



## The Deming Tape

*In February, two representatives from The Quality Committee -- David Weekley and Mike Bock -- had the opportunity to attend a four day seminar personally conducted by Dr. W. Edwards Deming. Normally these seminars have a cost of \$1200 or so. Quite unexpectedly, two positions as "scholar/helpers" were offered to us, in which this fee was waived.*

*This is the same intensive seminar that Dr. Deming has made famous with business leaders around the world. Very often books or articles on quality mention a Deming "four day." It was a great opportunity to attend, and a great privilege to have direct teaching from this man.*

*Dr. Deming is known as "the man who discovered quality." For decades he has been greatly honored in Japan for his help after WWII. The Deming Prize dates from 1952. Only in the early 80's did American companies such as Ford invite Deming to help with quality methods.*

*Debbie Ray of The Ohio Quality Production Forum at Edison State College wrote a letter of introduction for us to Dr. Deming.*

**Dr. Deming:** Yes, Debbie is my great friend.

**WCEA:** It is a pleasure to meet you. My name is Mike. I am a teacher. This is David, the assistant superintendent for our district. We have a small publication -- I believe that you got a copy -- that we publish a couple of times a year.

We have a committee that has been meeting to talk about how to improve schools by using quality methods. We have greatly benefited from your ideas.

**Dr. Deming:** Thank you. I appreciate that.

**WCEA:** We wanted a chance to print some comments from you directly.

We've been trying to think of some general questions that you could perhaps comment on. Or, perhaps there is something specific that you would like to say to people in education that we could share. (Dr. Deming looked at the first question which was, "What should be the aim of schools?")

**Dr. Deming:** Well, what do you think should be the aim of schools?

**WCEA:** (Nervous laughter) Well, that's part of what we are trying....

**Dr. Deming:** To me they should restore and nurture the yearning for learning that the child is born with. Why drag it out?

**WCEA:** (long pause) Right. The second question is, how do you know when you are getting there?

**Dr. Deming:** Don't you have a theory on how to do it?

**WCEA:** Well we are searching. We have theories on how to give tests and take attendance...

**Dr. Deming:** That's no good. That's no good.

**WCEA:** We need a theory on how to measure this yearning for learning.

**Dr. Deming:** No you don't. You need a theory on what you ought to be doing.

**WCEA:** OK.



**Dr. Deming:** To preserve and nurture that yearning for learning, that everyone is born with.

**WCEA:** How can you measure?

**Dr. Deming:** Don't measure. For heaven's sake, I've been trying to say, "DON'T MEASURE." Whatever you can measure is inconsequential.

**WCEA:** Right. Right. So what would be a theory that one might have in?

**Dr. Deming:** I don't know. That's your job. Not mine.

**WCEA:** Right.

**Dr. Deming:** You ought to have one. That's your job to have it.

**WCEA:** I think we have some. Yeah. Here is another question on your theory on reducing variation. I can see how that applies to manufacturing pretty well.

**Dr. D:** I didn't say, "Reduce variation."

**WCEA:** In terms of looking at variation ...

**Dr. Deming:** I didn't say, "Reduce variation."

**WCEA:** to help improve quality as a means...

**Dr. Deming:** I didn't say, "Reduce variation." Where did you get that? I didn't say it. You made it up.

**WCEA:** (Nervous laughter) OK. Help me to understand that then -- your theory of variation, and so forth.

**Dr. Deming:** I didn't say reduce it. Sometimes you would, sometimes you wouldn't.

**WCEA:** OK. Something to look at.

**Dr. Deming:** You better have a theory. If you have a theory then you know the answer there.

**WCEA:** OK. That makes sense (I lied.) Here is another question. Is it fair to say that if workers are not having joy in their work that there is something wrong with the system?

**Dr. Deming:** Yes.

**WCEA:** If you could sample the amount of joy that workers have, if you are showing a problem with people having that joy, is it fair to say that there is something wrong?

**Dr. Deming:** Yes.

**WCEA:** As a teacher, and I know this comes back to theory, but what would be a good question that every teacher should ask his/her self?

**Dr. Deming:** She should ask herself how is she doing.

**WCEA:** In terms of the yearning for learning and so forth?

**Dr. Deming:** In terms of nurturing that yearning for learning. She can tell.

**WCEA:** Right. Here is a similar question. What questions should a principal or superintendent ask him/herself in terms of the broader system?

**Dr. Deming:** I don't know. I haven't thought it out.

**WCEA:** We're trying to think of it too. And we are talking about grades. And of course, without grades, it seems you need something.

**Dr. Deming:** You need something?

**WCEA:** Right.

**Dr. Deming:** For what?

**WCEA:** For parents, for children. People want to know what they are doing I guess. (pause) But, there's are ways of doing that. Grades are not going to tell that, you're saying, I guess.

**Dr. Deming:** Grades never told you how you were doing.

**WCEA:** Right. So, I guess the problem is, to give feedback, because as soon as you do this, there is always a comparison



*Dr. Deming, David Weekley and Mike Bock*

# What to ask?

By Mike Bock

**Dr. Deming:** I'm not sure about that. Why should you? You mean you don't know how a child is doing?

**WCEA:** Well, we are so centered on grades.

**Dr. Deming:** All right. Get out of it.

**WCEA:** What do you think of a system of allowing high accomplishment for everyone -- everyone eventually getting an 'A' or 'B'. Would that be too much ranking? That is almost like pass/fail.

**Dr. Deming:** Why do that?

**WCEA:** Are you familiar with Dr. William Glasser? That's one of his ideas. He wrote *The Quality School*.

**Dr. Deming:** I know. I know. What do you make of that book?

**WCEA:** I like it because he says you need a different way of managing to get improvement. And I think that is true. I don't know how specific he is about this. But I think he has a truth there, that you must manage differently to get improvement in schools. What did you feel about the book?

**Dr. Deming:** Well, I have the book. He sent me a copy. And it is hard for me to understand. How did you make out with it?

**WCEA:** We're still studying.

**Dr. Deming:** Do you know about the Deming study group in Detroit? They've been working on education for two years. If you would like to attend, you would be welcome to. I would like for you to attend.

**WCEA:** Thank you. If we could find out more about the Detroit meeting, that sounds interesting.

I guess we are out of time. We really appreciate your time and the knowledge that you have that you are sharing with everybody. Thank you.

It was a rare opportunity: the chance to ask questions from one who knows. Yet, what to ask? Good question. Be prepared. Make a list. Dr. Deming has a reputation. He is a gracious and kind person, but he is sometimes rough on interviewers. After 92 years of suffering fools, it's reasonable that anyone's patience could wax thin.

Earlier in the week, a local TV station was given the opportunity of a short interview. We found this out later. The first question evidently was all wrong. Dr. Deming stared in silence until the cameras were tuned off and the interviewer ushered out.

Deming has spoken of the value of questions. So, in thinking about questions, I wondered: what about a question about questions? "What are good questions every teacher should ask?" Good question.

Well, we determined to do our best, and prepared a list of questions to point to as needed.

Some of his answers still puzzle me. Particularly the one about variation. Reducing variation was a principle that I believed was central to Deming. After the interview, I did more reading. I found one author who in a chapter subtitle quotes Deming directly as saying, "If I had to reduce my message for management to just a few words, I'd say it all had to do with reducing variation."

I was wondering how he might apply that principle to education. But in the interview, he insists, "I didn't say

'Reduce variation.'" I couldn't believe what I was hearing. In fact, the tape shows that he persisted with that comment three times before I relented. "You made it up," he finally said.

In the interview he had already declared, "Whatever you can measure is inconsequential." That's amazing. Isn't much of the Deming approach statistical? How can there be statistics without data? How can there be data without measurement? So maybe he saw that I hadn't believed my hearing at that point either. "Don't measure!" he had said emphatically.

Maybe he suspected that my question about reducing variation implied measurement, implied showing neat things on statistical charts and graphs. Maybe he was right. And if so, he was making it clear, it was something I made up, and something he would not sanction. He made it clear that there was a greater depth I was not seeing.

He had begun the seminar with the comment, "You have come here to learn." And that was his goal in the interview. His attitude was one of challenge: "You'd better have a theory."

We'd gone through the wringer -- all in twenty minutes. He could have given easier or non-committal answers. But, I'm glad he didn't. That's not the Deming way.

This is the man who has taken the captains of industry to task. We had received the Deming treatment. That's quite a privilege! We can always say we have been scolded with the best.



# Deming Quotes

*The following are quotes taken from the Deming "four day."*

- Quality goes down when ranking people.
- Reward for good performance may be the same as reward to the weather man for a pleasant day.
- Cramming facts into students heads is not learning. Information is not knowledge. To learn means to learn theory, not facts and information.
- Abolish grades in school, from toddlers on up through the university. When graded, pupils put emphasis on the grade, not on learning.
- Customers expect what producers lead them to expect. We didn't ask for the electric light bulb.
- Be guided by theory not by figures. The most important things don't have figures to go along with them.
- You cannot measure performance. If you thought you could, you are wrong.
- We know the cost of training, but the benefit we will never know. Why do we do it? We are guided by theory.
- Numerical goals are nonsense, hot air. A goal leads to distortion and faking. What is important is how to get there. BY WHAT METHOD?
- If you can accomplish a goal without a method, then why were you not doing it last year? There is only one possible answer: you were goofing off.
- AMERICA 2000 provides a horrible example of goals but no method. By what method? Examples: **High school graduation will be at least 90%** Why not make it 95%? What is important is BY WHAT METHOD? **Every school in America will ensure that students learn.** Sounds great, but how?
- Deming's First Theorem: Nobody gives a hoot about profit (sustained profit). If we did we would operate as a system.
- Deming's Second Theorem: We are ruined by people doing their best without knowledge.
- There is no substitute for knowledge.
- Without theory there is no questions, without questions there is no learning.
- The most important losses are unknowable.
- Promote joy in work by making the worker part of the system.
- Managers talk about getting rid of deadwood, but there are only two possible explanations why it exists: 1) you hired deadwood in the first place 2) you hired live wood and then you killed it.
- Boiling water takes a while for you to see any change, then all of a sudden things start to happen. Have faith in the process.
- We must know what changes to make. There is in any journey an origin and a destination. The origin is the prevailing style of management. The destination is transformation.
- Most people don't know how they are imprisoned by the current practices of management.
- Hard work, best efforts, and best intentions will not by themselves produce quality. Transformation of management is required -- learning and application of profound knowledge.
- Change will not do it. It must be transformation.
- Transformation is like moving from ice to water. We know much about ice; we need to learn about water.
- Management in any form is prediction. Rational prediction requires theory.
- The aim of a system must be clear to everyone in the system. Without an aim, there is no system
- Think of a tiger. He has aim. He enjoys life today and assures tigers for the future. Let me ask you: Is your company a system? Sure it has people running about, telephones, budgets, but is it a system?
- Is your company a system or just individual profit centers? A system must be managed, it will not manage itself. By focusing on a system of quality, everybody wins.