



D10 Blended Learning – An Effective Approach to Training for Forensic Science Disciplines

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After attending this presentation, attendees will understand the blended learning approach to forensic training and the benefits of this model, such as reducing costs and reaching more practitioners with state-of-the-art training.

This presentation will impact the forensic science community by describing how the blended learning model is a highly effective approach to forensic science training. The online environment provides many benefits to stakeholders, including best value for training delivery, collaborative learning environments, consistent content, secure access and randomized testing capabilities. In addition, robust reporting features provide comprehensive reports on performance metrics. When combined with the hands-on, scenario-based activities in the classroom, this approach to training can be a highly cost effective alternative that promotes peer interaction and produces well-trained, highly proficient forensic practitioners.

Reduction in training budgets requires agencies to carefully consider options that maximize training opportunities while minimizing cost. This presentation will provide information on the blended learning approach to forensic science training and the benefits of this model, such

as reducing costs and reaching more practitioners with state-of-the-art training.

From training members of the U.S. military to preparing forensic practitioners who work in publicly funded crime laboratories and law enforcement agencies, the National Forensic Science Technology Center (NFSTC) educates professionals on the front lines of ensuring public safety. To broaden the availability and reduce the cost of training, the NFSTC often uses a blended learning model that combines web-based distance learning with onsite instruction and hands-on activities. The distance learning component maximizes class preparation, assessment activities and learning results, while the complementary classroom-based training uses realistic scenarios that allow trainees to practice their skills in real-world situations.

The NFSTC maintains a web-based Online Learning System (NOLS) that supports blended learning by serving as a virtual learning community that includes program information, course content, resources, discussion forums, communication tools, surveys and autograded testing. Before and after each classroom session, participants complete online work through NOLS to master basic subject area knowledge or to reinforce and apply skills learned through classroom instruction, discussions, demonstrations and hands-on activities.

NFSTC's delivery of two *Latent Print (LP) Examiner Training* programs provides an example of forensic science training that was developed using the blended learning model. Offered at no cost to entry-level examiners, the selection process includes an online interactive visual acuity test. The program combines classroom training, online distance learning and practical exercises and is designed to help prepare trainees to successfully meet the challenges of certification examinations provided by the International Association for Identification (IAI).

This comprehensive, 11-course *Latent Print Examiner Training* program provides each trainee with more than 380 hours of classroom-based training over an 8-month timeframe. An additional 6 to 10 hours of online pre- and post-coursework is assigned for each of the 11 courses, providing an average of 88 hours of web- and practical-based instruction. Five 2-week classroom-based sessions are held at the NFSTC facility in Largo, FL. Between sessions, trainees complete online reading assignments, exercises and assessments in preparation for the next classroom-based training session. During the two years that these programs have been offered, the NFSTC has trained a total of 33 practitioners in the latent print examination discipline.

The most recent graduating class achieved average grades of 97.25% on individual course assessments and 93.78% on the comprehensive program assessment. In a three-part mock certification exam, grades averaged 98.4 %, 86.4% and 76.8% for each individual component. Trainees also participated in a video-captured moot courtroom testimony experience.

The blended learning model is a highly effective approach to forensic science training. The online environment provides many benefits to stakeholders, including best value for training delivery, collaborative learning environments, consistent content, secure access and randomized testing capabilities. In addition, robust reporting features provide comprehensive reports on performance metrics. When combined with the hands-on, scenario-based activities in the classroom, this approach to training can be a highly cost effective alternative that promotes peer interaction and produces well-trained, highly proficient forensic practitioners.

Distance Learning, Forensic Training, Blended Learning