

## J6 Counterfeit Detection Training in Distributed Learning Environments

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After attending this presentation, attendees will gain an understanding of factors to consider when planning counterfeit document detection training programs for large and geographically diverse audiences.

This presentation will impact the forensic science community by providing a framework for deploying counterfeit document detection training using a combination of distributed learning, classroom training, and hands-on exercises.

In every discipline of forensic science, the most comprehensive examinations of evidence are completed by individuals with substantial education, training, and appropriate laboratory facilities. Logistical and resource considerations mandate efforts to push analysis into field environments so that preliminary information can be obtained quickly by personnel with less training and fewer resources. Examples include field drug-screening tools or presumptive tests for blood. In questioned documents, fraud detection is frequently the task of individuals for whom it is not a primary job duty (examples include bank tellers, police officers, and motor-vehicle employees). Training is critical to prepare these individuals for preliminary field counterfeit detection.

To design organizational counterfeit detection training for a large population of non-experts, several questions must be answered. Are the training recipients a large or small audience and where are they located? Will the training cover detection of a limited set of documents or a wide variety of documents? Are genuine, counterfeit, or altered documents available for hands-on exercises in or outside of a classroom environment and in what quantities? How can the behavior of complex security features that defy photography be displayed on a monitor? The answers provide important needs assessments about the document types and the balance of e-learning to classroom training.

In the United States Department of State, the Bureaus of Consular Affairs and Diplomatic Security have developed a broad strategy for deployment of fraud document detection training to a geographically diverse mix of consular and law enforcement staff that must assess a broad range of national identity and travel documents. While training on individual country documents is critically important at the local level, it is not possible for headquarters offices to build local document training for every location. Therefore, the training strategy is feature-based instead of document-based and provides trainees with an understanding of similar document security features as they are used across document types. For example, training on watermarks demonstrates watermark features in several foreign passports, birth records, and currencies to illustrate commonalities across documents of different types and from different issuers. Then, when presented with an unfamiliar document, the trainee can readily self-train on and evaluate a new watermark or other security features.

The Department of State possesses adequate quantities of genuine documents it issues for these to be used for hands-on exercises at all posts, but foreign and counterfeit documents are more restricted. Images of features in foreign documents are deployed in an e-learning format to reach the largest audience possible, with liberal use of alternate light images, video, and animation. Trainees are asked to locate the same technology in a set of physical United States documents as a hands-on exercise. By simulating different tools, angles, and lighting conditions, this distributed learning program allows trainees to examine, touch, and tilt the documents virtually, with a similar training experience that they can get in the classroom-based programs. It also serves as a job aid and provides the consular and law enforcement staff in the field with a continuity of on-demand training without having to be constrained by schedules and travel costs. For counterfeit document training, classroom exercises are necessary for two reasons: (1) because of the difficulty in demonstrating certain modalities of fraud on screen and in the absence of physical counterfeits; and, (2) because counterfeit or altered documents are in restricted supply compared to genuine documents.

This interactive distributed-learning model can be applied to many security training areas where learners need hands-on experience, continuous and exact feedback, and the opportunity to use the tools at any time. For example, the Diplomatic Security Training Center has developed training simulations of door locking systems, X-ray scanner training, hydraulic vehicle barrier systems, and simulated use of criminal databases. For both initial learning and for quick refresher training, well-designed training simulations are both very effective and very efficient.

## **Counterfeit, Training, E-Learning**

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