

MADE IN JAPAN:

Deming's Management Principles

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Dr. Glasser's last book, *The Quality School* (1990), combines control theory and reality therapy with the lead management techniques of W. Edwards Deming. Deming was the man who almost single handedly changed the phrase "Made in Japan" from a pejorative to a sign of excellence in the post WWII years.

Deming's theory of management rests on 14 basic points he developed while working for Japanese companies in the early 1950s. Although these 14 tenets were derived from the business world, they have direct applicability to the field of education. As more and more school districts are introduced to Glasser's "Quality Education Program" it is important that Deming's 14 points be translated into educational terms so that teachers and administrators can better assimilate the concepts.

In conducting workshops in a number of school districts the author has developed a presentation of Deming's 14 points that seems to help participants understand the concepts as they apply to Education. Many of the examples used in this presentation were suggested by the participants themselves. A summary of these points with appropriate examples is included below.

I Create constancy of purpose for improvement of product and service.

Educational programs like business and industry must have a purpose and that "reason for existence" must be spelled out in a mission statement. Deviating from a common assumption, Deming states that making money is not the primary purpose of business. On the contrary, he says, that staying in business and improving products and services should be the main mission.

In a similar fashion "raising test scores" should not be the primary focus of schools; although we sometimes get the feeling that many school districts operate on that assumption. Education, like business, needs to focus on its products and services. In schools the student is both the worker as well as the product and we need to provide those services that will help students acquire basic skills and become productive citizens.

The effectiveness of a mission statement in directing the course of a business or educational enterprise is directly dependent upon the degree to which the CEO, Superintendent or Principal fully supports that mission with the employee's concurrence. Unless the employees see concrete evidence of top management support and involvement they will not actively buy into the mission.

In control theory terminology, the mission statement should become a part of the quality world of all participants who will then gauge their behaviors against this accepted purpose. In terms of reality therapy techniques, when we ask persons what they want we are simply looking for their personal mission statement.

II Adopt the new philosophy

Deming says that the "quality approach" must become the new philosophy. Business can no longer live with poor workmanship, bad materials, sullen service or poorly trained employees. Education cannot continue to accept high dropout rates, poor teaching and lowered student performance. What is needed is a transformation of management styles from boss to lead management. Teachers and administrators must become familiar with control theory and reality therapy in order to implement lead management techniques and institute a quality education program.

III Cease dependence on mass inspection

Quality comes not from inspection but from improvements of the process. In America, industry hires inspectors to locate defective work during the production process or as the finished products come off the assembly line. This means that the company is paying workers to make defective parts and to correct them. The consumer pays for this duplication of work. Deming says that the key is to train production and assembly workers to self-inspect their workmanship so that quality is built into the process, not “inspected out” by someone else.

In education, teachers need to involve the student as a worker to evaluate the quality of his or her work, product or outcome. When students buy into the self-evaluation process the quality of their work is greatly enhanced. You can deceive others for a long time but it’s hard to lie to yourself for very long. Using reality therapy techniques to find out what students want and what they are doing to get what they want sets the stage for this process of self evaluation.

IV End practice of awarding business on price tag alone

According to Deming, price has no meaning without a measure of the quality being purchased. A good example of this in industry is the space shuttle program and the tragic launch of the Challenger caused by a faulty O Ring.

In education we can cite a number of examples. School districts are constantly operating under severe budget restraints and are always looking for a way to save money. One teacher talked about her district making a terrific buy on kickballs. The only problem was they were not perfectly round and they wore out three times faster than the most expensive ones they had replaced.

When school districts maintain such high class size averages that students are failing because of the lack of close supervision, they don’t seem to take into consideration the additional cost it takes for students to repeat a class. How often do we see schools buying high sticker priced items such as computers only to find that the cheaper one they purchased did not have the features needed for use in the classroom. Or that the quality computers that were purchased for a lab were not functioning effectively because the lab was minimally wired to save money.

Purchasing needs to be a team effort involving the buyer, the supplier and the consumer. School districts need to learn, just as the Japanese found out, that developing long term relationships with vendors and suppliers builds loyalty, trust and is the best guarantee of high quality products. This team approach is also a good example of a lead management technique.

V Improve constantly and forever the system of production and service.

In education we very often are put in the role of firefighters. As a public institution supported by taxpayers, we are quick to overreact to parents’ complaints and rush to apply the “quick fix”. When, for example, test scores drop at a specific grade level, or school, we point fingers at the test, the students and/or the teachers. Instead we should be looking at the system and examining our goals and mission – what we have agreed is important for students to learn.

The recent interest in strategic planning by school districts – examination of long and short range goals – is a hopeful sign that we are beginning to focus more on improving the system rather than laying more on to students i.e. lengthening the school day, school year and toughening academic standards. It is important to remember that improvement is not a one time effort but is an ongoing process in schools as well as business and industry.

VI Institute training and retraining

Too often in business and industry workers learn their jobs from other workers who themselves have received inadequate training. The training of new workers is also complicated by the use of unintelligible and oftentimes out of date manuals.

In education one only needs to talk to new teachers to realize the need for preservice and inservice programs. A major factor in the so-called “teacher burnout syndrome” is the lack of adequate preservice and inservice training that causes teaching – the world’s toughest job – to be a discouraging and oftentimes frustrating experience. Many teachers are taught by professors who have never been in charge of a classroom of K-12 students. It is just not enough to have a mission statement. You have to be sure people are trained to carry out that mission.

VII Institute leadership

Both Deming and Glasser stress the need for a style of leadership that is, for the most part, not found in American industry or education. Glasser calls it lead management – managing without coercion. It can be characterized by four salient features.

First of all the leader must engage the worker in a dialogue about what needs to be done. He emphasizes the need for quality work while soliciting input from the workers. He makes a constant effort to fit the job to the skills and needs of the worker.

Second, the leader, supervisor or teacher models what needs to be done so that the worker/students know what to expect. Third, a lead manager is committed to the concept of self evaluation on the part of the worker with the knowledge that the individuals doing the work are in the best position to evaluate the quality of the work.

Finally, the leader is a facilitator whose job is to provide the worker with a non coercive climate along with adequate tools and instruction to do the job. Lead managers spend the majority of their time working on the system to improve the performance of the workers.

In education, the antithesis to lead management – boss management – is the most frequent style observed. Boss managers set standards, tell rather than show how, and rely heavily on reward and coercion to control students and teachers.

VIII Drive out fear

Coercion is the most corrosive element in a work place. It destroys productivity and quality work. Workers that fear their bosses or supervisors may produce but will never achieve quality. Administrators, principals and teachers who operate from a base of coercion and fear will never engender respect and loyalty from those they manage. Nor will they improve the quality of work being produced.

Deming is quick to point out in his lectures on quality that, “The economic loss from fear is appalling”. It is interesting to note that initially Deming did not have the concept of driving out fear when he originated his management concepts in Japan. The Japanese managers did not have to be counseled to eliminate fear since the workers were eager to work together to build their nation after the war. They regarded the employers not with suspicion and distrust but as a benefactor. They were part of a family all working for the same goal. Driving out fear became a part of the final 14 because of Deming’s experience in working with American companies who stressed boss management techniques.

A good example of the use of fear and coercion in schools is the over abundance of rules governing student behavior. The language of the rules are invariably phrased in negative terms – “No smoking” “No littering”

“Keep off the grass” etc. Until educators accept the fact that fear and quality work are incompatible there can be no improvements to the educational system.

IX Breakdown barriers between staff areas

Most companies are quick to give lip service to the team approach to management. Participative management has been a buzz word that implies a close working relationship between management and labor. Deming, on the other hand, says that American industry working as it does mostly from a boss management base, cannot foster or promote team work. Coercion produces an adversarial climate which negates cooperation.

Schools, who see themselves as the embodiment of democratic principles, feel that they exemplify the team approach with everyone working as a unit. Those of us who work in schools know that this is not the case in most instances. We have only to look at the caste system that exists in the majority of public schools. First of all we have the basic certificated/classified distinction. The principals and teachers see themselves as more important than the clerks, custodians and instructional aides. The latter group, in many instances, feel like second class citizens especially in the area of working conditions and salaries.

When, however, you operationalize the concepts of lead management and seek input from all staff members in the decision-making process, the climate will change. When people feel that their ideas, comments and suggestions are valued they will not only feel a part of the team but will increase the quality of their performance and work.

X Eliminate slogans, exhortations and targets for the work force.

According to Deming, slogans never helped anyone – they only generate frustration and resentment. The message that workers get from company developed slogans is that they could do better if they tried. When faced with poor lighting, incompetent supervision and defective materials the workers in the face of clever exhortations simply conclude that management doesn’t understand the problems and doesn’t care enough to find out.

When slogans are developed by and/or with the workers, they become credible reminders of mutually agreed upon goals. In schools we see the powerful influence of student-generated slogans that often times precede important athletic and social events. Since a majority of the student body wants to win the homecoming football game or go to the senior prom, the slogans are simply external symbols of their internal motivations.

XI Eliminate numerical quotas

When companies focus on work standards such as “increase sales by 10%” or “answer at least 25 calls per hour” they have created the greatest barriers to quality. Work quotas seldom include any trace of a system that would help someone do a better job.

Deming cites the case of an airline reservation clerk who was required to answer 25 calls an hour while being courteous and not rushing callers. Since the quota did not allow for unforeseen circumstances such as computer down time, and the need to look up additional information, the clerk was unable to maintain the quota. What is the employee supposed to do in this situation? Should he satisfy the customer or make the quota, since both cannot be done.

When quotas are based on the average output of a group, the outcome will be mediocrity – half the workers will be above and half below the quota. Peer pressure will hold the upper half to the average and those below will be unable to meet the standards.

Schools are notorious for exerting pressure on teachers to raise test scores. This has led to evidence of cheating and resistance on the part of students and teachers. This focus on a numerical goal has led to less attention being paid to those skills that cannot be tested by a standardized instrument. Instead of measuring

people by the numbers they turn out it would be far more productive to set up a system that fosters an atmosphere of receptivity and recognition for suggestions made by the employee.

XII Remove barriers to pride of workmanship

One of the first things that Deming does when he works with companies is to hold a meeting with the workers without the presence of management. These meetings are recorded so that company officials can hear what took place.

It is usually a shock to management to hear the complaints that are voiced: defective machinery not repaired in a timely manner; standards for inspections frequently changed; arbitrary supervisors; workers receiving no feedback on their performance and defective supplies; are some common complaints.

It seems that management focuses on getting the work out but will not deal with the people or processes that produce the product. Deming, on the other hand, has shown that when there is a problem, 15% of the time it's the fault of the worker and 85% of the time the fault lies in the process or system. Management's job is to work *on* the system and to listen and act on the perceptions of the workers.

In education, much lip service is given to so called "participative management practices" wherein the employee becomes an integral part of the decision making process. In actuality however, this approach ends up with the employee "participating" and the administrator "managing".

It's a simple observable axiom that "people are eager to do a good job and distressed when they can't". Whether we're dealing with administrators working with teachers, or teachers working with students, the goal is to empower people to manage themselves and take responsibility for their own actions. You don't have to create pride of workmanship, you have to create an environment in which employees/students are encouraged to do their very best.

XIII Institute a vigorous program of education and retraining

Although this point is similar to number VI – Institute training and retraining – it stresses setting up a comprehensive continuing program of education that not only trains workers in the skills needed to do their jobs but encourages them to acquire new knowledge and understanding that prepares them for future assignments. Deming stresses the need for workers to understand and use basic statistics to improve the quality of their products.

Deming, a statistician by training, believes that all workers need a basic foundation in this area. He is not talking about complicated statistical procedures that we have all learned to fear and avoid in college, but simple statistical procedures that analyze the variations that can occur in any process. Variation, according to Deming, is the enemy of quality and unless it is brought under control, defective products will be the result.

In education this statistical approach to analysis and process control translates to the need for the constant evaluation of what we are doing. It calls for using both subjective and objective techniques to gauge the effectiveness of our instructional strategies as opposed to "gut level feelings" or simply grading on the probability curve.

XIV Take action to accomplish the transformation

"A journey of a thousand miles begins by taking the first step". That old Chinese proverb summarizes the final principle in Deming's 14 point management process. Once top management makes a commitment to change its management style, it must *act* on the basis of this commitment. According to Deming, the first milestone on a company's road to quality occurs when a "critical mass" of the employees understand the 14 points and become active participants in the process.

Effective schools are the products of effective leadership. When principals and teachers agree on their mission and institutionalize Deming's 14 points, the students as workers and products will reap the benefits of a lead management system.

References

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