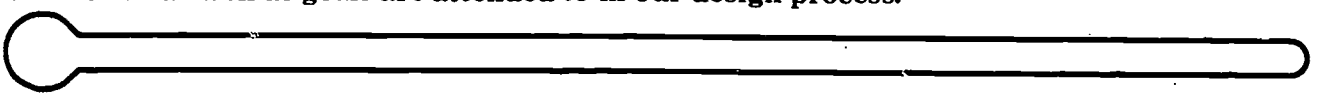
Describe how new courses, services or activities in the district are designed and introduced, and how processes are designed to meet quality requirements and district performance goals.

**A. The district has a process for designing courses and new services that integrates customer requirements.**



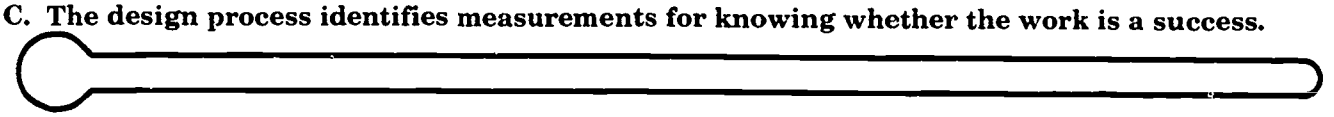
| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

**B. Methods as well as goals are attended to in our design process.**



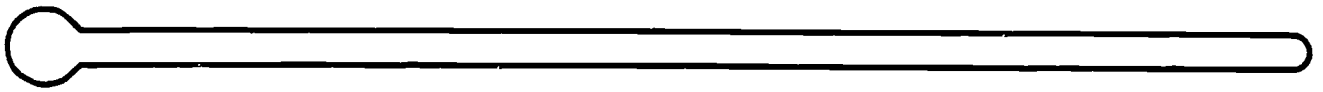
| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

**C. The design process identifies measurements for knowing whether the work is a success.**



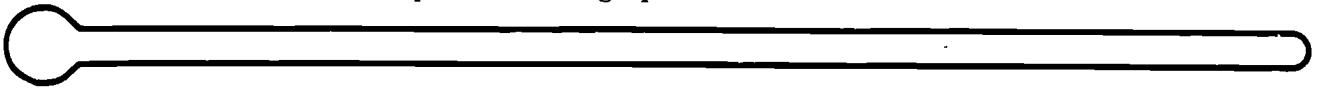
| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

**D. The design is reviewed by customers and workers.**



| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

**E. The district uses data to improve its design process.**



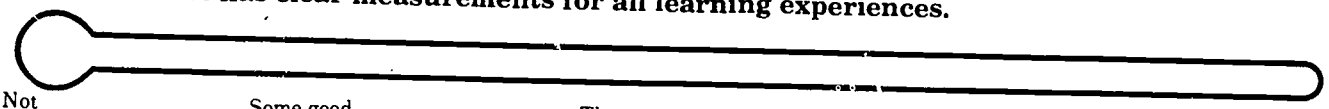
| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

0% ---------- 25% ---------- 50% ---------- 75% ---------- 100%

# 5.2 Process Management -- Learning Processes (35 points)

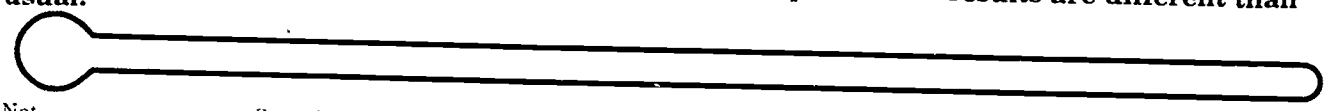
Describe how the district's learning activities are managed so that current quality requirements are met, and quality and performance are continuously improved.

**A. The district has clear measurements for all learning experiences.**



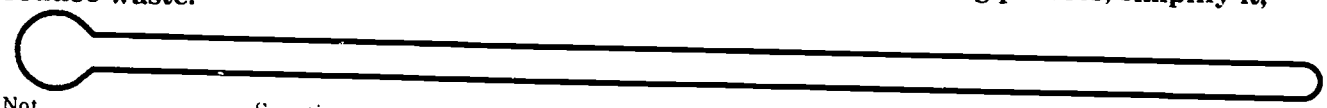
| Not at all | Some good examples | There's a process for ensuring it | In both curricular & extracurricular | Couldn't work here w/out it |
|---|---|---|---|---|

**B. All learning experiences have a way to notice and respond when results are different than usual.**



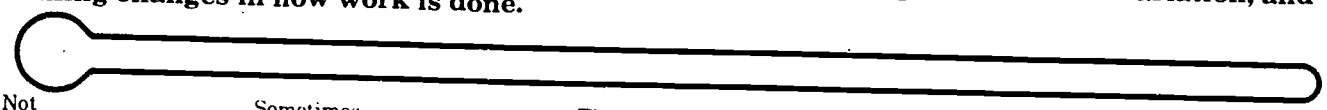
| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

**C. Individual buildings have processes in place to analyze the learning process, simplify it, reduce waste.**



| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

**D. All learning experiences include analyzing results, identifying root causes of variation, and making changes in how work is done.**



| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

0% ---------- 25% ---------- 50% ---------- 75% ---------- 100%

# 5.3 Process Management -- Business Processes and Support Services (30 points)

Describe how the district's business processes and support services (for instance, the library, cafeteria, accounting, purchasing, maintenance) are managed so that current requirements are met, and quality and performance are continuously improved.

**A. The district can clearly identify and describe all of its key business and support processes in systems terms.**

| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

**B. Business and support workers have a way to notice and respond when results are different than usual.**

| Not at all | Sometimes done well | There's a process for ensuring it | In all areas | Couldn't work here w/out it |
|---|---|---|---|---|

**C. Business and support workers have a process for analyzing results, identifying root causes and making changes in the systems in which they work.**

| Not at all | Sometimes done well | There's a process for ensuring it | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

0%----------25%----------50%----------75%----------100%

56

# 5.4 Supplier Quality (20 points)

Describe how the district assures the quality of incoming personnel (students and teacher candidates, for instance), services provided by the community (social service and health care agencies, for instance) and materials or services (textbooks and staff training, for instance) provided by other businesses.

**A. The district makes clear to parents and the community what is needed from them to assure student success.**

| Not at all | Sometimes done well | There's a process for ensuring it | In all areas | Couldn't work here w/out it |
|---|---|---|---|---|

**B. The district makes clear its quality requirements to business suppliers.**

| Not at all | Sometimes done well | There's a process for ensuring it | In all areas | Couldn't work here w/out it |
|---|---|---|---|---|

**C. The district has data on the performance of parents and the community and regularly communicates with them about it.**

| Not at all | Sometimes done well | There's a process for ensuring it | In all areas | Couldn't work here w/out it |
|---|---|---|---|---|

**D. The district has data on the performance of business suppliers and regularly communicates with them about it.**

| Not at all | Sometimes done well | There's a process for ensuring it | In all areas | Couldn't work here w/out it |
|---|---|---|---|---|

**E. The district has a clear set of strategies for building the capacity of parents and the community to support the quality work of the school.**

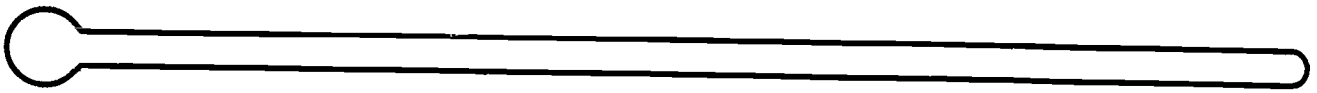
| Some ideas | Some success | Regular planning | Wide involvement | Core part of our strategy |
|---|---|---|---|---|

0% ---------- 25% ---------- 50% ---------- 75% ---------- 100%

# 5.5 Quality Assessment (15 points)

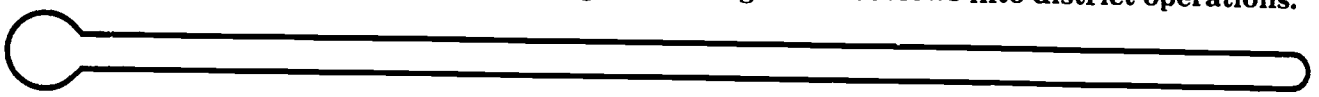
Describe how the district assesses the quality and performance of its systems, processes and practices, and the quality of its output.

**A. The district initiates regular district-wide reviews of the quality of its processes and its output.**



Occasional | Often | Most are | Clear system | It's expected

**B. The district has a system for integrating the findings of its reviews into district operations.**



Not at all | Sometimes done well | There s a process for ensuring it | In all areas | Couldn't work here w/out it

0% ---------- 25% ---------- 50% ---------- 75% ---------- 100%

# 6.0 Quality and Operational Results (180 points)

***The Quality and Operational Results category examines the district's quality levels and improvement trends in quality, district operational performance and supplier quality. Also examined are current quality and performance levels relative to those of world-class achievers.***

These items look at the actual results of the district's quality efforts, with particular attention to the comparison to world-class achieving schools -- the best known educational organizations, regardless of location. To meet the intent of these criteria, the district must demonstrate consistent progress toward its quality goals. These items focus on four kinds of results:

-- **Outcome quality** These are measures of the quality of the school's actual "product"-- presumably student learning.

-- **Operational results** These are measures of the overall performance of the district's operations, and might include measures such as cost, drop-out rate and timeliness.

-- **Business and support quality** These measures look at the quality of the district's business and support processes, such as library, cafeteria, accounting and maintenance.

-- **Supplier quality** These measures look at the quality of the inputs that the district depends on to do its work, including incoming students, parental involvement and community services.

Processes for managing these results have been examined in Category 5.0. What is asked for here is charted data showing what has happened as a result of those management and improvement processes.

**Imagine a school where...** everyone in the school knows how the school is performing compared to world leaders in learning.

**Imagine a school where...** teams of teachers and students regularly investigate other schools to benchmark their performance against the best schools they can find.

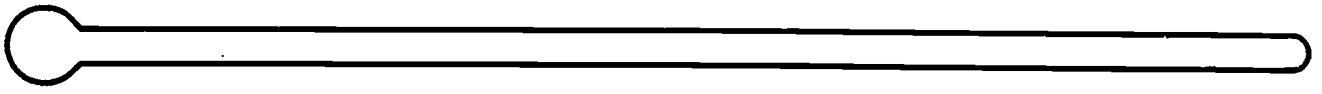
**Imagine a school where...**administrators, teachers and students can document their 5-year progress against specific measures, and use that documentation to help parents and taxpayers understand the value of adequate tax revenues.

# 6.1 Learning Quality Results (75 points)

Summarize the district's trends in quality for key learning outcomes; compare the district's current quality level with those of world-class benchmarks.

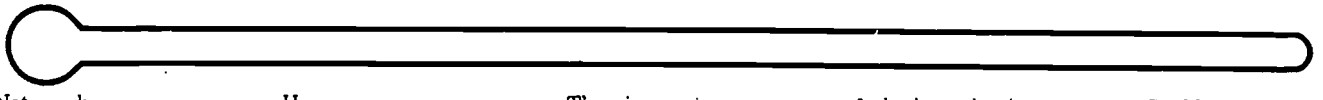
(NOTE: These are overall learning outcomes associated with a student's experience with the district. They might include problem-solving ability, knowledge mastery, life skills or self-directedness, for instance.)

**A. The trend in the district's quality levels is:**



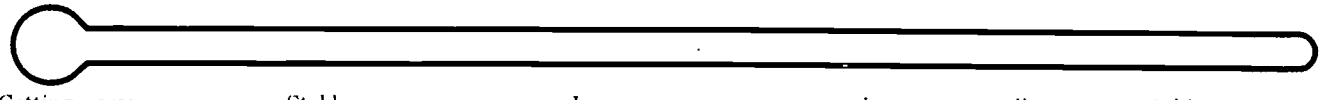
Getting worse | Stable | Improving | Improving rapidly | Achieving leadership

**B. The district knows how it is performing relative to world leaders in learning.**



Not much | Has some data | There's a process for finding out | In both academic & business areas | Couldn't work here w/out it

**C. District performance relative to world leaders in learning is:**



Getting worse | Stable | Improving | Improving rapidly | Achieving leadership

0% ---------- 25% ---------- 50% ----------75% ----------100%

# 6.2 District Operational Results (45 points)

Summarize trends and levels in overall district operational performance, and provide a comparison of district performance with others schools and appropriate benchmarks.

(NOTE: Measures of "operational performance" are measures of efficiency, productivity and effectiveness. They might include drop-out rate, cost per pupil, class size and other overall indicators of operational performance.)

**A. The trend in the district's quality levels is:**

| Getting worse | Stable | Improving | Improving rapidly | Achieving leadership |
|---|---|---|---|---|

**B. The district knows how it is performing relative to world leaders.**

| Not much | Has some data | There's a process for finding out | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

**C. District performance relative to world leaders is:**

| Getting worse | Stable | Improving | Improving rapidly | Achieving leadership |
|---|---|---|---|---|

0% ---------- 25% ---------- 50% ----------75% ----------100%

# 6.3 Business Process and Support Service Results (25 points)

Summarize trends and current levels in quality and performance improvement for business processes and support services.

**A. The trend in the district's quality levels is:**

| Getting worse | Stable | Improving | Improving rapidly | Achieving leadership |
|---|---|---|---|---|

**B. The district knows how it is performing relative to world leaders.**

| Not much | Has some data | There's a process for finding out | In both academic & business areas | Couldn't work here w/out it |
|---|---|---|---|---|

**C. District performance relative to world leaders is:**

| Getting worse | Stable | Improving | Improving rapidly | Achieving leadership |
|---|---|---|---|---|

0% ---------- 25% ---------- 50% ---------- 75% ----------100%

# 6.4 Supplier Quality Results (35 points)

Summarize trends in quality and current quality levels for suppliers; compare the district's supplier quality with that of other public and private schools and with key benchmarks.

**A. Data show that the skill and ability level of new students coming into the district is:**

Getting worse | Stable | Improving | Improving rapidly | Achieving leadership

**B. Data show that the quality of parental involvement in the schools is:**

Getting worse | Stable | Improving | Improving rapidly | Achieving leadership

**C. Data show that the quality of community services provided to the school and students is:**

Getting worse | Stable | Improving | Improving rapidly | Achieving leadership

**D. The quality of business suppliers (textbooks, equipment, training, etc.) to the schools is:**

Getting worse | Stable | Improving | Improving rapidly | Achieving leadership

**E. The quality of the suppliers to the district relative to other schools and benchmarks is:**

Getting worse | Stable | Improving | Improving rapidly | Achieving leadership

0% ---------- 25% ---------- 50% ---------- 75% ---------- 100%

# 7.0 Customer Focus and Satisfaction (300 points)

***The Customer Focus and Satisfaction category examines the district's relationships with customers and its knowledge of customer requirements and of the key quality factors that determine marketplace competitiveness. Also examined are the district's methods to determine customer satisfaction, current trends and levels of satisfaction.***

It is important to distinguish customer satisfaction results examined in this category from quality results examined in 6.0. The previous category examined the **process and outcome results** obtained by the district. They are important because (if they are well chosen) they are good predictors of how satisfied customers will be.

This category examines the **degree to which the results meet identified customer requirements**. It looks at the degree to which students, parents, employers, taxpayers and others are satisfied with the outcome results achieved by the school.

**Imagine a school where...** a quality leadership team (including board members, the superintendent, staff, teachers and students)meets twice a year with parents, local and national employers, colleges and vocational training institutions to negotiate quality requirements and review school progress.

**Imagine a school where...** the school knows so well what the community expects and how it is meeting those expectations that local school tax elections are no longer a matter of hit and miss politics, but are only requested when absolutely essential, and when asked for are always approved.

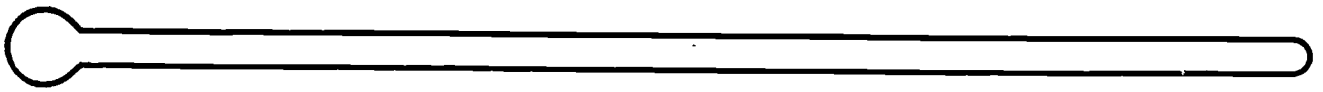
**Imagine a school where...** everyone knows what employers and colleges and parents and the local community will want from high school graduates in 5 years.

**Imagine a school where...** the school regularly surveys parents, employers, taxpayers, community groups... receives 50%+ response rates... and uses teams of students, staff and teachers to analyze the results and communicate them to the school community.

# 7.1 Customer Relations Management (65 points)

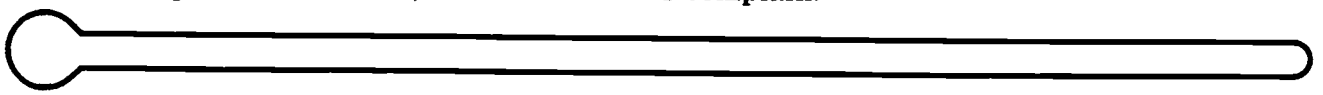
Describe how the school district provides effective management of its relationships with its various customers and uses information gained from customers to improve customer relationship management strategies and practices.

**A. The district continuously surveys the needs and expectations of its multiple customers (parents, students, employers, taxpayers, etc.) to understand their most important expectation of the school.**



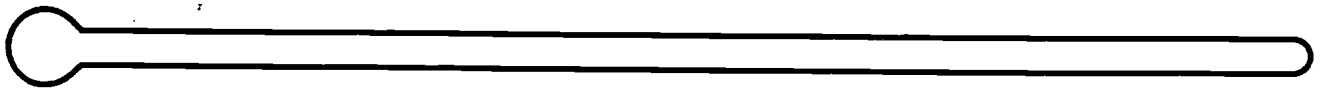
| Not at all | Sometimes done well | There's a process for ensuring it | In all areas | Couldn't work here w/out it |
|---|---|---|---|---|

**B. Individual buildings have means for customers (students, parents, employers and community members) to provide feedback, seek assistance or complain.**



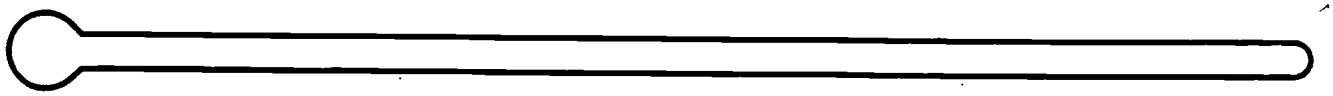
| Not at all | Sometimes done well | There's a process for ensuring it | In all areas | Couldn't work here w/out it |
|---|---|---|---|---|

**C. There are clear standards for school personnel to guide their interactions with students, parents and citizens.**



| Not at all | Sometimes done well | There's a process for ensuring it | In all areas | Couldn't work here w/out it |
|---|---|---|---|---|

**D. District employees are taught skills to effectively interact with parents, employers and citizens.**



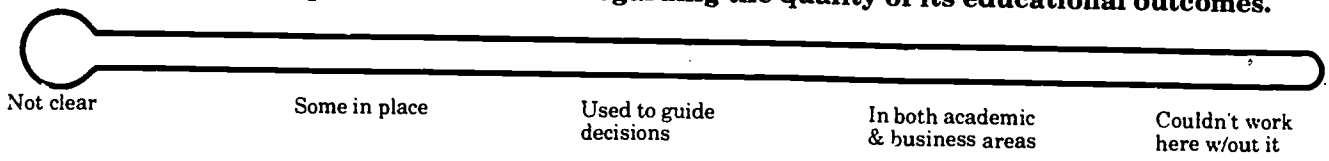
| Not at all | Sometimes done well | There's a process for ensuring it | In all areas | Couldn't work here w/out it |
|---|---|---|---|---|

0% ---------- 25% ---------- 50% ---------- 75% ---------- 100%

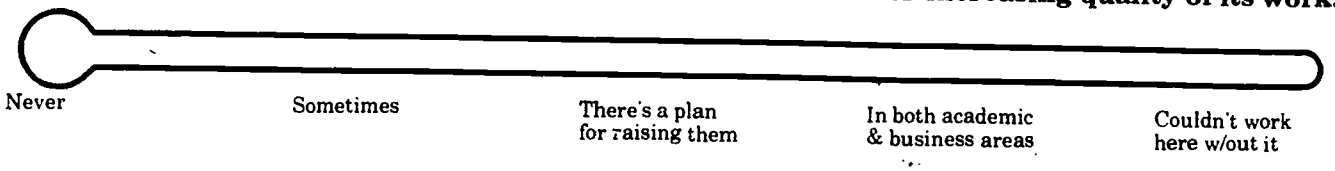
# 7.2 Commitment to Customers (15 points)

Describe the district's explicit and implicit commitments to students, parents, employers and others regarding the quality of its services.

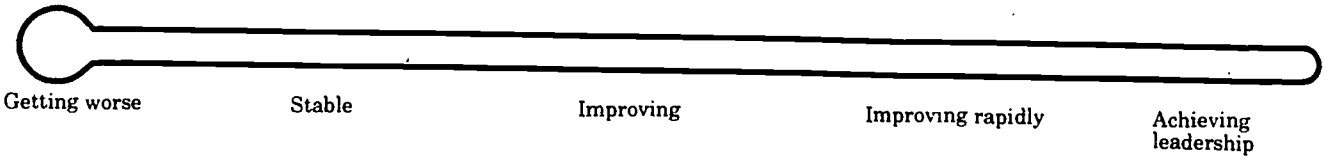
**A. The district has explicit commitments regarding the quality of its educational outcomes.**




**B. The district has improved its commitments because of the ever-increasing quality of its work.**




**C. Compared to other schools, the district's commitments are:**

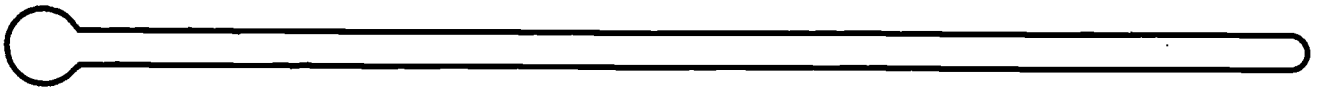



0% ---------- 25% ---------- 50% ---------- 75% ----------100%

# 7.3 Customer Satisfaction Determination (35 points)

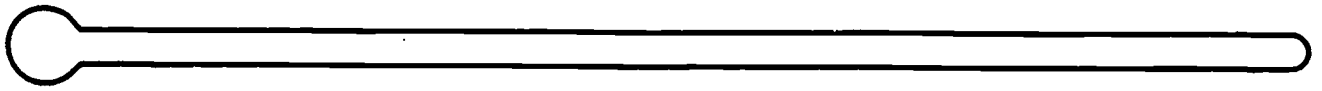
Describe the district's methods for determining student, parent, employer and community satisfaction, and satisfaction relative to other schools; describe how these methods are evaluated and improved.

**A. The district uses surveys, focus groups, interviews and other methods to determine how satisfied students, parents, employers and other citizens are with its services.**



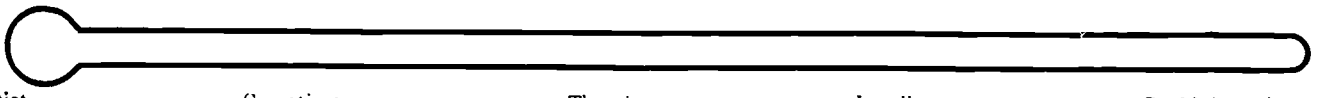
| Not at all | Sometimes done well | There's a process for ensuring it | In all areas | Couldn't work here w/out it |
|---|---|---|---|---|

**B. The school measures satisfaction of its customers relative to other schools.**



| Not at all | Sometimes done well | There's a process for ensuring it | In all areas | Couldn't work here w/out it |
|---|---|---|---|---|

**C. The district continually evaluates the effectiveness of its methods for listening to students, parents, employers and other citizens.**



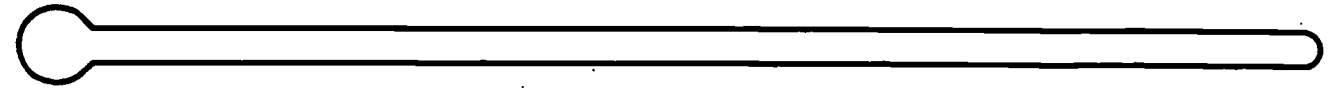
| Not at all | Sometimes done well | There's a process for ensuring it | In all areas | Couldn't work here w/out it |
|---|---|---|---|---|

0% ---------- 25% ---------- 50% ----------75%----------100%

# 7.4 Customer Satisfaction Results (75 points)

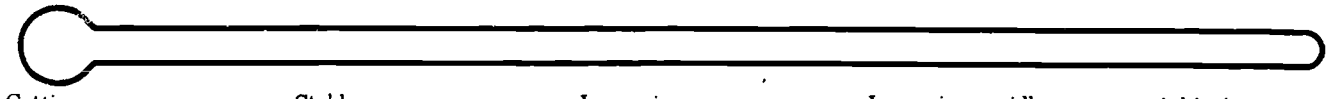
Summarize trends using data and graphs in the satisfaction of students, parents, employers and other citizens with the district, and trends in key indicators of dissatisfaction.

**A. The trends in satisfaction with district performance are:**



Getting worse | Stable | Improving | Improving rapidly | Achieving leadership

**B. The trends in dissatisfaction with district performance are:**



Getting worse | Stable | Improving | Improving rapidly | Achieving leadership

0% ---------- 25% ---------- 50% ---------- 75% ----------100%

# 7.5 Customer Satisfaction Comparison (75 points)

Compare the satisfaction with the district's performance with those of other schools.

**A. The trends in satisfaction relative to other schools are:**

Getting worse | Stable | Improving | Improving rapidly | Achieving leadership

**B. The rate at which the school is losing students to other schools is:**

Getting worse | Stable | Improving | Improving rapidly | Achieving leadership

**C. The percent of students that choose to attend a school other than the public school is:**

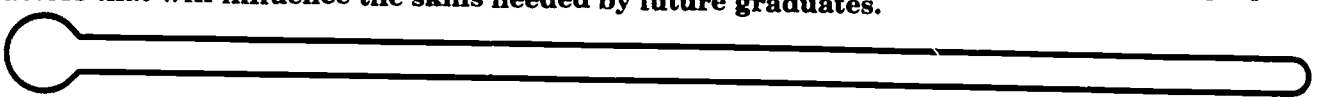
Increasing | Stable | Decreasing | Decreasing rapidly | Non-existent

0% ---------- 25% ---------- 50% ---------- 75% ---------- 100%

# 7.6 Future Requirements and Expectations of Customers (35 points)

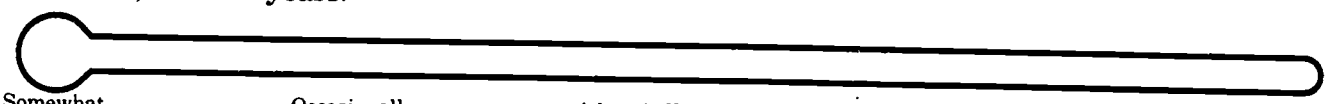
Describe how the district determines the future requirements of students, parents, employers and other segments of the community.

**A. The district has a process for assessing the technological, social, economic and demographic factors that will influence the skills needed by future graduates.**



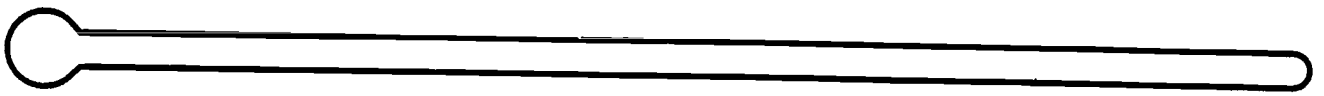
Not at all | Sometimes done well | Regularly | In many cases | Couldn't work here w/out it

**B. The district is now making plans for the curriculum and programs that will be needed in another 5, 10 or 15 years.**



Somewhat | Occasionally | A lot of effort | Extensive system | Proven capability

**C. The district is continuously assessing its process for determining future curricula and programs.**



Not at all | Occasionally | Often | Systematically | Continuously

0% ---------- 25% ---------- 50% ---------- 75% ---------- 100%

## *Percentage scores from each item go here:*

| | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| LEADERSHIP | | | | | | | | | | | |
| 1.1 Senior Executive Leadership | | | | | | | | | | | |
| 1.2 Management for Quality | | | | | | | | | | | |
| 1.3 Public Responsibility | | | | | | | | | | | |
| INFORMATION & ANALYSIS | | | | | | | | | | | |
| 2.1 Scope & Management of Quality & Performance Data | | | | | | | | | | | |
| 2.2 Comparisons & Benchmarks | | | | | | | | | | | |
| 2.3 Analysis & Use of Data | | | | | | | | | | | |
| STRATEGIC QUALITY PLANNING | | | | | | | | | | | |
| 3.1 Planning Process | | | | | | | | | | | |
| 3.2 Quality & Performance Plans | | | | | | | | | | | |
| HUMAN RESOURCE DEVELOPMENT & MANAGEMENT | | | | | | | | | | | |
| 4.1 Human Resource Management | | | | | | | | | | | |
| 4,2 Employee Involvement | | | | | | | | | | | |
| 4.3 Education & Training | | | | | | | | | | | |
| 4.4 Performance & Recognition | | | | | | | | | | | |
| 4.5 Well-being & Morale | | | | | | | | | | | |
| MANAGEMENT OF PROCESS QUALITY | | | | | | | | | | | |
| 5.1 Design of Products & Services | | | | | | | | | | | |
| 5.2 Learning Processes | | | | | | | | | | | |
| 5.3 Business & Support Processes | | | | | | | | | | | |
| 5.4 Supplier Quality | | | | | | | | | | | |
| 5.5 Quality Assessment | | | | | | | | | | | |
| QUALITY & OPERATIONAL RESULTS | | | | | | | | | | | |
| 6.1 Product & Service Results | | | | | | | | | | | |
| 6.2 Operational Results | | | | | | | | | | | |
| 6.3 Business & Support Results | | | | | | | | | | | |
| 6.4 Supplier Results | | | | | | | | | | | |
| CUSTOMER FOCUS & SATISFACTION | | | | | | | | | | | |
| 7.1 Customer Relationship Management | | | | | | | | | | | |
| 7.2 Commitment to Customers | | | | | | | | | | | |
| 7.3 Customer Satisfaction Determination | | | | | | | | | | | |
| 7.4 Customer Satisfaction Results | | | | | | | | | | | |
| 7.5 Customer Satisfaction Comparison | | | | | | | | | | | |
| 7.6 Future Requirements & Expectations | | | | | | | | | | | |

# *Calculate weighted scores for each item here:*

LEADERSHIP

1.1 Senior Executive Leadership _____% x 45 points = _____
1.2 Management for Quality _____% x 25 points = _____
1.3 Public Responsibility _____% x 20 points = _____

INFORMATION & ANALYSIS

2.1 Scope & Management of Quality & Performance Data _____% x 15 points = _____
2.2 Comparisons & Benchmarks _____% x 25 points = _____
2.3 Analysis & Use of Data _____% x 40 points = _____

STRATEGIC QUALITY PLANNING

3.1 Planning Process _____% x 35 points = _____
3.2 Quality & Performance Plans _____% x 25 points = _____

HUMAN RESOURCE DEVELOPMENT & MANAGEMENT

4.1 Human Resource Management _____% x 20 points = _____
4,2 Employee Involvement _____% x 40 points = _____
4.3 Education & Training _____% x 40 points = _____
4.4 Performance & Recognition _____% x 25 points = _____
4.5 Well-being & Morale _____% x 25 points = _____

MANAGEMENT OF PROCESS QUALITY

5.1 Design of Products & Services _____% x 40 points = _____
5.2 Learning Processes _____% x 35 points = _____
5.3 Business & Support Processes _____% x 30 points = _____
5.4 Supplier Quality _____% x 20 points = _____
5.5 Quality Assessment _____% x 15 points = _____

QUALITY & OPERATIONAL RESULTS

6.1 Product & Service Results _____% x 75 points = _____
6.2 Operational Results _____% x 45 points = _____
6.3 Business & Support Results _____% x 25 points = _____
6.4 Supplier Results _____% x 35 points = _____

CUSTOMER FOCUS & SATISFACTION

7.1 Customer Relationship Management _____% x 65 points = _____
7.2 Commitment to Customers _____% x 15 points = _____
7.3 Customer Satisfaction Determination _____% x 35 points = _____
7.4 Customer Satisfaction Results _____% x 75 points = _____
7.5 Customer Satisfaction Comparison _____% x 75 points = _____
7.6 Future Requirements & Expectations _____% x 35 points = _____

***Total:*** _____

# IV. Resources for Further Learning

*Wilderness outfitters:*

*Get equipped for your trek through the forest of change...*

Now let's assume there might have been some items--maybe lots of them--on which you aren't all the way there yet. You didn't forget what we were doing and feel bad, did you? Remember this was an overview of the learning territory. Welcome to the mountain climbing club. We do intend to get through this forest. Join us if you do too! Shop here for some of the equipment you'll need to outfit yourself for the rest of a lifelong transformation process. We've displayed here resources (organizations, materials, readings, videos) that will be helpful in your TQM learning curve. Don't leave home without them.

## TQM and Education

An Introduction to Total Quality for Schools: A Collection of Articles on the Concepts of Total Quality Management and W. Edwards Deming. (American Association of School Administrators, Arlington, VA, 1991). These reprints cover theory and application to education.

**David Langford**, Total Quality Learning seminars. A high school teacher from Mount Edgecumbe High School in Sitka, Alaska, draws on his experience over the last 5-10 years to apply TQM to learning. His focus is on thinking of classrooms as systems and monitoring their processes. P.O. Box 10540, Sitka, Alaska 99835. 907/747-8528.

**William Glasser**, The Quality School (Harper & Row, 1990). The book presents "control theory" as a psychological and motivational explanation of why Dr. Deming's management methods work. . . and applies it to classroom management and teaching.

## Leadership for Change

**W. Edwards Deming**, Four-day seminars. These are opportunities to learn from one of the pivotal theorists whose work over his 60-year career, in Japan and in the United States, has shaped our understanding of Total Quality Management. He has taught management the key elements (14 points) for transformation; he illustrates variation and how a system's "common causes" override individual efforts within the system with his red bead experiment; and he emphasizes the four elements of "profound knowledge," which must guide the transformation: appreciation for systems, theory of variation, theory of knowledge and knowledge of psychology. The American Association of School Administrators Total Quality Network (see below) has information about Dr. Deming's schedule, including any seminars with a special education focus.

**Mary Walton**, Deming Management at Work ( Perigee, 1991). This is a collection of six case studies about organizations (a utility, a hospital, a community, a navy depot, a tiremaker and a Baldrige Award winning metallurgical company) using Deming methods to achieve and maintain customer-centered quality results.

**Noel Tichy and Mary Anne Devanna**, The Transformational Leader (John Wiley and Sons, 1986). An excellent resource to help TQM practitioners understand the dynamics of organizational change that accompany the introduction of a new management philosophy such as TQM. Tichy and Devanna's change model is simple and understandable, and they do a terrific job of describing the role of leaders in transformation organizations.

**Joseph Juran**, Juran on Leadership for Quality -- An Executive Handbook (The Free Press, 1989). This is one of the best overall introductions to quality theory and practice for managers by another of the primary theorists who have shaped our understanding of quality. It is built on the "Juran trilogy" of quality planning, quality control and quality improvement, and focuses on the practical tasks of implementing total quality throughout the organization.

**Stephen R. Covey**, The Seven Habits of Highly Effective People (Simon & Schuster, 1989). Covey outlines elements of a personal commitment to integrity and learning that parallel a TQM organization's commitment. It is compelling reading to those who have undertaken TQM leadership.

## Systems Thinking

**Peter Senge**, The Fifth Discipline (Doubleday, 1990). The "fifth discipline" is systems thinking, and Senge adds four other corollaries of leadership, which will stretch leaders' ability to manage "learning organizations."

**Ervin Lazlo**, The Systems View of the World, (George Braziller, New York, 1972). A short and compact introduction to General Systems theory, the philosophical roots of TQM. Fun and stimulating reading for those who are interested in how systems thinking is applied to other fields of human inquiry, such as physics, biology and sociology.

## Using Statistics and Data

**Joseph Juran,** Juran's Quality Control Handbook, Fourth Edition (McGraw-Hill, 1988). This work is only for those who have become truly obsessed with TQM. If this is you, you'll want at least one copy of the Handbook for your organization. The Handbook is a virtual encyclopedia of TQM knowledge. Its 35 chapters and over a thousand pages cover everything from the history of quality control since the middle ages to the mathematics of Taguchi design of experiments.

**Hitoshi Kume**, Statistical Methods for Quality Improvement (The Association for Overseas Technical Scholarship, 1985. Available through UNIPUB, 1-800/ 247-8519). An excellent and compact introduction to some of the basic tools of statistical analysis--pareto diagrams, cause and effect diagrams, histograms, scatter diagrams, and control charts. Also includes an introduction to the seven-step problem-solving process, in the form of the QC Story.

**Kazuo Ozeki**, editor, Handbook of Quality Tools (Productivity Press, 1988). A very useful, large-page format book on both the process for identifying problems and the tools to analyze them. Includes both tools to analyze numerical data and tools to analyze idea data.

**Shigeru Mizuno**, editor, Management for Quality Improvement -- The 7 New QC Tools (Productivity Press, 1988). The best description of the "seven new management tools"--relations diagram, affinity diagram, systematic diagram, matrix diagram, matrix data-analysis, process decision program chart and arrow diagram. These are powerful tools to analyze verbal and idea data, just as the "seven old tools" are tools to analyze numerical data.

**Robert C. Camp,** "Benchmarking: The Search for Best Practices that Lead to Superior Performance." (Quality Progress, January 1989, February 1989, March 1989 - three-part series)

## Continuous Improvement

**Total Quality Transformation** (PQ Systems, Dayton, 1991. 1-800/777-3020). These materials guide an improvement project team through a seven-step improvement process using sound hands-on learning theory techniques. Teams work on an actual improvement project. As they need quality tools, these materials stop to thoroughly teach that tool and then return to apply it to the current hands-on project.

**The Team Handbook**: How to Use Teams To Improve Quality (Joiner Associates, Madison, WI, 1988). This practical guide shows how to assemble the right team, pick the right project, lay the right groundwork, know what to expect from group dynamics patterns and solve common problems that come up when groups work collectively in order to move through a disciplined improvement process. It doesn't lay the process out in detail, but addresses the teamwork skills needed to use any one of the PDSA processes.

**Myron Tribus**, The Application of Quality Management Principles in Education at Mount Edgecumbe High School, Sitka, Alaska. Dr. Tribus chronicles the learnings of a high school that took Dr. Deming's teachings to heart and began implementing them several years ago. Accomplishments are impressive and help point the way for other explorers. Students from Mount Edgecumbe's Business Management Class have been instrumental in shaping this handbook.

## Networks of Practitioners

**The Total Quality Network** (American Association of School Administrators, Arlington, VA 703/875-0753). AASA keeps in touch with TQM practitioners in education through a newsletter, regular publication and reprint distributions and seminar/conferences. Organizations or individuals can belong.

**The Community Quality Coalition** (President, Carole Schwinn, Jackson Community College, Jackson, MI 517/787-0800). This is a group of communities around the United States that are working to build a critical mass of understanding about TQM among organizations and individuals in their communities, and to use these principles to begin thinking about community issues in TQM terms.

**American Society for Quality Control**, (PO Box 3005, Milwaukee, WI 53201 414/272-8575). Membership includes a subscription to Quality Progress, a monthly magazine about quality topics.

**GOAL/QPC** (Methuen, MA 01844 508/685-3900). This TQM resource group has an Education Resource Guide and Network.

# Feedback Form

**What did you like about the self-assessment?**

**What would you change?**

**Do you have any great stories to share about things you've discovered while working on a TQM transformation in your school?**

**What other products would be useful to you as you work toward your TQM transformation?**



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Points of view expressed in this book are those of the author and do not necessarily represent the official position of AASA.

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