Bridging the Gap Between Researcher and Practitioner

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ABSTRACT

The National Institute of Justice (NIJ) funded the National Forensic Science Technology Center (NFSTC) to facilitate the transfer of forensic technologies with potential forensic applications from research to practice. The training sessions provided instructions and presentation of research data on:

- Liquid Chromatography — Tandem Mass Spectrometry (LC-MS/MS) for toxicological analysis.
- Laser Microdissection for Examiners
- Laser Microdissection for Evidence
- Chemical Forensics and Microscale Instrumentation
- Spatial Light Modulation for Fingerprints
- Forensic Analytical Chemistry

As new technologies of forensic interest are developed, it is vital that practitioners be informed in order to promote:

- Researcher and forensic practitioner.

The objective of each two-day training session was to provide analysts with an overview of the theoretical and practical applications of the laser microdissection training was provided in two separate workshops; one with special focus for analysts and one with special focus for forensic practitioners.

RESULTS

As a result of the technical transition series, participants may be provided hands-on experience with the technology being presented. Workshops were very highly subscribed and only a small percentage of applicant attendees could be accommodated. Laboratory components of training sessions significantly limited the number of students that could be accommodated.

DISCUSSION

- Participants can interface directly with instructors and have the opportunity to ask questions, seek clarification, and discuss related topics.
- Participants provide feedback to new technology, research, and materials that ultimately benefitted the technology implementation and helped to forward promising applications.
- Participants developed new and effective training methods to facilitate laser technology-based research in practice while reaching out to members of the forensic science community.

CONCLUSIONS

- The NFSTC has significant experience in alternative methods of delivery for a variety of training purposes. A team composed of NIJ staff, researchers with subject matter expertise in the desired areas, instructional designers, and training staff to develop the model presented in this poster for delivery of their 2007 technical transition series.

The following materials and resources were required for the workshop series:

- Organizational infrastructure to sustain high-quality web-based training
- Laboratory infrastructure to support participants in the workshop

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Evaluations:

- Training evaluation surveys were conducted at the conclusion of each training session.

MATERIALS

- Electronic Capture
- Workshop Delivery
- Lecture and discussion components of the face-to-face training sessions were video captured to facilitate web-based delivery. Video captured content was:
- Production and editing equipment
- Research and development equipment
- Web development infrastructure
- Authorizations for permission to videotape were obtained from instructors and participants

Pseudonymization for Databases

- Training can be viewed from office or home
- Participants were provided with an overview of the theoretical and practical applications of the emerging technologies. It is anticipated that this blended format will be used as a model to facilitate future technical transition workshops.

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INTRODUCTION

- Instructional designers developed templates to ensure effectiveness and consistency of curriculum design processes
- Researchers with subject matter expertise in the desired areas were identified
- Workshop delivery was selected by NIJ based on the knowledge of an existing intention to incorporate the technology presented in the workshop into the participant work processes
- Training sessions included theoretical lectures, demonstrations, laboratory exercises, and data interpretation exercises
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METHODS

Development—Implementation: Delivery Steps for Each Technical Transition Workshop

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The NFSTC has provided a number of technical transition training programs, which have traditionally been presented in face-to-face training program format.

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- Workshops were very highly subscribed and only a small percentage of applicant attendees could be accommodated.
- Laboratory components of training sessions significantly limited the number of students that could be accommodated.

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