

APICS Sacramento

The Educational Society for Resource Management

Issue 9 Volume 14

www.apicsacramento.com

April, 1999

“Investing In Human Capital And Fostering Knowledge Management”

Tuesday, April 20, 1999

Joseph Martin Stevenson, Ph.D.

Investment in human capital and fostering knowledge management in the workplace have emerged as critical elements for maximizing productivity. This presentation will review and research practices relative to investing in human capital through training and higher education. The presentation will demonstrate how educational investment in human resources can improve quality, **enhance** market share, maximize productivity, support bottom-line results, and improve overall operational **performance** through the effective management of **knowledge** in the workplace.

ABOUT THE SPEAKER

Dr. Joseph Martin Stevenson is the CEO and Provost for the Sacramento campus of Golden Gate University. A prior resident of the Sacramento area, Dr. Stevenson **earned** his B.A. and two M.A. degrees at CSUS and completed his M.S. and Ph.D. at the University of **Oregon**.

Dr. Stevenson has held a wide variety of positions in the fields of education and government. Among these are: tenured professor of education, provost, associate vice president, system-wide academic director, and acting school superintendent. Dr. Stevenson has also worked at the California Post-Secondary Education Commission, California State Senate Rules Committee, Sacramento

City College, CSUS, and consulted on preschool education for the Sacramento Employment and Training Agency.

Since relocating back to Sacramento, Dr. Stevenson has been appointed to the Board of Directors for the *American Society of Public Administrators*, *Raster Seals*, *Sacramento Philharmonic Orchestra*, *Comstock's Club*, *Sacramento Metropolitan Chamber of Commerce*, *Access Capital*, *Valley Vision*, *the Center for Aids, Research, Education and Services*, *KVIE/Channel 6*, *Venture Out for Youth and United Way*. He has been recognized by the Mayor, City Council and Legislature for his return to the area; and was appointed to the *Governor's 21st Century Training Task Team* to address the training needs of statewide employees. He is a member of the *Sacramento Club of Rotary International*, *the Consortium for Distance Learning* and the *Sacramento Capitol Club*.

Dr. Stevenson has many academic works to his credit in many published journals. Among these are a “global education” publication on Yale’s **website**, a “arts-technology education” concept paper on NYU’s **website**, and several other local commentaries for *Comstock's*, *The Sacramento Observer* as well as *Education*-the oldest educational journal in the U.S.

RSVP by Friday, April 16, 1999

To RSVP for this dinner meeting, please call (916) 650-8660 and provide the attendee’s name, company and telephone number or **fax/email** this information to Brenda Marsh at fax (916) 448-5847 **email: brcben@aol.com**.

5:30 Registration	\$22.00	Members
6:00 Dinner	\$25.00	Non-members
7:00 Membership meeting	\$18.00	Full-time students
7:20 Presentation	\$5.00	Speaker only

Presentation will be held at the Hungry Hunter Restaurant on Bercut Ave., Sacramento.

Please call the Hungry Hunter at **916-441-2844** for directions.

President's Message

At the risk of sounding repetitious, I again need to talk about the change in testing. Sacramento is a transition site which means that paper and pencil tests will be available only until computer based testing (CBT) is available. As CBT sites are established, paper and pencil sites will be phased out. Paper and pencil tests will only be offered if the CBT test site is not open. Updates to the locations will be posted to the APICS web site.

To register call **ASI** Customer Care at 800-274-8399 or you can register via the web. Visit the APICS web site at www.apics.org/certification for the link. For CBT tests you will need to call at least 4 days prior to the date you wish to take the test. For paper and pencil tests given July 10, 1999, you would need to register by June 21, 1999 and for the paper and pencil test given Nov. 5, 1999 you would need to register by Sept. 27, 1999.

I wish to welcome our newest members: Yogesh Joshi, Dorothea Parsons, Robert Quinn, Craig Young and corporate member The Michael's Furniture Company. WELCOME! I hope to see you all at our next meeting. If I, or any of the board can be of assistance, don't hesitate to call.

Beverly Paul, CPIM
President

More About "Motivating World Class Performance"

(see the summary article in the Feb 1999 "APICS-The Performance Advantage" -page 4)

By Gerhard Plenert, PhD, CPIM

The author has long felt that the key to successful performance is not in systems and procedures, like **ISO** Certification or Statistical Process control (SPC). Rather, World Class successful performance is found in a meaningfully structured measurement system which is focused on results rather than on data collection. With this idea in mind, the author received an APICS E&R grant funding research focused on the relationship **between** motivation and measurement, with the belief that:

The **measurement system directly effects employee performance.**

In order to study the measurement - motivation relationship the following steps were taken.

1. Surveys at various management levels
2. Interviews of managers and employees at different levels

3. Case studies where companies that are currently focused on volume measures change their measurement system

The surveys quickly determined that:

- All companies have some form of measurement system
- Only about two-thirds of those surveyed see any relationship between the measurement system and their bonus / reward system
- Very few managers, especially lower level managers, are familiar with the company vision and mission statements. Even fewer see a relationship between the vision or mission and the way they are measured.
- Nearly everyone feels that the measurement system that measures their performance needs to be changed because it is not motivating the correctly.
- Very few managers have any involvement in the goal setting process.

Using the surveys as a basis for the interviews, the interview process quickly confirmed the information that the surveys taught us and added that:

- Labor Efficiency is more important in keeping your job than Quality
- Employees believe that they can get a raise if they make their measured numbers look good
- Employees feel that they can make any set of **numbers** look good, they just need to know which numbers are being looked at
- Most employees believe the numbers are more important as a measure of performance than the **non-quantifiable** aspects of their job

It was now time to test this knowledge by experimenting with an actual case study example where a company that was previously motivated by volume measures of performance would experience a shift in direction by changing to a different measure of performance. A company was selected which was willing to go through the transformation process. The company was Precision Printers, Inc. (**PPI**) in Grass Valley, California. PPI was traditionally structured and focused on volume. Quality was secondary and was not used as a measure of employee performance. The shift was made to eliminate the volume measure and to focus on quality performance in the belief that driving for quality will result in volume increases, but driving for volume will not improve quality. The author worked with PPI on the transition from volume to quality which occurred over a six month period. The transformation occurred as a series of stages:

1. Production Planning Training - An extensive training program was started which involved the majority of the employees of the company. The training focused on production-operations management (POM) training which focused on the APICS-CPIM basics.

It taught EOQ, MRP, **JIT**, TOC, PERT/CPM, inventory management, etc. The focus of all this training was to give the employees alternatives, rather than leading them to believe that there was only one right way to do things. It taught them that, in the case of PPI, inventory was more damaging to the profitability of the company, than low labor productivity.

As an example of the training, on one day, the entire shop floor was brought into a room and was broken up into work stations. They were given a model for a paper airplane and they were instructed to manufacture these airplanes using volume as their driver. They were given a five-minute "work day" and they went to work. The first run was a disaster. Every plane was rejected. After cussing out the customer and the quality department, they were redirected and instructed that they now had a new measure of performance. They would be rewarded on the number of airplanes accepted by the customer, minus the number of returns. We ran a few more five-minute production runs, each time allowing the employees to make improvements in the process. The entire focus of the production process changed. Communication increased between employees and everyone became an inspector -- exactly what you would expect in a transformation to a **JIT** environment. The employees became a team. Then, at the end of the exercise, they were instructed that this is exactly what they needed to do at PPI. They need to transform the company away from volume and towards quality.

2. Total Quality Management (**TQM**) Training - The quality training included training in TQM processes like teaming, ISO and QS certification, and tools like SPC.
3. Goal / Measurement System Redesign -- After about three months, management held a retreat and redesigned the vision, mission, and strategic initiatives of the company. The focus was primarily to unify management, and secondarily to move management away from volume and towards quality.
4. The "Quality Week" -- A date was picked for the transformation process. One entire week was designated as quality week. During this week the instructions were simple: "You can do anything you want to the equipment or the process, but you cannot produce any bad parts." Management was somewhat fearful that the employees would all stand around wondering what to do. Instead, management was pushed out of the way. Employees spontaneously organized teams around issues that had been "bugging them for a long time." They were excited to be able to experiment and try new ideas out. They

started tearing into the equipment and the processes. Nothing was sacred and everything seemed to be changing.

5. On-going continuous improvement programs -- After quality week, the process maintained itself and employees continued forming teams and implementing changes. Initially volume output went down, as would be expected, but as the employees learned how to do their processes more efficiently with a quality focus, they regained their speed. A constant measure of "quality performance" was made available to the employees so that they could visualize their performance and be reminded of their focus. The result is that everyone learned that:

**If Quality is First, Volume follows as Experience
Increases
If Volume is First, Quality has only Secondary
Importance**

The lessons learned from the PPI case study were profound and exciting. Probably the biggest lesson is that:

Increasing productivity often decreases profitability
If we focus on labor productivity or volume measures of performance, we may actually be hurting profitability. For example, if the labor value added content of your product is 10 percent, but the materials value added content is 60 percent, as is often the case in discrete products, then what we find is that a 10 % increase in labor productivity will cost us a decrease in materials efficiency. The reason is simple. In order to keep labor busy, we need to make sure they have plenty of materials to work on. Therefore, materials efficiency decreased by two percent to support the ten percent labor efficiency increase. The result is:

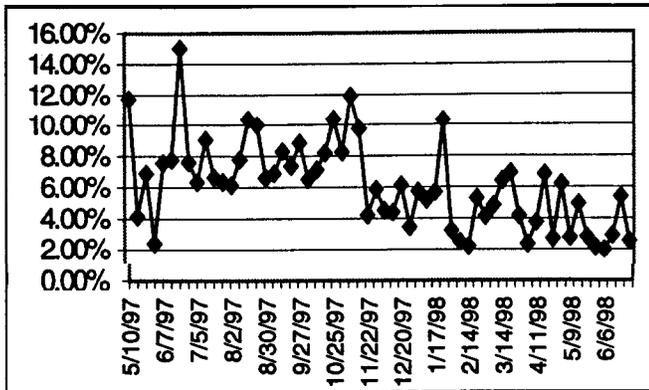
- ◆ A 10 % labor productivity improvement times 10 percent value added content = 1 % over all
- ◆ A 2 % materials productivity decrease times 60 percent value added content = 1.2 % over all
- ◆ A net profitability decrease of .2 % (1% - 1.2%) over all has occurred

This is what was happening at PPI and what is happening at companies all over the world. **Focusing on labor productivity increases is resulting in profitability deflation.**

So, what happened at PPI as a result of these changes? Defects went down, customer satisfaction went up, on-time deliveries went up, employee turnover went down, inventory levels were cut in half, we gained one day a week in increased capacity which had previously been wasted on reruns, production cycle times were significantly reduced, profitability went up, and on and on.

Here is the defect rate chart as a small example of what happened.

Defect Rates Chart:



Notice how the defect trend line for the first half of the chart was upward. Also note the dramatic shift that the trend line took downward during the second half of the chart.

As a result of this research project which included the surveys, the interviews, and the case studies, it has been effectively demonstrated that:

The **measurement system directly effects employee performance.**

Which directly **effects** everyone's World Class **measure** of success, profits!

Gerhard Plenert, **PhD**, CPIM is a Senior Principal with American Management Systems (**AMS**) located at: 8545 Sunset Ave., Fair Oaks, CA 95628. Dr. Plenert can be reached at: (916) 536-9751, fax (916) 5369758, e-mail: plenert@aol.com

Lessons In Leadership

As part of its 'Lessons in Leadership' series, CSUS Regional Continuing Education will host

Dr. Robert Cooper
who will present,

**"Emotional Intelligence:
The Competitive Advantage."**

This presentation is scheduled for April 15, 1999 from 8:30 a.m. to 4:00 p.m. For questions regarding this presentation or the series, please call 1-800-873-345 1.

The Leading Edge: Don't Just Change-Innovate

By George W. Plossl, *CFPIM*

© 1996, APICS—The Educational Society for Resource Management

The Business Game Has Changed

Nothing changes faster than children, unless it's aerospace and defense (A&D) business in the last decade. The important changes were the end of the Cold War and the spread of hot-spot conflicts; collapsing markets for prime and secondary contractors; voracious overseas competitors; a rush of technological developments in information handling and transmission, products, and processes; a rash of acquisitions and mergers among A&D firms; surprising switches in government procurement to commercial practices; and outside directors on company boards taking charge of more decisions. Second-tier contractors face another trauma: Many will lose out in the partnerships now recognized as advantageous to both supplier and customer working together.

Who can continue to believe that doing the same things **better** or even faster will suffice in the new world of A&D manufacturing? Survivors will do everything differently. They will innovate--develop **NEW** solutions to both **old** and **new** problems. Isn't this what every management group does in times of crisis?

Innovation Sequence

A logical sequence of actions to produce innovations is:

- ◆ Identify and prioritize activities requiring innovation by contingency planning.
- ◆ Benchmark leading companies, not only in the same or similar businesses, and not only in the United States.
- ◆ Set challenging goals for critical performance measures.
- ◆ Revise both near- and long-term strategies of each major function (engineering, marketing, production, finance).
- ◆ Adopt necessary tactics to support these strategies.
- ◆ Develop fully qualified people to get the job done, measure their performance, reward good results, and move poor performers out of the way.
- ◆ REPEAT-REPEAT-REPEAT.

Why Is Innovation So Rare?

While the means are available and the process is well known, there are several reasons both A&D and com-

mercial companies fail to innovate. Only real crises trigger actions; contingency planning is rare. When threats become serious, there is too little time to correct fundamental flaws. The greater the uncertainty about the future, the more difficult it is to make sound innovative decisions. Possibly the biggest reason: good innovators are highly intuitive, not methodical, logical thinkers.

To succeed, real innovation will change the ways an industrial organization will work. Top managers will spend less time micromanaging and more time innovating. Middle and lower levels of supervision will switch from ordering how things must be done to helping their people implement their own improvement ideas. Engineers will design more manufacturable products with fewer components and apply processes to smooth work flow, reduce cycle times, and cut costs. Planning and control will cease being clerical and become a professional arm of management. Materials and services will come from fewer "partner" suppliers providing higher quality and more reliable, faster deliveries at lower costs. All will work to provide more flexible response to customers' desires and to eliminate waste and activities that add no value to a **firm's** products and services.

Innovation's prerequisites, logical process, and enormous potential benefits, including survival, are not difficult to understand. Doing nothing but hope is fatal. Prayer may help you feel better, but the Lord seems to care little for absolving business sins. Spin-offs and acquisitions have poor track records. Rightsizing is a noble objective, but deciding what is right is tough. New products and markets generate lots of hype among optimists but most bring little near-term benefit. Foreign markets look tempting, but they have been morasses to the naive and unwary. Selection is not simply picking one option "by the numbers" since intangible factors usually outweigh the tangible. Reversing course when a selection turns sour is rarely beneficial, often impossible.

Innovation is the challenge that may justify the high executive salaries now causing wrathful (envious?) criticism of "unbridled greed." This is the complaint of politicians, most of the media, labor leaders and workers, and others who lack even a rudimentary understanding of the role industry plays in wealth generation and general standard of living in any society.

The **Bottom Line**

If anyone thinks U.S. industry in general, and A&D particularly, is healthy, think again. Look at our balance of trade, our inability to hold wages and salaries level, not to mention increasing them, and the inroads foreign suppliers have made (and are still making) that increase

their market share of myriad products including weapons. **Don't** be fooled by temporary high profits gained by companies playing **financial** games like selling off resources or cutting muscle as well as fat. It has long been clear that business as usual will do A&D firms no good. What is not yet generally seen is that a few Band-Aid fixes of parts of the business will be inadequate, at best. All necessary operation improvements can't be made simultaneously; the objective must be innovation at each step in a well-planned program.

Don't believe that any company is impregnable; all are endangered species. The list of giants of the past now extinct or in dire straits is testimony to the virulence of the hazards to healthy businesses. The relevant truisms are that the only thing constant is change, changes come faster and are more deadly, and the race will be won by the swift and sure-footed.

Please Help!

We need to ask your help to improve the attendance scheduling at dinner events. The problem we are encountering is that people are making reservations but failing to attend.

Because of the nature of these events, restaurants require the chapter to guarantee a minimum number of meals. When no-shows forced the attendance below the guaranteed level, the chapter is required to make up the difference. As a result, the amount of funds available to sponsor other events for our members is reduced.

We ask that members avoid making reservations for colleagues or customers who have a low probability of attending. We also ask that you consider simply showing up if your schedule is too uncertain for you to commit to a reservation. Thank you for your help!

Job Opportunities

Buyer/Admin – Duties: Familiar with quoting basics (F.O.B, terms and payment, freight, expediting) and invoicing. Will also perform various administrative tasks. Requirements: Some experience in procurement. Must be proficient in MS Word and Excel. Employer prefers high-tech industry experience and 4 year degree. Seeking ambitious individual who is flexible and willing to perform a variety of duties.

For additional information regarding this posting, please contact: Marsha Grodin at (9 16) 454-4 196, fax (9 16) **454-4199**, or **email** purchasersgrodin@earthlink.net.

References

By Tony Winckowski, Executive Search Consultant

The 1st two parts of this series were on the Resume & the Cover Letter. These are the tools that get you an interview. But, while a great resume and letter can get you the interview, the references you provide will either make or break your job offer.

As you move up the job scale, the screening process gets tougher. At the entry-level, a company might do an abbreviated check (i.e. dates & title) on a potential candidate. But, up the pay and responsibility, and now, more information is collected. It is at this point that the references you supply **MUST** seal the offer!

A recent survey found on the Electronic Recruiting Exchange shared that about half of all checked references fall into the mediocre to poor category. I would say that my results have been similar. This fact further strengthens the idea that if you want to stand out from the crowd, have excellent **references**.

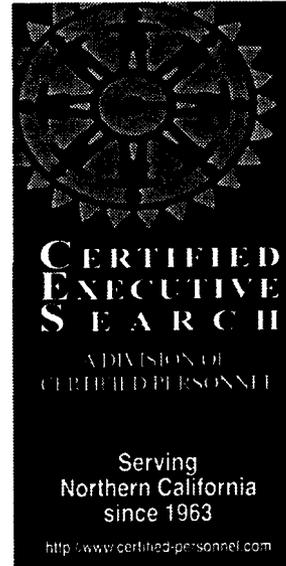
How do you do that?

First, make a list of prospective references- remembering peer in prior jobs, subordinates if applicable and even suppliers & clients. Besides name, have title, relationship to you, current phone & fax numbers, and ask if they have an e-mail address. Next, call or meet with your prospective references and get permission to use their name. **THIS IS VERY IMPORTANT!** I can always tell when someone is hit out of the blue with a request for a reference check. Even when the reference is positive, the person giving the reference isn't prepared to talk about you. Think about it, Are your first thoughts on any subject always the best? Third, update your chosen references as to what is going on with you. This is a good way to keep their contact information current, as well as, get assistance, support or ideas on your job search. Next, if you know that your reference might get called, give them a heads-up. That way, when the person calls to get the information they can get through to your reference easily. The quickness in which a person can get a reference on a candidate reflects positively on that reference. Your heads-up can also stimulate experiences and examples that will further strengthen your reference check. Finally, remember the Thank You Cards! Keep it simple, but let them know you appreciate their assistance.

The last step: When asked for references, present those that apply best to the situation or position desired. In addition, provide information to stimulate conversation

between the reference checker and your previous reference. The conversation would go along the lines of, "Mr. Doe was my supervisor at ABC, Inc., and we worked closely on such and such projects."

Well, now you are armed with the tools necessary to maximize your job search.. . next month we begin the search!



Your Best Employment Solution is a Company You Can Trust

Work with experienced recruiters offering the best service, information and knowledge of Production & Inventory Management, Resource Management, and HR Professionals.

Flexible and contract staffing also available.

Tony Winckowski, Executive Search Consultant
(916) 771-6886 • fax (916) 771-6808
tonyw@certified-personnel.com

Dinner Delays

It has come to the attention of the Board of Directors that the dinner meetings have been running beyond the scheduled end time. While we encourage questions and group participation during these meetings, we also recognize that our members and customers have busy schedules which may be compromised by a late running meeting.

One of the key factors contributing to meeting overruns is the late arrival of attendees. To address this, we have asked our restaurant provider to begin serving late arrivals with a course that corresponds with that of the rest of the group. This means that late arrivals may miss out on the soup or salad. We believe that keeping the food service on track will also help keep the meeting on schedule.

Please note that the restaurant will begin serving dinner promptly at **6:15 P.M.** and we will strive to adjourn by **8:15 P.M.** We recommend that you arrive several minutes early for the best seating. Thank you!

APICS Sacramento Calendar

April

- 6 Board meeting at Lyons on I-5 & Richards Blvd.
20 Dinner meeting. Dr. Joseph Stevenson will present, "Investing In Human Capital And Fostering Knowledge Management".

May

- 4 Board meeting at Lyons on I-5 & Richards Blvd.
18 Professional development meeting. TBD.

CSUS Materials Management Certification Class Schedules

The 1999 Spring and Summer classes for the Certificate program are as follows:

- ◆ Production Activity Control - April 12 - May 5
- ◆ Just In Time - May 24 - June 21
- ◆ Systems & Technologies - July 7 - Aug. 2
- ◆ Purchasing - Aug. 16 - Sept. 13

For more information, please contact Jackie Branch at (916) 2784433 ext. 115.

1999 Examination Schedules

Basics of Supply Chain Management:

- ◆ April 3rd - May 15th 1999
- ◆ Aug. 21st - Oct. 2nd 1999
- ◆ Nov. 22nd - Dec. 30th 1999

All other CPIM modules are offered throughout the year.

CIRM exam schedules (excluding IEM) are:

- ◆ July 17th - Aug. 14th 1999
- ◆ Oct. 4th - Oct. 30th 1999

IEM schedule:

- ◆ May 21nd - May 22nd 1999
- ◆ Nov. 19th - Nov. 20th 1999

For test location, registration and other information, please contact Assessment Systems Inc. (ASI) at 800-274-8399.

CPIM Certification Corner:

6th of a Series

By Ed C. Mercado, CPIM

We continue from last issue's topic covering the various question formats in the certification exam. We stated that

you will be more comfortable taking the exams by being familiar with the various forms of the questions that will be asked. If you still haven't seen a Sample Test, order it now. It not only presents a variety of question formats, but it also tests your knowledge of the subject. It is as close as you can get to the real exam questions.

1. In certain multiple choice questions, two or more statements or possibilities are offered. The strategy for this type of question is to consider each statement, decide if it is true and then search for the correct combination from among the list. The question is always followed by four answer choices labeled A, B, C, or D.

Example: If a company changes from make-to-stock to assemble-to-order, the effects of inventory levels are which two of the following?

- I. Lower finished goods inventory
- II. Higher finished goods inventory
- III. Lower work in process
- IV. Higher work in process

- (A) I and III
- (B) I and IV
- (C) II and III
- (D) II and IV

(The correct answer is B)

2. Another type of multiple choice question offers more possible combinations. The strategy for this type of question is the same as above.

Example: Management policies and decisions about which of the following have a direct impact on investment?

- I. Customer service levels
- II. Intracompany transportation modes
- III. Placement of distribution centers
- IV. Types of production processes

- (A) I and II only
- (B) II and IV only
- (C) I, II and IV only
- (D) I, II, III and IV

(The correct answer is D)

When analyzing these types of multiple choice questions, read the question and the statements or possibilities carefully. Every effort has been made to avoid tricky wording.

More information and tips in the next issue. In the meantime, if you need any other information before the next issue, contact me at: mercado@wr1000.mbg.com. We'll endeavor to give you an answer or point you in the right direction within 24 hours