

## Issues to Consider for Using e-Learning Effectively: Smart Learning in Law Enforcement Contexts

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**Abstract:** *The education and training of law enforcement personnel is frequently carried out in a face-to-face or traditional classroom format. Because of the increasing numbers of employees, spread further and further around the globe, difficulties arise with scheduling, with budgets, and with facility availability to provide appropriate and effective information via the old format. E-learning has great potential to offer many advantages for law enforcement education and training, not only with savings of time and money, but also with staying up-to-date with current technology and with connecting colleagues across local and international borders. However, care must be taken with hardware and software choices as well as in preparing and supporting the users of the system. To make the most efficient and effective use of this “smart” educational technology, an “intelligent” process is suggested.*

**Key Words:** *Law Enforcement Education and Training, E-Learning, Research on Domestic Security, Police, Educational Technology, Smart Learning,*

### E-Öğrenme Metodunun Etkin Kullanımı: Güvenlik Alanında “Akıllı Öğrenme”

**Özet:** *Bu çalışmada, E-Öğrenme teknolojilerinin Polis eğitiminde kullanılması ve bu alanda dünya çapındaki örnekleriyle birlikte uygulama tecrübeleri paylaşılmaya çalışılmıştır. Polis eğitiminde, yüz-yüze veya geleneksel eğitim metotları sıklıkla kullanılmaktadır. Personel sayısının artması, hem ülke hem de dünya çapında yapılan görevlendirmeler dolayısıyla çok geniş alanda görev yapılması, personelin eğitim planlamasını zora sokmakta ve maliyetleri artırmaktadır. Geleneksel usulde güncelleme eğitimlerinin ve hizmet içi eğitimlerin yapılması çok yönden problemler ortaya çıkarmaktadır. Polis eğitiminde e-öğrenme hem zaman hem de maliyet açısından büyük avantajlar sunmaktadır. Ayrıca hem ülke içinde hem de uluslararası görev yapan meslektaşlarla bilgileri güncelleme anlamında hızlı ve kolay paylaşım imkânları sunmaktadır. Ancak bütün bu yeni teknolojiler kullanılırken, donanım ve programların iyi seçilmesi, kullanıcılara gerekli teknik desteklerin verilmesi büyük önem taşımaktadır. E-öğrenme sistemleri kullanılırken, “Akıllı” eğitim teknolojilerinin doğru bir şekilde kullanılmasına ayrıca önem verilmelidir.*

**Anahtar Kelimeler:** *Polis Eğitimi, Hizmetiçi Eğitim, E-öğrenme, İç Güvenlik Politikaları, Eğitim Teknolojileri, Akıllı Öğrenme*

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## **Introduction**

“Learning can be hard. Not learning can be even harder” (Shank & Sitze, 2004, p. xxxiv). This is true for both learners and the organizations that are responsible for their training. It is clear that technology, at some level, has now become a reality in the workplace and in education. However, as practitioners remind us, (Waterhouse, 2005; Allen, 2006; Zengin, 2007) it is not enough to have a computer budget and a training materials syllabus; groundwork must be laid for learning to take place. Approaching e-learning may initially require considerable effort to get it up and running and to have the teachers and learners up to speed and on the same page; however, the outcome can be very effective. All decisions must be made with the following caveat: “When technology is used improperly, for the wrong reasons, or without the proper resources in place, it’s likely to be slow, expensive, and inefficient” (Shank & Sitze, 2004, p. 5).

In fact, several things must be considered: while e-learning is not the right answer for every learning need, “one of its biggest advantages is the ability to easily update materials that change frequently. . . such as government regulations” (Shank & Sitze, 1994, p. xvii) or law-enforcement training procedures. In a law enforcement context, without in-service training, it is almost impossible to continually assure competent policing for society. This training is very essential not only in the transformation of the police organization, but also in creating a peaceful society (O’Rawe, 2005). In-service training in police contexts is a process of learning about the latest changes and improvements in all policing-related subjects to maintain high quality service; although in-service training is necessary for every profession, for the police, in-service training is vitally important (Kazu & Gumus, 2000).

The organization may still be debating traditional vs. e-learning formats: is one better than the other? Perhaps more useful/comprehensive questions to contemplate are what instructional methods will work best in which organizational and training contexts and which technologies will support them. From this perspective, even law-enforcement organizations that have limited access to technology can consider adding some e-learning component to its in-service training curriculum. Agencies that already incorporate e-learning can add organizational mentoring to the curriculum and employ the use of cross-organization training approaches to facilitate informed and appropriate technological exploitation by fellow agencies.

## **1. Implementing E-Learning within Organizations**

Software that is used to structure the training course, a learning management system (LMS) can be developed in-house, out sourced, or even open-sourced (i.e., free). Some examples of the latter are the OKI (Open Knowledge Initiative) within the United States, or KEWL (Knowledge Environment for Web-Based Learning), appropriate for organizations in developing nations (Waterhouse, 2005). For actual assignments and activities that can be found and used freely, the US Department of Defense (DoD), collaborating with the

Advanced Distributive Learning Project (ADL) and other organizations, has created Shared Courseware Object Reference Model (SCORM) which sets guidelines for finding and accessing learning activities to be shared across diverse organizations and diverse software platforms (Shank & Sitze, 2004; Waterhouse, 2005). Other organizations that have developed on-line learning standards include are the Alliance of Remote Instructional Authoring and Distribution Networks in Europe (ARIADNE), an EU group that focuses on computer-based technologies and telematics-supported learning tools and methods, the Japanese-based Advanced Learning Infrastructure Consortium (ALIC), the International Standards Organization (ISO), and the Global Learning Consortium (AIMS-IMS) a global group with members from educational, commercial, and government organizations (Shank & Sitze, 2004). These organizations and others have worked to eliminate global and organizational boundaries through virtual cooperation within learning paradigms.

In general, *e-learning* is defined as delivering learning materials and experiences using technology such as the Internet, intranets, CD-ROMs and satellite-transmitted video (Schafter, 2001). It assumes, at a minimum, access to computer technology by both the learners and the instructors, although not necessarily at the same time. Law enforcement agencies should keep in mind that training course delivery occurs on a spectrum; aside from traditional classroom training that uses no technology and tends to be very teacher-centered, a course can be solely technology based, or can be blended with some on-line and some on-site (either in one location or in several locations linked by satellite video) components. Shank and Sitze (2004) argue that organizations find that this hybrid e-learning approach may be a better choice than all or no technology; this may be in part because it allows for both instructor-and learner-centered elements and a variety of teaching and learning styles.

## **2. E-Learning Styles (Collaborative and Social Learning)**

Within the e-learning context, because it is challenging to always coordinate the instructor and the distance learners at a set, determined time, three styles of e-learning are possible. The first e-learning style is *synchronous* e-learning, which provides interaction between the learners and the instructors at a specified time over the Internet. Because everyone is using the same time interval, though not necessarily the same geographical location, students can communicate with their instructors and other students in real-time (Waterhouse, 2005; Allen, 2006). This style is most similar to traditional teaching methods, but does not demand a common physical space. However, when trainees are spread across time zones and have scheduled work duties, this type of format can be difficult to manage. It lends itself to team experiences such as role plays, models, simulations and experiential learning activities.

The second e-learning style is *self-directed* e-learning. Learners complete training materials by themselves without time constraints. Self-directed learning does not necessarily provide interaction among learners or with an instructor; in its strictest form, students essentially “teach” and assess themselves. Because there is no schedule,

learning is available whenever the student wants it (Henderson, 2003) which is the least disruptive to organizational schedules, but it also requires considerable self-motivation and discipline. Additionally, because some in-service law enforcement training focuses specifically on team issues, this format may not always be appropriate, but works for case studies and models.

The last e-learning style is *asynchronous* or *collaborative* e-learning, which blends the first two e-learning styles. The students can interact with the instructor and other students by using e-mail, posting their messages in discussion Webs, and can exchange their electronic documents. In this e-learning style, students do not need to be on-line at the same time. Students can share their ideas while they are working; and if they have questions, students can ask by sending e-mail or postings to the instructors or the other students (Henderson, 2003; Waterhouse, 2005). This style allows for more time to reflect on material than synchronous e-learning, but includes the feedback and collaborative components that strict self-directed learning lacks.

### 3. E-Learning Practices for Police (Law Enforcement) Organizations

Currently, many government and law enforcement agencies use e-learning for training and education of their personnel both for professional development and for updating job-specific skills. A visit to the state of Kentucky's government website shows many of the training modules available for state employees; they run the gamut of violence in the workplace to customer service in Spanish (Kentucky Personnel Cabinet, 2011). The human resources department for the District of Columbia offers language and other professional and personal development modules for both employees and the general public (Department of Human Resources, 2011; Office of Human Rights, 2011).

The United Nations (UN), the Federal Bureau of Investigation (FBI), The Royal Canadian Mounted Police (RCMP), the Australian DoD, Singapore Armed Forces (SAF), the State of California's Peace Officer Standards and Training (POST), and US Navy all have training modules on-line. E-learning affords the UN an efficient way of ensuring a base of shared, highly relevant background knowledge for the disparate people involved in issues of peace keeping. At the same time, it also allows easy access to informational modules that provide prerequisite foundational information necessary for further courses (Chan, 2002; Persons, 2004; Zengin, 2007).

The US FBI has created the Law Enforcement On-line (LEO) system, "a national interactive computer communications system and information service, an Intranet exclusively for the law enforcement community. LEO is also used as a vehicle to educate officers on the best technologies and practices in all areas of law enforcement" (LEO, 2005). The FBI Training Network (FBITN) provides e-learning environments for FBI members and officers from other police agencies (LEO, 2005). As of 2004, the US Navy offered approximately 4000 courses, including simulations, which allow personnel to assess their proficiencies and track their progress (Persons, 2004). The SAF implemented their e-

learning component as a way to augment “operational readiness and improve training efficiency” while reducing the amount of time needed for national service and active servicemen to participate (Chan, 2002). California chose to have an outside organization, Allen Interactions, create the e-learning component of the senate mandated anti-terrorism training; it includes simulations and recursive components (Allen, 2007). Many other agencies, such as the Turkish National Police (TNP) are considering the implementation of such, for it is generally agreed that e-learning is a feasible and appropriate alternative or adjunct to traditional classroom education.

Clearly, government agencies have many issues to consider and options to choose from in terms of e-learning. Particularly germane to government agencies is the major issue of security. Companies have sprung up that provide services to government agencies, (as well as industry and individuals). All of them discuss issues of security when explaining the benefits of using them. For example, one provider, GeoLearning, claims to have saved US taxpayers \$20 million dollars in the first 20 weeks of operation, and explicitly touts its strong security system, as well as its compliance with federal laws (GeoLearning, 2011).

For a law-enforcement agency to incorporate e-learning in in-service training, the e-learning must be a good fit from three perspectives. It must fit the users; that is, trainers and trainees should be comfortable with teaching and learning with technology. It must also be a good fit, or an appropriate approach, for the need or material for which it is being implemented. And, it should allow for learning access to be improved and for the training content and goals to be accomplished (Waterhouse, 2005). Practitioners advocate conducting a needs analysis to determine the response of the organization’s culture to e-learning (Shank & Sitze, 2004; Waterhouse, 2005; Allen, 2006; Zengin, 2007). Without this, efforts at incorporating technology for training will result in wasted time, money, and ineffective learner outcomes, as well as jeopardizing future attempts. Zengin (2007) recounts an example of a failed attempt at mandating technology without the technological or administrative support necessary; a needs analysis and open communication channels might have averted the negative results.

In regard to potential implementation of e-learning in-service training for a national police force, Zengin (2007) found that the current TNP trainers and trainees believed that essential for successful on-line learning would be continued support by the administration for the integration of e-learning and continuous up-to-date technology, tools, and specialists to facilitate and maintain the process. As Chan (2002) noted, “three key players are needed to develop e-learning: subject matter experts (SME), instructional designers, and the technical support group. . . . [A] critical success factor is a stable network infrastructure with a responsive first-line technical support team” (p.2).

When law-enforcement agencies are considering implementation, four advantages of using e-learning are readily apparent:

1. Flexibility—people can learn at any time of the day or night if the training is asynchronous, and they can participate across geographical boundaries.
2. Consistency—everyone receives the same quality of training, regardless of where they are located, as long as they have access to computers.
3. Quick dissemination of critical knowledge—organizations can rapidly create and offer new training without having to consider issues of mobilization of trainers/trainees into one geographical location.
4. Enhanced communication and collaboration—many communication channels can be created within and across organizations and geographical boundaries (Shank & Sitze, 2004).

From a law-enforcement agency perspective, these advantages lead to a clear savings in time and money, as deployment of personnel and disruptive organization of facilities and schedules for in-service trainings are minimized. Zengin (2007) also found that the TNP trainers and trainees believed that e-learning would facilitate in-service training material, would provide greater opportunities for professional development, and would benefit the TNP as a whole. Both the US Navy curricula as well as the SAF training experiences support these beliefs.

#### **4. Implementation of E-Learning Training Courses**

The implementation of an e-learning training course involves, in addition to computers and the willingness of trainers and trainees, other factors to be in place. It requires tech teams (graphic designer, programmers, or multimedia developers). Hierarchical organizations such as law-enforcement agencies also need to establish and maintain both top-down and bottom-up communication channels to facilitate two-way communication for e-training to be implemented and maintained effectively (Zengin, 2007), but this can be integrated into the e-learning component.

As previously mentioned, an e-learning training course does not have to happen exclusively on-line, and can use both intra and internet. An e-learning framework can stress conceptual interrelatedness and provide multiple representations or perspectives on the content. To be effective, the course should have instructional interactions; that is, a good feedback loop that influences the activity and the learner is established. The training should allow the users to apply their skills in real-life, not just hear a lecture or read about the material. Simulations that involve a multiplicity of information and multi-sensory engagement are one such possibility (Allen, 2007).

This is especially pertinent to contexts such as training in cyber crime tracking, tracing illegal organizations' networks, and updating law enforcement terrorism responses. By engaging with the material, it becomes meaningful, and an interaction occurs when the learners have to do something and get feedback in return, so that expertise is gained, rather than facts just being memorized. Thus, e-learning can incorporate discussions, debates and collaborative activities that lead to learning the material because they are

themselves the content. As Waterhouse adds, “e-learning adds a worldwide dimension to courses” as heretofore unreachable resources and guest speakers from all geographical locations are possible. She offers the example of Teaching Human Rights Online (THRO), a free website that provides exercises for individuals, teams, or transnational conferences related to issues in human rights (2005, p. 16). Time Equals Knowledge (TEK) is a website devoted to opening developing nations’ access to information available on the internet. Other sites offer organizations and educators examples of real-life effective course material organization exemplars, such as the Multimedia Educational Resource for Learning and Online Teaching (MERLOT) and the World Lecture Hall (Waterhouse, 2005).

Law-enforcement agencies intent on adding e-learning to in-service training must also consider how to incorporate a framework for a systematic, on-going feedback loop regarding the course. Some practitioners recommend the ADDIE paradigm, which involves Analysis, Design and Development, Implementation and Evaluation components and outlines each aspect, but others (Shank & Sitze, 2004; Waterhouse, 2005; Allen, 2006) argue that e-learning requires a new paradigm when considering instructional design since traditional models are not applicable because they are not comprehensive. Most agree that the linear approaches are limiting and that organizations need to have designers who can exploit the interactive multi-dimensionality of technology to ensure constant assessment and easy, effective, successful instructional materials and learning outcomes.

It is recommended that organizations comprehensively consider all these aspects before implementing e-learning. Shank and Sitze (2004) offer a checklist for organizations to determine if they are ready for technology in educational contexts. Organizations should be able to either respond positively or have a plan to facilitate changes that would result in affirmative answers to the following 17 concepts:

1. the agency and personnel will benefit from using e-technology to learn;
2. the agency has a plan for overall organizational learning, and on-line learning is an integral not separate component;
3. the agency places value on long-term development of personnel, and prioritizes learning in the budget;
4. support from all personnel is sought when changes are introduced agency wide;
5. the agency makes investments for needed change that may not show short-term positive effects;
6. the agency is prepared to deal with the complexities and constant change in learning technologies;
7. the agency has allocated personnel, budget and time for long-term e-learning success;
8. the agency is willing to integrate and maintain the requisite infrastructure to support e-learning;

9. the agency has IT personnel who are capable of providing necessary support for success;
10. the agency has the appropriate skills to provide for e-learning design, development, and execution;
11. the agency has or can get the knowledge to choose learning strategies and media appropriate for ensuring success;
12. the agency has access to in-house or outside resources and consultants for help to provide for long-term success;
13. agency trainers and trainees will have learning interactions and support needs met;
14. agency trainees are comfortable using computer technology to access and share information;
15. e-learning instructional materials are easily accessible to agency trainees;
16. agency trainees have the time necessary to use e-learning instructional materials;
17. agency trainees are willing to learn this way (p.9).

### **Conclusion**

Zengin's research indicated that TNP trainers and trainees realize the need for agency-provided resources for e-learning to be a successful context for in-service training, expect administrative support for e-learning, believe in the inevitability of e-learning, and have the willingness to take on the challenge (2007). Thus, the most important considerations for law-enforcement agencies to consider are how people learn, how comfortable people are with technology, and how compatible the organizational philosophy/context is or is willing to be with e-learning.

To assess these considerations, program implementers need to know who will use the technology, how it will be used, and who will keep it going. As technology education specialists warn (Waterhouse, 2005; Allen, 2006; Zengin, 2007), e-learning is not a feasible option if the agency and personnel support and resources are not in place and the interest and motivation are not assured in both trainers and trainees. However, given its clear potential, e-learning is a most effective, intelligent instructional choice for smart law-enforcement organizations.

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Law enforcement in the 21st century is evolving rapidly, as police face new threats and challenges along with increased scrutiny from the public and the media. The law enforcement profession is responding with significant changes in the areas of leadership, structure, culture, policy and technology. Today, the majority of departments and agencies are: Adapting to new levels of transparency that were nonexistent a decade ago. In a smart learning environment, learning can take place anywhere, anytime, at any pace. In this context, learners are likely to improve learning through their interaction (Burkle, 2003; Perry, 2003). In their studies D. Light and E. Pierson (2012a; 2012b) have focused on major changes in teacher's attitudes to teaching, their knowledge and behavior, as well as a shift in beliefs about how students learn, new teaching strategies, changes in students' learning activities and changes in how ICT was used to promote learning, including an increase in classroom management and. To effectively use ICT in teaching process, EFL teachers should be aware of each student's learning difficulties, make a deliberate decision when choosing a.