

WEB BASED TRAINING FORECAST FOR LAW ENFORCEMENT

Web Based Training Forecast for Law Enforcement

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Introduction

The most recent executive summary produced by the American Society for Training and Development (ASTD) titled “State of the Industry: ASTD’s Annual Review of Trends in Employee Provided Training in the United States” (Vanburen, M. & Erskine, W. 2002) was not only a review of the workplace learning and performance trends of 2002, but the article also assessed e-learning, or electronic learning. The review found that the average percentage of training that was delivered by learning technologies grew for 2002, edging upward from the 1998-1999 level of 8.5% to 8.8%. While admittedly a small margin, the authors related that they felt that this small increase just might be the start of a trend upward in e-learning opportunities.

Other recent observations and studies have mirrored the view of an increasing market demand for technology assisted training, of which e-learning is a growing segment. Mcgee (1999) estimated that technology assisted training will represent half of all training methods by the year 2002. Reasons given for this increase were that by switching from classroom to web based training that many organizations have realized up to 75% savings in their training budgets, making this mode of training especially appealing to companies that have large numbers of employees to train (Cole-Gomolski, 1999). To give further perspective of the U.S. market for web-based training International Data Corporation (IDC) reported that as recent as 1997 the market was \$197 million and that by 2002 the forecast was for an annual growth rate of almost 95% and a market value in excess of \$6 billion dollars (Driscoll, M., 1999). A recent Gartner study on e-learning reported that the global market for e-learning will grow from \$2.1 billion this year (2001) to \$33.6 billion in 2005-about a 100 percent compound annual growth rate (Vaas, 2001).

Additionally, web based learning is paying off handsomely, with lower training costs, increased employee retention, and delivery of better goods and services (Vass, L., 2001). Companies are also realizing other monetary savings by cutting down on employee down time expenses, travel costs for employees attending training sessions off site, and experts can be more widely assessable to larger groups of individuals, lower costs of media (manuals and self paced books), and classes can often be more flexible. Companies that have included technology based instruction as a part of their overall training programs have found that, on average, learners complete the required information in about half the time as traditional stand-up instruction (Elliott, T., 1999, p. 659).

MEAGER SUPPORTIVE LITERATURE

Unfortunately, a rigorous review of the literature available on e-learning regarding its effectiveness as a law enforcement training tool is meager. This review found that there were many independent web sites offering web based training opportunities and other electronic learning materials (CD Rom based instructional materials, virtual reality programs, etc.). However, feedback on the effectiveness of such programs through empirical research methods seemed to be absent, with the majority of opinions being based on mere judgment on the part of the author. For example, one author admits that while reviewing the many advantages of using virtual reality as a method for teaching law enforcement officers, “Unfortunately, few organizations have dedicated resources to developing virtual reality for law enforcement. According to a recent published resource guide, more than 100 companies currently are developing and/or selling virtual reality hardware or software. However, none of these firms mentioned law enforcement uses” (Hormann, J., 1995, p. 10).

The actual reasons for this lack of literature reviews could be many, from a perceived lack of funds in state and local law enforcement agencies by organizations developing high tech programs to purchase such products, the lack of qualified personnel to run these high tech simulations, to legal issues surrounding the use of force by law enforcement officers. Schmeckle (2001) in her review of online training effectiveness and efficiency in training law enforcement personnel over the Internet stated, “The recent emergence of online training has provided little time for empirical data to be collected and published. There is also little literature on the use of online instruction with a population outside of academia” (p. 2).

The legal issues are seen from the perspective of past law enforcement experiences in using simulations of a low-tech form. Lawsuits by individuals claiming that the officers received, but did not use or improperly used, past training skills taught by their respective agencies, has grown into what at times appears to be a blossoming business for lawyers everywhere. Failure to train and the liability that attaches for the failure to train was first successfully tried in federal court in the City of Canton, Ohio V. Harris (1989). In this case the Supreme Court held that inadequate police training may result in the imposition of municipal liability when the failure to train could be construed as a deliberate indifference to the constitutional rights of persons with whom the police come into contact (Alpert & Smith, 1991). Law enforcement may be concerned that they may be called upon to defend their decision to use high tech virtual reality style simulations in a court of law. Since there is sparse research into the appropriateness of e-learning, there would be few examples for law enforcement personnel to fall back on in the event of a lawsuit regarding the trainings effectiveness.. How can one rightly defend the use of

computer-generated simulations as indicative of what the officer may face when on the streets?

However, when compared to the traditional tactics taught in policing organizations the use of high tech simulations (not internet based, but computer based simulations) should actually result in a decrease in lawsuits, not an increase. These simulations seem to place the recruit or officer in a scenario that more closely resembles the real world than that of a highly controlled (safe) environment of the academy or range. As pointed out by Hormann (1995), "Virtual reality can provide the type of training that today's law enforcement officer needs. By completely immersing the senses in a computer-generated environment, the artificial world becomes reality to users and greatly enhances their training experiences" (p. 2). For example, officers can learn to shoot at real (simulated via computer) targets that include civilian presence than at the more traditional paper targets. This would appear to train officers in the consequences of using deadly force in a highly populated area. Shoot and don't shoot programs, which help to teach an officer constraint, are popular courses taught in many academies. One such program called the Firearms Training System (FATS) consists of a computerized movie projector that is attached to a standard service revolver which has a laser emitting device. The computer/projector shows a scenario in which a cadet must choose to use deadly force or not. The program tests officer judgment and skill in the use of deadly force (Doerner & Ho, 1994). The future of such learning experiences may grow into downloadable simulations from internet based sites that an officer may be able to play out in their own homes (or other locations), but such applications are years away due to technology issues that have not made this use practical.

BENEFITS OF ELECTRONIC TRAINING

Regarding web based training law enforcement should receive the same benefits as those of other outside organizations. Outside organizations have found that “Web based training is paying off handsomely with lower training costs, increased employee retention, and the delivery of better good and services” (Vaas, L., 2001, p. 1). Other recognized benefits include:

1. Flexibility, Accessibility, Convenience- Learners progress through their training course at their own pace.
2. Inexpensive distribution- No separate distribution mechanism is necessary.
3. Ease of update- If changes need to be made in course content after the original implementation, they can be made on the main server, and everyone world-wide can instantly access the update.
4. No travel costs- Employers have no travel costs or lost work time for bringing remote workers to a centralized workshop.
5. Effective training- Web-based training is more than just high-tech means of connecting educators and learners who are spatially separated. Courses remain well grounded in instructional theory (Layne, 2002, p. 22).

A review of the above list of benefits of web based training reveals that the majority of the focus seems to be on costs and the benefits to the organization that chooses to use web based instruction. However, that is not indicative of the real value of web-based training to the student or the law enforcement officer. Blanchard and Thacker (1999), commenting on the value of computer-based training “is best used as a method for enhancing trainees’ declarative knowledge and, in particular, procedural knowledge. It

can be useful in developing some types of strategic knowledge, teaching some types of skills, and influencing attitudes. CBT can enhance the trainees' declarative knowledge through repeated presentation of facts, using a variety of formats and presentation styles" (1999, p. 290).

Blanchard and Thacker also describe the development of procedural knowledge by providing opportunities to apply knowledge to various simulated situations. They also report that trainees' seemed to like being in control over the pace of instruction and the use of video and audio visual effects can draws a listeners attention to the material, it can break the learning situation down into manageable chunks, making repetition of the desired behavior more likely, and it (computer based training) does a good job of modeling appropriate behavior and provides simulations in which the trainee can apply her knowledge. While Blanchard and Thacker were referring to other types of computer based instruction and not e-learning directly (web based) the uses for law enforcement as technology has increased has allowed such training to now be at least partially conducted over the web (streaming video).

Law enforcement should see some of the same benefits as any other non-governmental civilian organization. The savings in officer training time, costs of travel and materials for training, availability of outside personnel to train in programs not available locally, and flexibility should be reasons enough for expanding web-based and other computer related training (ex. virtual reality programs). The recent evaluation by Schmeekle (2000), in which she evaluated an online jail management program in Colorado using Phillips (1997) Return on Investment model found that using internet based training could save approximately \$960 per trainee or over \$110,000 per year over

current methods of instruction. Additionally, the benefits to the individual, such as the control over pace of instruction, better retention of materials through chunking (cognitive learner benefits) and interesting instructional programs (games and simulations) appear to make web-based and computer related training the future of police training. However, web-based and computer training is not without its problems.

DRAWBACKS OF ELECTRONIC TRAINING

While the advantages to web based and computer-based training appear at first sight to be a viable remedy for law enforcement training issues, there are downsides to this new technology that also should be considered. Layne (2002) identified a few disadvantages, which are:

1. Bandwidth limitations- limited bandwidth means slower performance for sound, video, and interactive graphics, causing waits for downloads which can affect the learning process.
2. Lack of human interaction- while the organization may offer chat rooms and email links to instructors, a glowing computer monitor can never replace a friendly face.
3. Not all courses are delivered well by computer- some training areas, such as topics demanding extensive hands on activities, might not be compatible for web-based training.
4. Development costs- are high; however, the greatest costs are one-time expenditures (Layne, 2002, pp. 22-23).

The bandwidth limitation is especially troubling for small agencies unable to afford the proper equipment to get web-based training up and running smoothly. The answer to this, and perhaps other monetary issues faced by the smaller agencies, could be the sharing of costs on a local basis between several agencies and/or the pursuit of grants from the federal or state government to make the training opportunity happen. The lack of human interaction has, and will continuously be, a problem for all organizations pursuing computer assisted training. One relatively new process, known as streaming video, shows great promise to solve this interaction problem to some degree. If the streaming can be two way instead of the more popular one way (more interactive) this unique process may provide the learner with the opportunity to interact with both the instructor and the class as a whole, dramatically improving the overall learning situation .

Regarding the issue of not all training can be web based, it is the author's opinion that the action oriented classes, like firearms, family violence and hostage negotiation training are still best taught in the classroom with a live instructor, especially the interactive portions of these programs. Brown observed "the internet is not always the best training option. Tasks that require the use of interpersonal skills are better facilitated through classroom role playing and one-on-one interactions" (2001, p. 2). Heckler (1999) contends "Web-Based courses tend not to be as interactive as instructor-led ones and the absence of an instructor means that most students will not push themselves as hard" (p. 4). One newly emerging area that has shown potential, however, is virtual reality programs, where the student can interact directly with a scenario controlled by the instructor or technician. This process may not be a viable option at the current time for

law enforcement (costs are high, experienced resources few) but future technology may one day make web-based simulation a reality.

Development costs will always be a problem as long as law enforcement continues to wait on the public sector to design web-based and other computer related products to use for training police and cadets. There is a slight possibility that state level licensing authorities, may be able to offer some assistance through the employment of highly talented individuals to design these programs for distribution throughout their respective state. Realistically, this is not a likely option in many states as many of the states agencies have a tendency to pay people with this type of talent far less than what they can attain in the private sector. This is one reason why law enforcement in general often appears to be a follower, and not a leader, in new techniques and technology issues. We wait for someone else to design the program and then attempt to modify it for our own use, for use which occasionally the original program was never intended to be used (in some instances).

An additional drawback to both law enforcement and the private sector is the ability of the student/employee to grasp the technology. This is not a small problem that can be dismissed, as even though computers have been available to the majority of individuals either at home, work, school or the local library; even today there is a problem with many who seem intimidated by this technology. One interesting fact noted by Moran (2000) is that fifty percent of the U.S. workers still do not know how to use a computer. It is not only the blue collar employee's who do not know how to operate a computer, as Moran's research also discovered that computer literacy was as rampant in the boardroom as on the shop floor. Perhaps we should start first with the learner before pursuing the web-

based strategies that seem to hold much promise for our future in law enforcement training. As observed by Driscoll (1999) “the learner is the neglected variable in web-based training. More attention must be paid to preparing learners for this new interactional environment” (p. 6).

Is technology intimidating? It can be, but most of the problem seems to be that they are afraid of something new that they do not understand, almost like a fear of the unknown. Recently one of the authors had the opportunity to assist one of his employees in the use of the computer to track her case load progress by using a simple windows based calendar. The fear was there, as she commented that “Oh, I don’t know anything about that sort of thing”. Once she was shown how easy and user friendly the software was no one could convince her that there was anything better for her to use to track her cases as that simple windows based calendar program. Once we solve the learner technological problems only then should we move forward to greatly increase our web-based training opportunities.

COST AND EFFECTIVENESS OF ELECTRONIC TRAINING

Unfortunately, as was related earlier in this article, there appear to be little data available for the researcher who wishes to research the cost and effectiveness of electronic training in law enforcement, other than the evaluation by Schmeckle (2000). The obvious reasons were mentioned earlier in this review and for the sake of brevity will not be repeated at this juncture. However, the researchers spent many hours searching for pertinent data only to be disappointed that there has not been any other reported reviews of this issue in the field of criminal justice (at least that were published). The availability of outside data appears to be sufficient for making general references only, as it is not

always an easy progression from the civilian world to the law enforcement environment. Perhaps it is the costs of setting up web-based training for law enforcement or the fear of loosing control over the law enforcement training agenda that is causing the problem. Without appropriate research we will not know for sure. In Texas the Texas Commission on Law Enforcement Officer Standards and Education (TCLEOSE) has recently begun to offer web based courses over the internet to Texas law enforcement officers wishing to take available online courses (there are only a handful at this time) to meet yearly training requirements. Unfortunately, at this time TCLEOSE have not provided information as to how successful the online training program has been, quite possibly due to the newness of the initiative. These online programs are not offering streaming classes and instruction, only information based text followed by on line assessment.

WEB-BASED FORECAST FOR LAW ENFORCEMENT

Law enforcement, as a general rule, has always seemed to lag behind their civilian counterparts, especially in regards to E-learning opportunities. Many outside civilian organizations have become convinced that E-learning for their employees is the answer to their prayers for an easy access, low cost method of instructing their employees. It also allows for many of these organizations the opportunities to teach their employees on a globalized basis, as E-learning can be accessed almost anywhere, and also offers a return on investment in many other ways, such as less employee downtime from work and improved morale of the employees, who can often access and take classes at their own leisure and pace.

Law enforcement has been slow to accept E-learning as an acceptable way of teaching its employees the knowledge and skills necessary to perform their jobs. This has most likely resulted from two factors: a lack of funding opportunities to address the often costly start up monies needed to begin an E-learning project, and a lack of general appreciation and understanding of the many utilities that E-learning provides for the law enforcement agency. The authors believe that the primary driving force for change in law enforcement regarding E-learning opportunities will be the constant escalating costs of designing or purchasing current training programs (including costs of personnel being away from duty to attend classes). Since there has been very few empirical studies on the savings that are available through the use of E-learning opportunities for the administrator to review there may be a delay before E-learning becomes an acceptable method of instruction for law enforcement.

A secondary driving force will be the call for innovation, primarily coming from new police recruits and the general public. Many of our new recruits have virtually been accustomed to having E-sources and E-technology available for a vast majority of their lives, from the video games that they play to the newer technologies now offered in our schools, which have offered the student another opportunity to be “up close and personal” to the technology through our local schools and universities. These employees appreciate and expect technological innovations much more easily than those persons who often express a fear and suspicion of technological innovations of any kind, many simply because they are uncomfortable with change.

As technology has become more user friendly and available to the general public, we would expect to see increasing support from the local communities for law enforcement to purchase and benefit from the opportunities that E-learning will provide. However, even the public needs to see some type of return for the use of their tax dollars, so law enforcement must also be willing to both share their thoughts and ideas (ex., success stories shared with the media) regarding E-learning opportunities, and they must also be willing to support program evaluation (ex., a return on investment initiative) to inform the public of the payoff of E-learning, whether that payoff be monetary in nature or otherwise. The monetary returns are relatively easy to show, while other non-monetary benefits often remain hidden from view. This is the primary reason the department should be open and willing to share with the larger community the results of their E-learning initiatives and experiences.

For the administrator interested in beginning or improving an already existing E-learning program, establishing a direct leadership role and seeking support from the administration is a necessary step that needs to be addressed up front before the initiative has begun. It is also appropriate for the administrator to seek outside assistance and support from other support agencies, such as the individual states licensing authorities and other private sources, such as local colleges and universities, who may have the trained technical personnel already on staff to assist in development of E-learning training opportunities. Leveraging of these resources of support will ease the transition to an E-learning supported law enforcement training initiatives for the department.

Also, being willing to initiate a multiple agency training E-learning program could result in improved in-service access and availability of training classes on a statewide basis (many classes are now offered only locally in many areas) and a reduction of time away from duty to attend classes (scheduling). York County Sheriff (South Carolina) Bruce Bryant recently showed what a little ingenuity and a lot of hard work could do towards training officers using the web as a distance-learning tool. Through Sheriff Bryant's initiative and leadership the department recently converted a former S.C. National Guard Armory in York County into not only the states newest regional academy, but he also pegged part of the training center as a virtual academy. Time and money, both time away from work for his officers and money for officers attending classes at the S.C. Law Enforcement Training Center in distant Columbia, S.C. was a factor driving the changes (Stabley, 2002). The law enforcement agency of the future will likely include E-learning in their training agenda, and will most likely come to accept E-learning as both a valuable and useful resource for developing their employees. The payoffs the organization should realize are general improvement and expertise in overall operations as training opportunities are expanded, a reduction of overall training expenses (officers no longer have to travel for training opportunities, scheduling classes is easier, and the department does not have to pay someone to design or teach a course for them), expanded training opportunities as training becomes available on line from distant locations that are now not accessible to the departments officers, and improvement in training morale as the officers are afforded more opportunities to take training at their own pace often at a location of their own choosing.

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