

**FIELD TRAINING FOR THE 21st CENTURY
WORKFORCE
MODELS FOR TODAY AND TOMORROW**

by

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The Command College Futures Study Project is a FUTURES study of a particular emerging issue of relevance to law enforcement. Its purpose is NOT to predict the future; rather, to project a variety of possible scenarios useful for strategic planning in anticipation of the emerging landscape facing policing organizations.

This journal article was created using the futures forecasting process of Command College and its outcomes. Defining the future differs from analyzing the past, because it has not yet happened. In this article, methodologies have been used to discern useful alternatives to enhance the success of planners and leaders in their response to a range of possible future environments.

Managing the future means influencing it—creating, constraining and adapting to emerging trends and events in a way that optimizes the opportunities and minimizes the threats of relevance to the profession.

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The police radio crackled to life; the Watch Commander at the nondescript California suburban police department listened intently from her comfortable office chair: Two of her officers had confronted a knife and gun wielding man in a wheelchair. The man was belligerent and irrational as he refused the officers' commands to put his hands up. The Watch Commander enabled the holographic streaming video on her desktop. After viewing, she wasn't too concerned about the resolution of the incident and saw no need to leave her office. The officers were experienced, and seemed to have everything in control. After all, they had completed field training two weeks ago.

Today, it is unlikely such an incident would not grab the immediate attention and action of any police supervisor, particularly with officers two weeks removed from field training. Officers of the future, however, using the power of technology and simulators, may be the beneficiaries of a far different model of field training than is employed today. These new approaches can dramatically alter the readiness and proficiency of the officer to be far greater than today's time proven models. The technology necessary for this 21st century model of field training is not now available, but it is coming.

We will explore a new model of field training model in the coming pages. As part of that exploration, we will consider the current status of field training, as well as the characteristics of the workforce coming of age as entry-level police officers in the next 10 years. Although the emerging model of field training is not yet here, now is the time to migrate toward it to provide future officers with the necessary skills and aptitude for success.

Traditional Field Training Models

In a traditional police officer field training (FTO) program, the new officer applies and refines training in the academy to everyday duties. The new officer also learns the accepted behavior norms of the agency during this time. (Cleveland and Saville 2007, 9-10) Upon successful completion of field training, officers work under general supervision, typically by a field supervisor, but they largely have broad discretion in their daily duties. The lessons learned and behavioral norms imparted and fostered in field training become the foundation for an officer's career. (Blum and Polisar 2004). The tenor of the FTO program has a critical role establishing the new officer's attitude towards policing. Marshall McLuhan once said *the medium is the message*. In policing the "medium" of training and the process of learning is as important as the content. (Cleveland and Saville 2007, 9-10)

Field training for most California police agencies has been modeled after a nearly 40-year old program first developed and championed by the San Jose Police Department around 1970. (Office of Community Oriented Policing Services, United States Department of Justice, 7) The impetus for the creation of the San Jose model was to document deficient performance to allow for the dismissal of an employee. (Michigan NAFTO 2009) The San Jose model of field training is based upon a behaviorist approach to learning or behavioral modification, where new officers are seen as blank vessels to which trainers will impart knowledge. (Pitts, Glensor and Peak 2007)

Perhaps most troubling with the behaviorist approach in this setting is that it is incongruent with the vision of a "good" police officer. Policing is expected to involve problem solving, analysis, research, and critical thinking. These traits are unlikely to be developed by a behaviorist approach. (Schafer and Boyd 2007, 385) Officers are expected to perform their

duties via innovative, creative, and effective approaches that resolve community problems yet they are trained in a paramilitary, punitive, and authoritarian environment. (Schafer and Boyd 2007, 386) Behaviorist model training can lead to trainers only covering the topic instead of focusing on the degree of learning. (Massoni 2009) This has prompted the development and deployment of an alternate model of training is use in several locales nationally.

The PTO Model

The United States Department of Justice Community Oriented Policing Services, in conjunction with the Police Executive Research Forum, and the Reno, NV, Police developed an alternative model of field training between 1999 and 2001 called the Reno model or Police Training Officer (PTO). The Reno model involves contemporary methods of adult learning and problem-based learning (PBL). The goal of PTO is to provide a foundation for lifelong learning that prepares new officers for the complexities of the future. The focus of PTO is developing an officer's learning ability as well as their leadership and problem solving ability. (Pitts, Glensor and Peak 2007)

In contrast to the behaviorist model, PTO involves the concept of adult learning (pedagogy). In pedagogy, the new officer is not a blank slate. Rather, he or she is an active contributor to his or her learning and prior experiences are part of the learning process. Pedagogy may be a better approach to police instruction because it places students into a role they are more likely to fill while actually performing policing duties; they will learn to analyze, think critically, solve problems, and collaborate with peers. Officers learn the vital skills valued and desired in policing. They also learn outcomes are rarely perfect, and learn to maximize benefits and minimize risk. (Schafer and Boyd 2007, 399-400) In spite of the success of PTO

outcomes, the most prevalent field training model in mid sized California police agencies (11-50 officers) is the San Jose model of field training.

The Persistence of the Behavioral Approach

Of the 609 California law enforcement agencies which participate in the California POST program, 259 or 7.5% are mid sized agencies (11-50 officers) and these agencies employ about 6400 or 42% of all sworn peace officers in the POST program. (California Commission on Peace Officer Standards and Training (POST) 2009). Of these mid sized agencies only four use the Reno model. (Shingara 2009).

Reasons why the PTO model has not gained widespread favor with California mid sized agencies may include the structure of the PTO program. (Wood 2009) Unlike the San Jose model, which uses checklists and a sequential list of competencies for the recruit officer to demonstrate, the PTO model uses a journal, completed by the trainee officer, to focus on what was learned and what requires further learning. In the PTO program, it can be difficult to determine proof of training coverage and completion of required competencies. (Wood 2009) Additionally, one proponent of the PTO model has noted adoption and implementation of the PTO model requires a strong executive commitment or champion at the highest levels of a police agency. (Glensor 2009)

Proponents of the Reno model acknowledge learning occurs in both the San Jose and Reno model. While they assert the efficacy of the training is superior in the Reno model, it is more difficult to administer and this may be a hurdle that smaller agencies may find difficult to overcome. (Glensor 2009). Clearly, both the San Jose or Reno models have deficiencies and the idea of a different, future, training model requires exploration.

As the future emerges, computer simulation and gaming will continue to become more realistic and the degree in which simulation users become part of the virtual world they inhabit will become much more enmeshed and lifelike. (Schafer and Boyd 2007, 398-399). The opportunities this presents for police training are intriguing and go well beyond the “shoot/don’t shoot” simulators. New officers could spend much time in simulators handling all kinds of calls. (Schafer and Boyd 2007, 395-399) In much the same way as commercial airline pilots train for critical incidents in simulators, police officers will be able to train for not only critical incidents, but also routine incidents, during field training. (Halal 2008, 53-56) Simulations, reliant on technology, will transform training in the future and a new model of training- the Virtual Reality (VR) Model, which will eclipse what is available for training today.

The VR Model

The United States military was an early adopter of virtual reality training in a gaming environment. In fact, the U.S. Department of Defense originally coined the term, “serious game” as way to talk about “war games” with the Congress and public. (Derryberry 2007, 6).

Serious games have other names; including immersive learning simulations, digital game based learning, and gaming simulations. (Derryberry 2007, 3). Serious games are designed with the intention of improving some specific aspects of learning, and players come to serious games with that expectation. Serious games are focused on specific and intentional learning outcomes to achieve serious, measurable, sustained changes in performance and behavior. (Derryberry 2007, 4) One researcher has concluded, “there is widespread consensus that games motivate players to spend time on task mastering the skills a game imparts...” (Dondlinger 2007, 31) In

fact, there is a growing body of research on the effectiveness of games as learning tools.

(Derryberry 2007, 5)

An example of the real world benefits of serious games include the conclusion by the U.S. Science Defense Board in 2000 that low United States military casualties in the 1990s was due in a large part to the use of simulators in planning and training. (Science Clarified) Gaming simulations allow the players to make mistakes without catastrophic consequences, allow trainers to keep records of students' actions for review upon conclusion of the simulation, (Science Clarified) and focus on imparting, in a predesigned way, desired beliefs, skills, and/or behaviors of those who play the game. (Derryberry 2007, 4).

Currently, serious gaming is gaining a foothold in training in the dental industry. A student dentist is confronted with a screen depicting a virtual patient. In keeping with the dental training curriculum, the student dentist must ask the virtual patient specific questions before proceeding with a procedure or the student will fail; the questions asked must reflect what the student was supposed to have learned and how the student applies that knowledge. (Silver 2009) As the student progresses with the simulation, using the wrong drill in the wrong order will make virtual gums explode in blood. (Silver 2009)

At present, the game does not yet simulate touch or the degree of force a dentist can or should use. However, advances in haptic computing, in which the sense of touch is incorporated into the virtual simulation, are in the offing. (Derryberry 2007, 13) Eventually, dental students will be able to feel, in a simulation, how much force to exert before they break a person's jaw or cause injury. (Silver 2009)

A current United States Army serious game involves a full motion movie shot in a 360 degrees panorama. The panoramic feature is meant to give the game player or student the feeling of actually being present in the situation because as the game player rotates, his or her perspective rotates as well. (Kincaid 2008). Another existing application of VR to training is a game used by the United States Army. Interestingly, it does not focus on a combat situation. Instead, the game has been designed to focus on the nuances of social interaction and cultural differences with Iraqis. Game players are forced to make quick decisions that affect the situation's outcome; paying attention to facial expressions and gestures while trying to convince a small village's leader to cooperate with a checkpoint the soldiers have set up. (Kincaid 2008). This serious game could translate directly to the demands of the policing setting.

Police work is essentially the business of dealing with people. It is easy to imagine how simulations and game design, similar to the above examples, could be applied to police training situations. Police training could be advanced well beyond today's current shoot/ don't shoot simulators into the handling of situations, including those involving emotional intelligence, or dealing with one's emotions and the emotions of others, (Cleveland and Saville 2007, 21) and in which the desired outcome is only achieved through effective application of the concepts the trainee officer is supposed to learn.

This will be especially important when considering the characteristics of the emerging workforce. Our future police officers, those from the "millennial" generation born between 1982-2002 (Howe and Strauss 2000) bear a striking similarity to the characteristics present in serious games. Since serious games provide a stimulating environment that fosters the development of critical skills and characteristics, it is evident that serious games provide an

environment to learn necessary work skills. (Derryberry 2007, 11). In other words, a gaming environment is an ideal way for the emerging workforce to train and learn.

Limitations and Opportunities

Currently, two foreseeable limitations will affect the degree in which gaming will become integrated into police training: availability, including cost; and the realism of the gaming simulation.

Serious games are becoming more prevalent in the military environment, and companies are taking notice of how games could have other commercial applications (Kincaid 2008). In fact, commercial suppliers of serious games have plans to license proprietary technology so customers could create their own games. (Kincaid 2008). In 2008, 1.5 billion dollars were spent on serious games worldwide, (Derryberry 2007, 6). Almost 10 years ago, a serious game system, considered primitive by today's standards, cost at least \$300,000. (Sines 2001). A more recent and advanced simulation provider acknowledged costs for users of about \$500,000 as recently as 2008; that provider is attempting to provide customizable, cheaper, applications for customers. (Kushner 2008) The Federation of American Scientists in a 2005 summit determined serious barriers existed for private sector investment in serious gaming: "Publishers of educational materials have not identified a market opportunity large enough to make investments in educational games research worthwhile. In addition to poor markets, the exploratory nature of research on educational games, and uncertain returns to individual firms who develop generic tools further discourage the private sector from making these R&D investments." (Federation of American Scientists 2006, 24) There are about 17,000 police agencies and nearly 500,000 officers in the United States (United States Department of Justice 2004); it seems possible at

some point commercial suppliers will seize upon the currently untapped market for serious games designed for police training applications and at a cost that municipal police agencies can afford.

The simulations are also expected to increase in realism as time elapses and corresponding advances in technology are made. (Halal 2008, 42-63) The adoption of information technology in the past has been a cycle of early expense then lowered costs and improvements as time elapses. In 1965, Gordon Moore, co founder of Intel, noted the number of transistors per square inch on integrated circuits had doubled every year since that technology had been invented. Moore predicted this trend would continue for the foreseeable future and this became famously known as Moore's Law. (Cowper 2007, 77) Costs for computing power have decreased at the same time as the computer power has increased. (Garland 2007, 156) This is why a 120 gigabyte hard drive, capable of storing a book, cost \$200 in 2007 while the same amount of computer storage space, provided it could even have been built, would have cost about \$26 million in 1980. (Garland 2007, 157). The gains described in Moore's Law are expected to last at least the next ten years. (Garland 2007, 154-156) (Cowper 2007, 76-79) Based upon this concept, it is likely police agencies will eventually benefit from widely available and affordable simulator technology.

Field Training in the Future

Serious gaming and simulations will so dramatically affect field training in the future that a new model of field training, the Virtual Reality or VR model, will be established.

It is foreseeable officers of the future will spend considerable time in the police academy setting engaging in virtual simulations, so much so, that the distinct break between academy and

field training which exists today is going to be more or less seamless. So much meaningful training will occur in the academy or pre service setting that the duration of field training programs is likely to become much shorter. Mid sized agencies, which do not operate their own police academies, could merely repeat the academy simulations with agency specific desired outcomes designed into the games or simulations. In this manner, the norms and customs of the agency and desired behaviors will be imparted to the trainee officer.

If much of the police training formerly reserved for field training occurs in simulations, the relevance of field training and the debate between the San Jose and Reno models will be diminished. Police leaders will be able to impart to the trainee officer the desired norms, behaviors, and skills the trainee officer needs through the gaming simulation because the trainee officer will be immersed in an environment in which the trainee is led to the desired outcome due to the carefully crafted game design. The significance of the medium of field training whether it is the San Jose model or Reno model in reaching a desired outcome is likely to pale in comparison to the outcomes achieved through careful game design.

The shift towards more training in a gaming simulation will allow for a greater standardization of police behavior with long-range effects on police culture, especially since the simulations can be used to reinforce ethics and emotional intelligence. The public also will no longer be the guinea pig for the trainee officer because he or she will have had the opportunity to succeed, or fail, and build proficiency in gaming simulations.

Today, the trainee officer is at the mercy of training models in which the medium or structure of the model affects the learning. In the future, medium or structure of the training model, built upon carefully designed serious gaming, will lead to specific, desired, outcomes.

Officers who have received the benefits of this new training model will have an enhanced level of readiness as compared to the newly minted officer of today.

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