



Evaluation of UNODC's e-Learning initiative (with emphasis on computer-based training) as a modality of technical cooperation delivery and capacity building

Introduction: Programme Background

One of the major mandates for UNODC is to provide field-based technical cooperation to enhance the capacity of Member States to counteract illicit drugs, crime and terrorism. In 1995 UNODC launched a project to provide interactive computer-based training to "front-line" law enforcement officers, aimed at improving their basic skills and knowledge relevant to drug trafficking ("Enhancement of Drug Law Enforcement Training in East Asia (RASC51)"). This was part of a larger law enforcement programme between UNODC and six South East Asian countries—Cambodia, China, Lao People's Democratic Republic, Myanmar, Thailand and Viet Nam.

The project expanded over time to include training on issues such as money-laundering and anti-human trafficking. UNODC initiated a global programme in 2003, titled "A Global Approach to computer-based training (CBT) to counter illicit drug trafficking and cross-border organized crime (GLOH17)." This programme aimed at establishing a "Centre for Excellence" for the e-Learning Programme, located in the UNODC Regional Centre for East

Asia and the Pacific, Bangkok, Thailand. Currently, CBT is widely used in other parts of the world as part of UNODC's law enforcement projects.

Evaluation purpose and objective

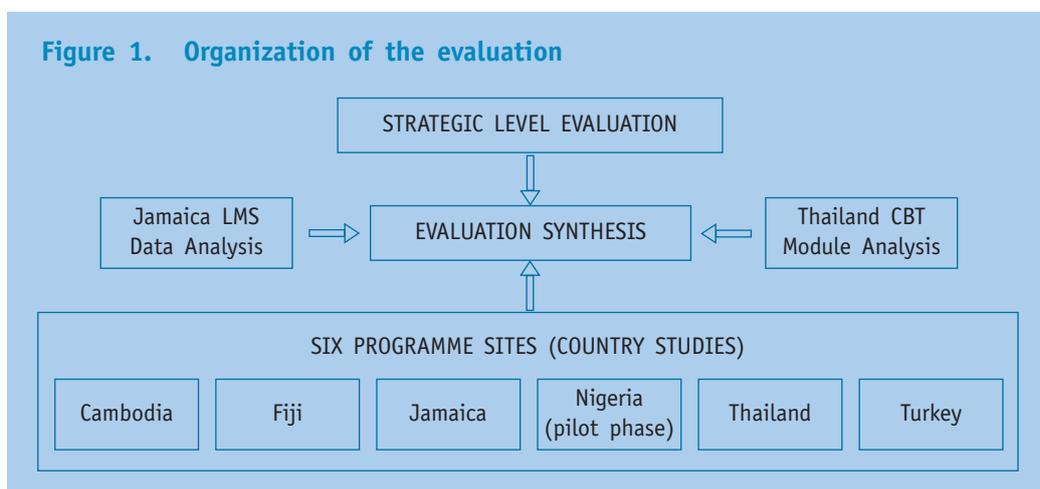
A thematic evaluation of UNODC's e-Learning initiative was conducted in 2005. The evaluation built upon past evaluation efforts and expanded the scope of the evaluation to examine issues from several levels: strategic, programme and project. The evaluation investigated questions about where and how e-Learning fits strategically within the organization, as well as questions about the content, operations and outcomes of the computer-based training (CBT) system across sites and regions.

Evaluation methodology

The approach was to utilize information from various sources, independently, to answer key evaluation questions and synthesize this information into a final analysis and report. See figure 1.

UNODC's e-Learning Programme is a highly regarded and effective method of delivering quality training

Figure 1. Organization of the evaluation



A major feature of the approach was a set of country-based studies conducted in Cambodia, Fiji, Jamaica, Nigeria, Thailand and Turkey. This country-based information was combined with other information to answer questions about the content of the training modules and courses, and the outcomes of the training.

The data used for the study were obtained from several sources: (a) headquarter and field interviews; (b) surveys for students, students' supervisors, managers of training centres and donors; (c) module content analysis; (d) document reviews and (e) Learning Management System (LMS). LMS is a management tool used at each training centre to register new students, create a customized course menu, and obtain standard student enrolment/performance reports. Pre-test and post-test scores for 446 students in the LMS system from Jamaica were collected to assess the achievement of learning.

Major findings by level of analysis

The evaluation was designed to answer questions about the UNODC e-Learning Programme across a range of issue areas. Findings were organized into four levels to reflect different programme components:

1. *Strategic level of operation*: the questions on where and how the e-Learning Programme fit within UNODC's mission.
2. *Programme design and resources level*: the questions about the design and operations of the e-Learning Programme, and resources available for its operations.
3. *Project operations level*: questions about the operations and outcomes of the different country project sites. This last set of questions attempted to learn about general characteristics of the sites' operations and outcomes, using information

obtained from across the six countries in the study.

4. *Project results level*: analysis of data from the LMS for students from Jamaica and the various survey instruments.

Strategic level

- There are general strategic priorities described in the *Operational Priorities: Guidelines for the Medium Term*, but there is no plan for enacting these that would specify a role for the e-Learning Programme.
- When matched against each stated priority, the e-Learning Programme can be aligned with each of the six priorities described in the *Operational Priorities* document.

Programme design and resources level

- The Anti-Trafficking Section is the headquarters focal point for CBT and has an overview of CBT issues. However, there is no centralized, official e-Learning Programme within UNODC at the organizational level.
- Only one existing programme, GLOH17, provides a proto-type for developing an agency-wide e-Learning Programme with structure and objective.
- The e-Learning Programme is funded on a project-by-project basis and lacks a stable funding stream.

Project operations level

- There is an effective method for establishing a CBT centre, including development of customized learning modules, computer operations, and the training of managers and staff to operate these centres.
- An assessment of the training material content shows this to be of a high quality.

- Project strengths include customized modules, flexibility in delivery, low cost and strong support from national governments.
- While the overall assessment showed a positive result, some weaknesses were identified which included the need for additional and follow-up training, insufficient training of managers, lack of funding and under utilization of the LMS.

Project results level

- A large number of participants are being trained at each examined site, many of whom would not have had access to quality training through other means.
- Interviews with students, training managers and supervisors suggest that participants are acquiring new knowledge and information, and improving their job performance. All survey respondents reported that they gained an understanding of the topic during the training with a mean rating of 4.74 on a 5-point scale.
- Empirical evidence from the Jamaica site (pilot phase), in the form of pre-test and post-test results, gives some support to the claim that students are learning (see table 1). However, there were some issues identified with the tests and their administration. The method used in calculating gain by the LMS uses the pre-test and post-test difference as a percentage of the pre-test score. This method tends to inflate the gain and weights the results for those scoring lower on the pre-test more favorably. This study used a more standard approach to calculating learning increase with these data that simply uses the difference between the pre- and post-test scores. Even with this method, there appears to be sizeable learning increase based upon standard test scores.
- Participants are selected for training by their supervisors. Data

Table 1. Average LMS test scores and learning gain of CBT participants*

Variable	Value
Average pre-training score (points)	53.5
Average post-training score (points)	84.6
Average learning gain (%)	65.6
Average learning increase (points)	31.1

*Data from the LMS on training results for 446 students at the Jamaica training centre. The data from the pre- and post-test scores cannot be generalized to the full population of students across sites.

from the LMS show that a sufficiently large number of participants know much of the information prior to the training. Current methods of student selection could be improved to more effectively target those officers who could benefit most from the training.

Outcomes, impacts, sustainability

- Overall, the e-Learning Programme is a valuable initiative that filled a void by providing a standardized approach in dealing with the subject matter.
- The training modules are relevant and new ones are being added.
- A large number of law enforcement personnel are being trained at the centres for a substantial number of hours. See table 2.
- There is a high level of satisfaction and enthusiasm for the training.
- It appears that participants are learning new skills and obtaining new knowledge through the training, and it is having a positive effect on their job performance.
- The lack of a stable funding source for the e-Learning Programme may affect its ability to continue and grow to meet future demand.

Recommendations

- CBT/e-Learning should be continued in conjunction with the other recommendations.
- CBT should be placed within a central training unit that supports activities across the organization, including internal training.
- Develop a secure funding stream for this programme that will enable it to continue and grow. (Additional funding will be required to implement many of these recommendations.)
- Conduct a staffing needs assessment and develop a staffing plan for the e-Learning Programme.
- Redesign and upgrade LMS so that it can support on-going monitoring and evaluation activities.

Lessons learned

- Pre-training—conduct a needs assessment to help shape the training milieu.
- Student selection—presently appears to be a function of participants’ supervisors. While this may be adequate, a more systematic approach may be needed for additional or advanced training.
- Provide a sufficient number and variation of training courses in order to provide opportunities for a progressive training plan, including refresher courses.
- The programme has resulted in a more integrated approach to training, one that recognizes the need to include participants from multiple agencies. It has facilitated inter-agency cooperation.

Table 2. Total number of CBT centres and trained participants

Country	Number of sites	Number of trainees
Jamaica	1	>600
Turkey	10	1,900
Nigeria (pilot site)	1	150
Fiji	4 + 1 mobile centre	90 + 127 from pilot phase
Thailand	11	10,135*
Cambodia	12	>1,188
Total**	38 + 1 mobile centre	>13,590

*Of these, 1,047 participants completed CBT training under the Cross Border Law Enforcement Officers’ project.

**Update June 2006; total 157 training centres in 26 countries. Training delivered in 13 languages to over 50,000 participants.



More importantly, it has changed the training mentality to ensure that it is an integrated function and no longer confined to one law enforcement group.

- There may be an issue across sites with funding levels for staff. The Cambodia report specifically noted that poor government salaries might pose a threat to continuing operations. This is certainly related to sustainability. But it also can be a factor in the quality of the training and its expansion.
- There are multiple opportunities for the training initiative to expand. One area where there appears to be agreement is in follow-up, more advanced training. Several sources reported there may be a different need, one that requires hands-on type of training, for which CBT would be less appropriate. This may be important when considering a comprehensive, long-term training programme.

Best practices

- In general, the practice of having participants from different agencies in each training cohort seems to be successful at ensuring

cooperation between agencies once the training is completed, but there were exceptions. In the case of Turkey, CBT was established on the condition that training was open to all law enforcement agencies. However, there has been a significant variability in the distribution of attendance—e.g. participants were mostly from police agencies and very few from customs.

- CBT training will be accessed and used if the computers are located in a convenient location to the participant's workplace.
- "Spin-off" materials may be developed by other projects using information/tools generated elsewhere in UNODC. Using knowledge generated in a different project creates added value and results in cost savings, as well as extending the "shelf-life" of UNODC products.
- Synergies between projects can result in greater coverage where otherwise, due to constraints (i.e. funding), project activities might have been curtailed.
- Localize training materials to fit specific conditions and cultural differences.

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About IEU

The Independent Evaluation Unit (IEU) is an independent unit within UNODC.

The Unit provides feedback to the organization and its stakeholders on the efficiency, effectiveness, relevance and impact of UNODC projects and programmes.

IEU provides substantive guidance and support to other UNODC units in evaluation issues and promotes the use of evaluation results to improve programme performance, outcomes and impact

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