

# NEWSLETTER

EDUCATION COMMUNITY OF INTEREST

## HOW TO SPICE UP YOUR SEMINARS

By James H. Anderson, PhD



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Are you eager to make your seminar-based instruction more dynamic and inspiring for your students?

If so, then consider getting a copy of *Leading Dynamic Seminars: A Practical Handbook for University Educators* (Palgrave Macmillan, 2013). Co-authored by James Anderson, the Dean of Academics at the Marine Corps War College, and Andrew Bellenkes, a senior lecturer at the Naval Postgraduate School, this easy-to-read handbook addresses the art of leading seminars from start to finish. Though written primarily for beginning seminar leaders, more experienced educators seeking to reinvigorate their teaching techniques will find this text useful as well. The book amplifies key points with examples and illustrations based on the authors' experience. These include, but are not limited to, the following principles:

**Know Your Students.** Bankers are advised to know their customers, since such knowledge helps them to provide their customers with better service. Likewise, PME instructors are well advised to

know their students' academic strengths and weaknesses. This understanding is essential if instructors want to help improve student performance. For example, consider the case of a student who seldom participates in seminar discussions. Instead of simply exhorting the student to contribute more, the instructor should first seek to ascertain why the student is being reticent. Is the student unprepared? Naturally reserved? Confused about seminar standards? Armed with such insights, the instructor can then appropriately tailor his or her counseling to encourage greater participation.

**Promote Active Learning.** Lectures can be useful when basic information needs to be conveyed to students. But seminar-based discussions have distinct advantages over lectures, especially when instructors use the Socratic Method to promote active learning and critical thinking. With the Socratic Method, seminar leaders use questions to promote dialogue and student learning. To be effective, instructors need to carefully

consider how their questions can best address designated learning objectives and engage as many students as possible. This requires careful preparation and the ability to guide the trajectory of seminar discussions without being overly directive or heavy-handed. (cont'd on page 2)

James Anderson can be reached at [James.H.Anderson1@usmc.mil](mailto:James.H.Anderson1@usmc.mil) if you would like further information about seminar leading techniques.

**Leading Dynamic Seminars**  
A Practical Handbook for University Educators  
James H. Anderson  
& Andrew H. Bellenkes

PALGRAVE  
TEACHING  
& LEARNING



## HOW TO SPICE UP YOUR SEMINARS (CONT'D)

**Clarify Team Teaching Responsibilities.** Some PME classes and courses are taught with two (or more) instructors. What is the key to success in these circumstances? Instructors to discuss an appropriate division of labor well before the actual seminar begins. This essential task involves designating who will lead the seminar and who will play a supporting role.

Instructors should consider applying these seminar-leading principles, as well as others detailed in the handbook on *Leading Dynamic Seminars*, to

enliven their classrooms and promote student learning.

### More About Dr. Anderson

Dr. James H. Anderson joined the Marine Corps War College faculty in July 2012. Previously, he was a professor of International and Security Studies at the George C. Marshall Center for European Security Studies, where he directed the Program in Advanced Security Studies.

Dr. Anderson served in the Office of the Secretary of Defense from September 2001 to January 2009, where he was director of Middle East Policy in International Security Affairs, among other positions. He is a recipient of the Defense Exceptional Public Service Award.

Prior to his Pentagon service, he worked as an associate professor of international relations at Command and Staff College, Marine Corps University, an associate at DFI International, and a research fellow at The Heritage Foundation. In addition, Dr. Anderson has taught courses at Lasell College, George Washington University, and National Defense University.

Dr. Anderson has written on a broad range of national security topics. He is the author of *America at Risk: The Citizen's Guide to Missile Defense*, as well as numerous articles in major newspapers and scholarly journals. His current research interests include national security strategy, international terrorism, the Middle East and Europe.

He earned his doctorate in international relations from the Fletcher School of Law and Diplomacy, Tufts University, and his undergraduate degree from Amherst College.

Prior to earning his doctorate, he served three years on active duty as an intelligence officer in the United States Marine Corps. He attained the rank of major in the reserves before receiving his honorable discharge in 1998.

### Areas of Interest:

- National Security Strategy
- International Terrorism
- Building Partnership Capacity
- Middle East
- Europe

## MEET THE INTERIM COMMUNITY LEADER



Dennis Thompson

INTERIM EXECUTIVE

DEPUTY DIRECTOR, TRAINING AND EDUCATION COMMAND

Mr. Thompson served nearly 30 years in the US Marine Corps in a wide range of command, operational, and staff billets, retiring as a colonel in 2005. He commanded at every rank and was designated a joint service officer. He served with artillery, reconnaissance, Marine Expeditionary Unit, combat service support, and communications units. Staff experience included duty with two Marine Expeditionary Force staffs, Headquarters Marine Corps, the Joint Staff, and US Central Command. He also commanded two formal learning centers, served as a Guard Officer, Marine Barracks, Nor-

folk, and was the Marine Officer Instructor, Naval ROTC Unit at both the Georgia Institute of Technology and Morehouse University.

After retiring from active duty, Mr. Thompson became a senior research fellow with the Potomac Institute for Policy Studies supporting initiatives related to expeditionary operations, distributed operations, and irregular warfare at the Marine Corps Warfighting Laboratory's Center for Emerging Threats and Opportunities, the Office of Naval Research, and the Defense Advanced Research Projects Agency.

In 2008 Mr. Thompson became the director of the MAGTF Training Simulations Division in Training and Education Command. In this capacity he was responsible for identifying future ground simulations needs, integrating simulations-based capa-

bilities across the MAGTF, and resource sponsorship of non-standard ground virtual and constructive training simulation-based capabilities. In 2012 he was assigned as the deputy director of the newly formed Training and

Education Capabilities Division, with duties including resource sponsorship oversight of live, virtual, constructive, and distance learning training programs and the integration of those capabilities to support home station, formal learning center, and service level training.

## ***Manager's Corner:* EDUCATION COMMUNITY STRATEGIC OVERVIEW**

Hello Community Members:

As your Community Manager, I am pleased and proud to introduce the Education Community's Human Capital Assessment (our own State of the Community), which is deeply rooted in the maturity of the program. From our program's 2009 startup initiative to present, we have grown organically from our previous plans and strategic directions. At the heart of our community assessment lie an updated vision and mission statements, along with several new workforce planning strategies. It also embodies a thoroughly practical, in-depth assessment of the world of adult higher education -now and in the future. The strategic planning process included extensive analyses of data on the education market and the changing environment in which we operate.

**Background:** The Education Community members serve in a myriad of different settings across the full spectrum of education occupations spanning positions that involve administering, managing, supervising, performing, or supporting education and training from early childhood providers and teachers; vocational trainers, administrators, and professors; to counselors and research specialist across the United States Marine Corps.

**Vision: Successful, skilled, and innovative education workforce** - engaged in positive, productive, and supported learning experience with high expectations for our learners and a strong commitment to the pursuit of excellence and innovation in our Marines, our programs, and in our resources.

**Mission:** To provide every 1700 Community member with the opportunity to continue to learn and reach

their potential, to lead fulfilling and productive careers, and to contribute positively to the mission of the Marine Corps by enabling each of his or her constituents to fully maximize their talents, imagination, skills and character.

**Purpose:** The purpose of training, education and self-development is to provide a competent, efficient, and effective professional workforce equipped to accomplish the mission and goals in their assigned organization and the Marine Corps. The future capacity and capability of the Marine Corps can only be assured if employees are developed to meet projected requirements.

The Education Community of Interest is committed to achieving this vision through creativity, innovation, and hard work. Our goal at the program is to continually strive to make the education system more responsive to, and reflective of, the diverse needs of our partners — the individual educators, our Marines, and our learning institutions. In a continually changing world, our challenge is to engage, evolve and transform both our education workforce and the way we support them to ensure that each community member is prepared for their next journey. In order to promote a positive, inclusive and responsive learning environment that contributes to the success of each education community member and ensures continuous improvement we will focus on:

- Educators that are committed to students and their learning;
- Educators that are responsible for managing and monitoring student learning;

- Educators that think systematically about their practice and learn from experience;
- Education workforce are members of learning communities
- Active learning activities such as demonstration, practice, and feedback;
- Collaborative study of student learning; and

Administrative support for continuing collaboration to improve teaching and learning.

### **Demographic Analysis:**

The education community sustains 509 active appropriated funded BICs of the 574 structure spaces throughout the Marine Corps' Tables of Organization preserving a healthy staffing rate of 89%. Additionally, the community comprises only three percent (3%) of the total civilian workforce (19,982). The education community is predominately an aging workforce with 58% baby-boomers. With a medium age of 50, which is three years older than the average federal employee, we are at high risk of losing "corporate knowledge" in our learning institutions as significant numbers of community members are likely to leave over the next five years (e.g. retirement eligible). Nearly two-thirds of the members in the education workforce retain a baccalaureate degree, with one-third possessing doctorate degrees. This is a highly educated workforce possessing tremendous abilities with 11% of the community supporting U.S. Title 10 requirements, 4% supporting acquisitions, and 85% directly supporting our learning institutions in a myriad of learning capacities.

## ***Manager's Corner:* EDUCATION COMMUNITY STRATEGIC OVERVIEW** (cont'd)

### **Environmental Factors:**

The Marine Corps is undergoing a critical economic transformation whilst simultaneously the field of education is moving rapidly from a traditional learning environment to high-skill, knowledge-based, technology driven learning environment – the economy and changes in the learning environment demand an adaptable education workforce. It is important to note that the most common challenges to recruiting and maintaining a diverse workforce identified by managers are funding constraints, limited opportunities for advancement, and limited time to

spend on recruiting activities. Over the past decade, our learning institutions have confronted numerous changes in their external and internal environment, and responded to emerging challenges, such as decreasing financial support, rapid technological advances, changing demographics, and outdated academic programs. Moreover, with continuing pressure to reduce the federal civilian workforce – this has concomitant additional negative pressures on hiring (no one will want to commit to work for an employer who is downsizing), retention, and morale. The education community should emphasize employee development by identifying employees with greater skills than current position. Train and equip those employees for the harder to fill vacancies/positions as it is far easier to initially hire/fill the lesser demanding skilled positions. Retaining and attracting the right education workforce as the Marine Corps is competing for increasingly limited federal resources is exacerbated by Federal hiring actions using antiquated hiring tools and career path models (i.e. longevity) designed to support and meet merit system require-

ments. A possible negative effect of antiquated hiring tools and career path models is observable in younger workforce members as job-security is no longer a primary driver as it was with the baby-boomer generation. We can no longer "hire and ignore" our workforce. Now our workforce requires nurturing, continuous training and retraining, and perhaps higher compensation – we have to show a willingness to "invest" in the workforce. Employees in their mid-20's to 30's tend to move through jobs very quickly. We have to be ready to show them that federal employment is a viable and attractive option. With the proliferation of technology in the education-workplace requires new skills for our workforce and near-

continuous retraining as technology and uses for that technology in supporting training and education advances. The education community requires a technologically relevant and professional workforce capable of improving - modifying old practices and developing – designing - implementing new methods in our learning institutions.

### **Workforce Planning Strategies:**

- ⇒ Create and retain a highly qualified, motivated, and supported workforce through strong professional development
- ⇒ Design an enterprise Education Community workforce plan to address skills gaps
- ⇒ Knowledge management solutions for best practices that enhance and build organizational capacity

- ⇒ Increase the communication, understanding, and cooperation internal to the community of interest.
- ⇒ Pursue a strong and measurable approach to continuous improvement using appropriate data to review the performance of all areas of the community.

## ALIGNMENT TO WHAT MATTERS MOST



By Lizette Zuniga, PhD

*In God we trust; all others bring data.* W. Edwards Deming

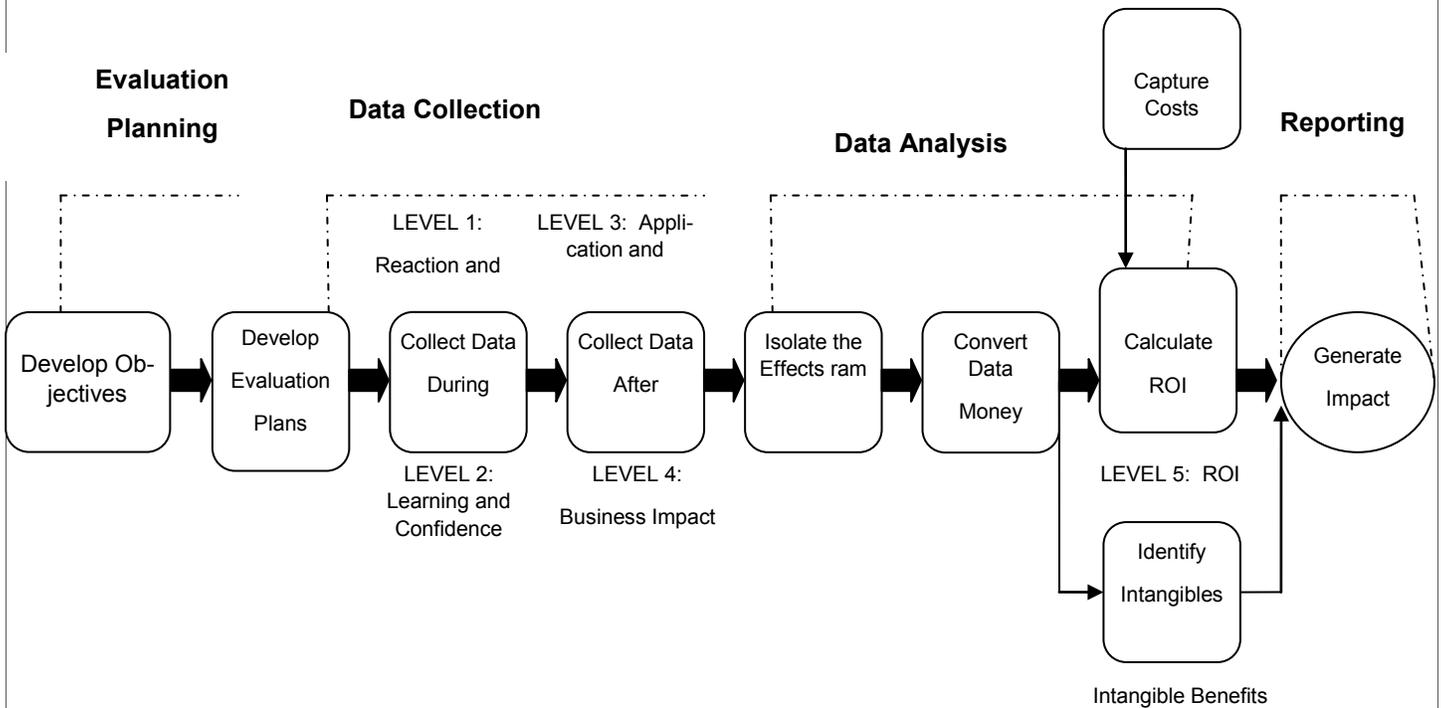
Lizette Zuniga, PhD

Vice President , ROI Implementation with the ROI Institute

A consultant specializing in learning and development was asked to join a specified training department working on a leadership initiative for a government organization. In particular, the training and development team wanted the consultant to help with evaluating the leadership program. By the time the consultant was invited to assist the team, the leadership program had already been launched and there were no measures put into place. There were missed opportunities to gather reaction and learning data as the program had launched. To identify relevant measures, the consultant began to ask questions about the *why* behind the intervention and the team’s response was quick, *our sponsor that got this program going is no longer available so we are not sure*. Not only was the consultant called after the fact, or after the program had launched, but now was presented with the challenge of no identifiable performance or business measures. After confirming that needs assessment did take place, the consultant set out to inquire from others in the organization that could help to supply missing information from the needs assessment. Weeks passed and finally, the consultant was able to confirm several significant performance and business needs that tied into the program, including leadership skills, conducting performance appraisals, giving and receiving feedback, employee satisfaction and timeliness for project/task completion.

The issues raised by this scenario represent challenges and experiences common to those practicing evaluation -pursuing initiatives without knowing why and not identifying clear performance or business needs or measures upfront. Evaluation is too often considered an afterthought as illustrated by this case. This article explores why it is important to plan ahead, aligning training projects with what

## The ROI Methodology™



## ALIGNMENT TO WHAT MATTERS MOST (cont'd)

With its beginnings in the 1970s, Jack Phillips created The ROI Methodology which follows a logical chain of impact. The ROI Methodology encompasses a ten-step process that includes evaluation planning, data collection, data analysis, and reporting.

We fold these critical elements into the ROI Methodology by starting with organizational/business needs and then, based on the client's input, asking what behaviors, performance, and learning issues are relevant to the business needs. For example, let's assume that during the needs assessment phase, two findings emerge: a decrease in employee satisfaction and an increase in time it takes for project completion. This is where the needs assessment phase moves to making inquiry about what behaviors and learning issues may be contributing to the decreased employee satisfaction and increase in time. In this case, we discover that inadequate leadership skills and lack of planning are identified culprits. This line of questioning and approach to diagnostics not only help identify the right solution, but also set into motion relevant goals and measures. Two key questions follow: 1) What is the ideal or desired state? 2) What is the current state?

These two questions will help to define the gap that exists. For example, a man by the name of Jose wants to lose weight. He currently weighs 245 pounds and has confirmed with his doctor that he should weigh 195. His weight problem is further complicated by high blood pressure, for which he has been prescribed medication. His doctor has advised him that by losing weight, his blood pressure is likely to decrease. Jose now has a quantifiable gap, which he has turned into a measurable goal: to lose 50 pounds to decrease blood pressure, and hopefully eliminate the need for medicine. His next step is to identify in what ways his behavior has led to the weight gain. Jose decides to see a nutritionist and creates a change plan, identifying what behaviors he will change during the week to meet his goals. In his plan, he incorporates exercise four times a week and eating 1800 calories per day. This is quite a change for Jose, as he has not been exercising or tracking calories. His plan incorporates rewards along the way. For every 10 pounds lost, Jose can buy either a book he had wanted to read or can go to see a movie. He wasn't factoring in that every time he went to the movies, upon entering the theater, he was overwhelmed by the waft of buttery popcorn. So, his plan needed modification. And eventually, several modifications later, Jose reached his two goals: 50 pounds of weight lost and stabilized blood pressure. Without collecting the right data (how much weight loss was required), careful planning (deciding on a daily calorie intake and exercise routine), and modifications (changing the rewards), Jose would not have been on track for a successful change.

### ROI Methodology Applied to Training Needs Assessment:

**Level 5 (ROI)** - The payoff need is based on the problem of lost project time. This time is equivalent to the course of 18 months and has been damaging to the work environment. To understand the impact, the problem unfolds with more detail, and it becomes obvious that the problem is worth solving.

**Level 4 (Business Impact)** - The average project time has been at an all-time high. Project completion time needs to improve; it has not increased in the last 18 months. The pressure of not meeting departmental/organization goals has put stress on employees and has impacted job satisfaction and employee engagement. When all these measures are considered, this is clearly an organization problem, and to a certain extent, a great opportunity for improvement.

**Level 3 (Performance/Application)** - The causes of the performance problem are explored using a variety of techniques. Each measure needs to be analyzed to see what factors are causing its current status (e.g., why is project completion not improving, or what is the cause of the job dissatisfaction?). For this project, the analysts conducted interviews and focus groups to understand why the organization/business measures were at their current level.

**Level 2 (Learning)** - Then, learning is explored. Do project team leaders/members understand the new process? Are they clear about their new roles? The new process and team roles are at the heart of the learning needs.

**Level 1 (Satisfaction)** - Finally, the desired satisfaction needs are considered. What type of training is needed to drive satisfaction and motivation for change?

Dr. Lizette Zuniga presently serves as Vice President, ROI Implementation with the ROI Institute. With more than 15 years of professional experience, Dr. Zuniga has expertise in leadership and organizational development, learning and development, survey design and ROI. She facilitates the certification course for ASTD in *Evaluating Learning Impact*, and serves as faculty on the United Nations System Staff College. Dr. Zuniga holds an M.S. degree in psychology from Georgia State University, and a Ph.D. in Leadership and HRD from Barry University. She co-authored the book *Measuring the Success of OD*, with Jack and Patti Phillips, and has published several articles and case studies on needs assessment, ROI and organizational culture. She can be reached at [Lizette@roiinstitute.net](mailto:Lizette@roiinstitute.net)

## CAPTIVATED BY TECHNOLOGY

By Lucian Laurie, M.Ed., Formal School Manager/Instructional Systems Specialist

In September, I took advantage of the opportunity to attend a two-day training session sponsored by TECOM CWFDT entitled “ADOBE CAPTIVATE 6 FUNDAMENTALS: An Introduction to Captivate.” It truly was an introduction even though I had been somewhat acquainted with Captivate last year by an assignment for a Master’s in Instructional Design Program. My group was slated to do a project that included developing a mobile teaching module for interviewers. The requirements of the assignment were that the training comply with centrally standardized learning objectives, and available to cost-effectively train a workforce that was geographically dispersed. Luckily, one of the members of my group was familiar with Adobe Captivate. The other group members each developed a main theme of the session, and the Captivate sage consolidated them into one presentation, complete with voice-over. Considering it was the first time most of us had seen it, the presentation came out remarkably smooth. In the introduction to the text for the class, the instructor put it this way;

“What can you do with Adobe Captivate? Wait, that question is a bit backwards. It would be far more efficient to ask: what can’t you do with Captivate...**You can create eLearning lesson from just about anything you can access on your computer** (my emphasis).”

If, as common custom tells us, a picture is worth a thousand words, then Captivate will save you a lot of writing. For those who think graphically, Captivate is almost limitless in allowing you to share information or get your point across. When I think of the mountains of PowerPoint presentations that I have sat through, many with an entire lecture just cut and pasted onto the slides, it almost makes my eyes bleed. For those who make an

art form out of removing words and replacing it with images, Captivate is the program for you. For those of us left-brainers who prefer to hammer away at a keyboard, maybe we should be the authors of the books that the instruction is based on. That gets us to the heart of the purpose of Captivate; to capture the attention of the learner, and keep it focused long enough and well enough for information transfer to occur.

This program is designed to be easy to use; simple point and click commands allow the user to insert videos, click-by-click recording of a computer screen through multi-step tasks, games, and assessments, either simple or branched, as in the quote above, almost anything that can be done on a computer. For fun, and to keep your audience interested, one can set the program to perform an action if a desired result occurs. For instance, a correct answer gets a gold star, while an incorrect answer gets a video of a stampede of Wildebeests. The heart of this program is your creativity.

Like most other computer tools, the most difficult part of the whole equation is planning. For those who cringe at the mention of the word storyboard, two things, first, you probably don’t really know what a storyboard is, but most importantly, you won’t find any relief here. Captivate provides a fantastic tool to realize and jazz up your delivery of ideas, but the ideas are the important factor, not the tool.

The class I attended presented Captivate Version 6, while a quick look on the internet will reveal that of course, Version 7 is now available. I won’t mention a certain intranet that may or may not allow this program on board, because I haven’t researched it personally.

Suffice to say that, for those gifted with any hint of graphic art ability, and a decent lesson plan, Captivate is an

extremely useful tool for eLearning creation, and we should make ourselves smart on it.

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Quoted from the course workbook; Siegel, K A (Eds.), *Adobe Captivate 6: The Essentials* (p. 3). Riva, MD.: IconLogic Inc.

Lucian Laurie, R.N., M.Ed. received his Master’s in Educational Leadership from Norwich University in 2009, his Bachelor’s Degree in Nursing from Norfolk State University in 1995, and his Associate’s Degree in Nursing from Westbrook College in 1983. He is a 1973 graduate of Marine Corps Recruit Depot Parris Island South Carolina, and served as an Assault Amphibian Vehicle (AAV) crewman (MOS 1833). Since his retirement from the Navy in 2009, he has worked at Officer Candidates School as the Formal School Manager/Instructional Systems Specialist. He lives in King George, Va. With his wife of 22 years, Sarah, his high school freshman son, Sean, 4 cats and 4 dogs.

## WHAT'S HAPPENING IN COMPETENCY MANAGEMENT ACROSS DoD

### INFORMATION PAPER

#### SUBJECT: Defense Competency Assessment Tool (DCAT)

#### BACKGROUND:

The Defense Civilian Personnel Advisory Service (DCPAS), Strategic Human Capital Planning Division (SHCPD) is responsible for the implementation of the Department of Defense competency-based approach for workforce planning. This approach includes competency model development for mission critical occupations and all major occupational series, assessment of civilian workforce competency gaps and identification of civilian workforce competencies need now and into the future. This initiative supports the Department's ability to meet the legislative requirements established in 10 U.S.C. §115b.

DoD has designed and developed DCAT as a Department-wide tool to validate occupational competency models and assess civilian employees' proficiency levels and competency gaps. The results of the DCAT occupational competency assessments will be reported in the Department's Strategic Workforce Plan report to Congress.

#### KEY POINTS:

- DCAT will provide competency assessments at the enterprise and component levels. Aggregate results will inform the Department's life-cycle management strategies for succession plans, competency-based recruitment, and training and development.
- A phased deployment is scheduled to begin in October 2013. This Initial Operating Capability (IOC) will begin with a pilot of employees in the Safety & Occupational Health series 0018.

- IOC will begin November 2013 and conclude May 2014. During IOC a stratified random sample of DoD civilian employees (GS 5-15 and equivalents) in mission critical occupations will be invited to participate in their occupational competency survey assessment.
- DCAT will be administered online. Through a stratified random sample, employees will be selected to participate in DCAT. They will be notified by e-mail and provided a link to access the tool. Participation is voluntary and will take approximately an hour of duty time to complete the survey. Individual results are confidential.

- DCAT interfaces with the Defense Civilian Personnel Data System (DCPDS). Employees will be requested to identify their supervisor via a drop-down menu or manually inputting the supervisor's e-mail address. If the supervisor is not in DCPDS or is military the employee will input his/her supervisor's e-mail address into DCAT. Once the employee completes the self-assessment, DCAT will generate an e-mail to the employee's supervisor stating that the employee has completed his/her self-assessment and requesting the supervisor to assess their employee in DCAT.

Through DCAT employees and their first-line supervisor will assess their individual proficiency level in each of the occupational series technical competencies. Both the employee and supervisor will be asked to answer the following questions for each competency:

Do you perform this competency in your current position?

- o How often do you perform this competency?
- o How difficult is it to perform?
- o How important is it to perform this competency without error?

o Does possession of this competency distinguish between a superior worker and an average worker?

- Supervisors will be asked respond to three additional questions:

o Is it important to have this competency at the time of hire?

o Is this competency needed now and in the future (five years from now)?

o How is this competency best developed?

- DCAT will be open for three weeks for each occupational series competency assessment. The specific dates will be stated in the e-mail notification sent to the employee and supervisor. Technical support will be available through a toll free line.

Questions about DCAT should be sent to [dcat@cpms.osd.mil](mailto:dcat@cpms.osd.mil).

- DCAT is not to be used to evaluate an individual's performance; it may be used to inform future training and development options.

**Note from the manager: The Education Community's assessment date is undetermined at this time.**

## ARE YOU LUCKY WHEN CREATING TRAINING? By Nathan Jones

You have designed and built a training system, but is your training effective by luck or by validated intention? If you do not take the time to validate the fidelity of your training system, then you may be providing training by luck. The ADDIE model consists of formative and summative evaluation; however, how do you apply these to evaluating training devices? Formative consists of feedback to modify the teaching and learning activities. Summative refers to the assessment of the learning and summarizes the development of learners at a particular time. Neither clearly applies to evaluating the devices developed because training evaluation in ADDIE model relies on the training system including the program of instruction.

When developing a training system, the evaluation process for the training device is called Verification and Validation (V&V). V&V seeks to evaluate the training device to confirm it provides the necessary conditions and sensory cues to support training tasks. Verification is the process of testing to confirm that the device meets the engineering and functional specifications (did we build what we designed)? Validation is the process of evaluating that device meets the intended use (did we build what we needed)? Often training device testers focus on the functional testing of the device and forget about the human performance aspect which is affected by the training system's fidelity. A training devices' entire purpose is to improve human performance. Whether that performance is individual or team, the fidelity of the system and its impact on human performance cannot be forgotten.

When evaluating fidelity, you are evaluating the accuracy of representations of the real world from the perspective of their intended use to determine the extent to which a device represents its real-world counterpart. This criterion includes both human performance-related training tasks and the simulated conditions and attributes under which those tasks are performed. The simulated conditions reflect real world facts, to include appropriate scenario conditions and presentation; and exchange--data exchanged across a simulation. As the evaluator, you will identify linkages and gaps between the criteria and the system capabilities.

Case in point, recently, a team consisting of Naval Air Warfare Center Training Systems Division (NAWCTSD) and Program Manager Training Systems (PM TRASYS) did a V&V on the Supporting Arms Virtual Trainer (SAVT). SAVT is a Joint Terminal Attack Controllers (JTAC) trainer. The fidelity assessment performed as part of the validation identified deficiencies in the visual attributes of the system that hinder trainees abilities to accurately identify aircrafts, targets, and battle damage. The system performed according to engineering tested specifications, but with insufficient fidelity there was negative effect on human performance; hence, SAVT was not adequately training all intended tasks to standard.

Once you have completed the training device V&V efforts and resolved known issues, then you are prepared to perform a Training Effectiveness Evaluation (TEE). Attempting to perform a TEE prior to V&V does not allow you, as the evaluator, to consider the training device as a known controlled variable in your training effectiveness assessment. The TEE will include the entire training system consisting of the training device, programs of instructions (POIs), instructors, and operators. The TEE should include qualitatively evaluating trainee and Subject Matter Experts (SME) *reactions* regarding the efficacy of system by employing semi-structured interviews and questionnaires; plus, quantitatively evaluate trainee and SME *reactions* regarding the efficacy of system by using specific training performance metrics. Operational, the TEE is the formative/summative evaluation phase(s) of the ADDIE process.

If you do not take the time to perform V&V and a TEE, then chances are you provided training by luck. V&V and TEE methods can be applied to not just simulator type training devices. You can apply the same approaches to computer based and other training methods. Think about how you will **ensure** the fidelity of your training device is enabling human performance, thus providing effective training.

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Nathan Jones is the Instructional Systems Specialist & Manpower, Personnel & Training Functional Lead at Program Manager Training Systems (PM TRASYS), Marine Corps Systems Command (MARCORSYSCOM). Mr. Jones primary areas of responsibility are overseeing front end analysis for training system development and training system evaluations. PM TRASYS is MARCORSYSCOM's independent program manager assigned for acquisition and life-cycle support of Marine Corps ground training systems, devices, and training support services. PM TRASYS's portfolio spans over a wide range of categories from virtual trainers and live ranges, to learning software and video review systems.