



UNITED NATIONS
Office on Drugs and Crime

**EVALUATION OF UNODC'S E-LEARNING INITIATIVE
(WITH EMPHASIS ON COMPUTER BASED TRAINING)
AS A MODALITY OF TECHNICAL COOPERATION
DELIVERY AND CAPACITY BUILDING**

Independent Evaluation Unit

January 2006

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In brief...

This evaluation attempted to build upon earlier evaluations that examined the UNODC e-Learning program. It expanded the scope of evaluation to look at the issues from several levels: strategic, program and project. This included a review of processes (operations) and results (outcomes and impacts). Results show that UNODC's e-Learning program is a highly regarded and effective method of delivering quality training. It has the opportunity to grow and meet an increasing demand. Students show a high level of satisfaction with all aspects CBT. However, a major obstacle that may prevent this program from achieving its maximum level and effectiveness is an unstable funding stream. CBT would also benefit from having a more clearly defined position within the organizational structure of UNODC. Other issues at the operational level, such as the training and data recording systems, are noted as areas where improvements can be made to the program. Recommendations are made to address these points.

Summary matrix of principal findings, supporting evidence and recommendations

<i>Principal Findings</i>	<i>Supporting evidence/examples</i>	<i>Recommendations (where applicable)</i>
1. There is consistent evidence that the program is valuable and has filled a need for basic law enforcement training across regions and countries.	Interviews with UNODC headquarter and field staff, training site managers, student participants and supervisors.	CBT/e-Learning should be continued in conjunction with the other recommendations.
2. The positive impact from the training appears to be significant as reflected in increased knowledge and skills, and in on-the-job behavioral changes.	Interviews with UNODC headquarter and field staff, training site managers, student participants and supervisors.	
3. Data from Student Survey and other sources show a high level of satisfaction with all aspects CBT.	General satisfaction and ratings of relevance and usefulness are high.	
4. A more suitable place for the e-Learning program within UNODC at the organizational level is required.	A review of the UNODC organization and interviews with headquarters and field staff.	CBT should be placed within a central training unit that supports activities across the organization, including internal training.
5. There is a need for a stable funding stream to support the e-Learning program.	A review of the history of e-Learning projects and interviews with headquarters and field staff.	Develop a secure funding stream for this program that will enable it to continue and to grow.
6. Additional staff are required to operate and expand the e-Learning program to meet growing demand.	Discussion with CBT program and headquarters staff; review by e-Learning expert consultant.	Conduct a staffing needs assessment and develop a staffing plan for the e-Learning program.
7. The Learning Management System (LMS) used at the UNODC training sites is currently not designed for supporting an on-going monitoring and evaluation system. It is used as a data-capture system.	Review of LMS system files, analysis of data from one training site (Jamaica) and interview with system designer.	Redesign and upgrade the Learning Management System (LMS) so that it can support on-going monitoring and evaluation activities.
8. The development and administration of pre/post tests as a measure of learning gain at the UNODC e-Learning training centers has a number of shortcomings.	Review of test development and administration method. Interview with system designer.	Employ testing experts to review the current testing content, format and procedures to recommend long-term improvements in the current pre/posttest method.
9. Current methods for selecting students to be trained by national counterparts need improvement.	Interviews with training site managers, student participants and supervisors.	Employ training experts to review the current selection method and recommend methods for selecting candidates for training based upon their skill/knowledge needs within a broader training framework.
10. Presently there are limitations for recording or archiving valuable information generated from the program's operations.	Interview with CBT Program staff.	Put in place a sustainable recording and archiving system on past project operations to help track and promote the program's viability and partnership opportunities.

EXECUTIVE SUMMARY

Background

The general mandate for the United Nations Office on Drugs and Crime (UNODC) is to enhance the capacity of governments to meet their commitments under international treaties to address the interrelated thematic issues of drug control, crime prevention and international terrorism. This mandate is addressed largely through a set of programs and projects generally organized around these thematic issues (drugs, crime and terrorism) and on a regional basis. Among other things, field-based technical cooperation projects attempt to enhance the capacity of Member States to counteract illicit drugs, crime and terrorism. It is through this area that UNODC has developed and operated its e-Learning initiative (i.e. Computer-Based Training) There have been earlier efforts to evaluate aspects of the CBT projects. While these evaluation reports were valuable contributions to our understanding of how the CBT works and how well it is working, they were limited in their scope.

Purpose & objective

The current evaluation attempts to build on the past evaluation efforts and expand the scope of the evaluation to include new program developments. The evaluation investigates 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.

Methodology & research levels

The approach of this evaluation is to utilize the information from various sources independently to answer key evaluation questions, and then synthesize this information into a final analysis and report. A major component of the study was to address issues about the operations of the training centers in Jamaica, Turkey, Nigeria, Fiji, Thailand and Cambodia, the content of the training modules and courses, and the outcomes of the training. The six country-based studies provided information that was combined with other information to answer questions in these key areas.

In addition to the country-based studies, there were two other components to the evaluation that were exploratory in scope. One was an in-depth probe of the Learning Management System (LMS) for monitoring learning progress or other features of the CBT system or to determine how productive this system might be in providing information for future evaluations. A second component was to look more closely at the design and content of the training modules.

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

1. At the general, Strategic level of operation, the questions focused on where and how the e-Learning Program fit within UNODC's mission.

2. At the Program Design and Resources level, the evaluation addressed questions about the design and operations of the e-Learning Program, and resources available for its operations.
3. At the Project Operations level questions were posed 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. At the Project Results level, data from the LMS for students from Jamaica and the various survey instruments were used.

Major findings

The key findings of the report are outlined by level of analysis:

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 project.
- When matched against each stated priority, the e-Learning program can be aligned with each of the six priorities described in the *Operational Priorities* document.

Program Design and Resources level

- The Anti-Trafficking Section (ATS) is the Headquarters focal point for CBT and has an overview of CBT issues, however, there is no centralized, official e-Learning program within UNODC at the organizational level.
- Only one existing project (AD/GLO/03/H17) provides a proto-type for developing an agency-wide e-Learning program with structure and objective.
- The e-Learning program is funded on a project-by-project basis and faces the problem of lacking a stable funding stream.

Project Operations level

- There is an effective method for establishing a CBT center, including development of customized learning modules, computer operations, and the training of managers and staff to operate these centers.
- An assessment of the training material content shows this to be of a high quality.
- The projects 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 been able to access 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.
- Empirical evidence from the Jamaica site (pilot phase), in the form of pre/posttest results, gives some support to the claim that students are learning. However, there were some issues identified with the tests and their administration where improvements could be made.
- Participants are selected for training by their supervisors. Data 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 target more effectively those officers who could benefit from the training.
- There is widespread support and demand for the training and the need to expand it to other topical areas and personnel.

Outcomes, impacts, sustainability

- Overall, the e-Learning Program (CBT) is a valuable initiative that filled a void by providing a standardised 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 training centers for a substantial number of hours.
- 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 a stable funding source for the e-Learning program 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 program that will enable it to continue and to 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 program.
- Conduct a redesign and upgrading of the Learning Management System (LMS) so that it can support on-going monitoring and evaluation activities.
- Employ testing experts to review the current testing content, format and procedures to recommend long-term improvements in the current pre/posttest method.
- Employ training experts to review the current selection method and recommend methods for selecting candidates for training based upon their skill/knowledge needs within a broader training framework.

- Put in place a sustainable recording and archiving system on past project operations to help track and promote the program's viability and partnership opportunities.

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I. Introduction

A. Background and Context

The general mandate for the United Nations Office on Drugs and Crime (UNODC) is to enhance the capacity of governments to meet their commitments under international treaties to address the interrelated thematic issues of drug control, crime prevention and international terrorism. This mandate is addressed largely through a set of programs and projects generally organized around these thematic issues (drugs, crime and terrorism) and on a regional basis. Organizationally, UNODC's work program is focused in three general areas. These are: (1) Research and analytical work to increase knowledge and understanding of drugs and crime issues for policy and operational decisions; (2) Normative work to assist States in the ratification and implementation of the international treaties for the development of domestic legislation on drugs, crime and terrorism; and, (3) Field-based technical cooperation projects to enhance the capacity of Member States to counteract illicit drugs, crime and terrorism. It is through this third area that UNODC has developed and operated its e-Learning initiative.

The current initiative began in 1995, with a regional and thematic focus. The project, AD/RAS/97/C51, "Enhancement of Drug Law Enforcement Training in East Asia," was part of a larger law enforcement program between UNODC and six South East Asia countries – Cambodia, China, Laos, Myanmar, Thailand and Vietnam. This project was designed to provide training to "front-line" law enforcement staff responsible for defense against drug trafficking. Training aimed at enhancing basic skills and knowledge relevant to successful interdiction, was delivered through an interactive computer-based training (CBT) system.

The project established a model for providing this training that included:

- establishment of training centers equipped to deliver the training,;
- training material tailored to the region and country established through a needs assessment; and
- a Learning Management System (LMS) that provides training managers with important information, including student test results.

The South East Asian project eventually expanded through other projects to include other topical training issues such as money laundering and anti-human trafficking. Key to this expansion was UNODC's "A Global Approach to computer-based training (CBT) to counter illicit drug trafficking and cross-border organized crime"¹ (AD/GLO/03/H17), initiated in 2003. This program aimed at establishing a "Center for Excellence" for the e-Learning Program, located in the UNODC Regional Center for East Asia and the Pacific,

¹ Program also known as "UNODC global e-Learning for drug control and crime prevention."

in Bangkok, Thailand, in order to expand CBT and other e-Learning into other countries and regions. This was in reaction to the growing demand for the expansion of CBT training among law enforcement official and the recommendations of earlier evaluations.

The role of the Center is to support the introduction of e-Learning in UNODC field projects worldwide. This Center has been part of an expansion of the basic model to include countries in other regions (e.g. Turkey, Jamaica and a pilot-phase in Nigeria) and, as noted, to other topical areas relevant to illicit drugs, crime and terrorism, such as money laundering. While the method of delivery is still through CBT, the expansion to other regions and topic envisions a broader e-Learning Program as part of UNODC's training effort. It is this broader training effort that is the focus of the current evaluation while emphasizing CBT.

B. Previous Evaluations

There have been earlier efforts to evaluate aspects of the CBT projects. In an evaluation of the broader regional program of which the CBT was a part, Sub-regional Action Plan on Drug Control Law Enforcement Program (February 2002), the CBT component received a favorable assessment. The author concluded that law enforcement personnel in the six countries needed effective training and that CBT was the most efficient and economical method for this task. It recommended that the CBT training component be expanded.

In a second evaluation conducted at nearly the same time, Evaluation of the UNDCP Computer Based Training Project – Thematic Area: Suppression of Illicit Drug Trafficking (RAS/97/C51, April 2002), the authors focused on a more specific dimension of the CBT. While continuing to focus on the six countries in the South East Asian region, the authors attempted to look more closely at the actual operations of the training and its outcomes. Their results were organized around a set of twenty questions about the CBT, which included training results, costs, the management information system, areas for improvement and sustainability. They concluded that the program has generally met its objective, noting that it was a significant departure from traditional face-to-face training, and has enormous potential to meet future training needs. The authors recommended that UNODC support development of a Center of Excellence to provide advice and guidance on this method of training.

While these evaluation reports were valuable contributions to our understanding of how the CBT works and how well it is working, they were limited in their scope. Each focused their attention on the one region, the South East Asian region, and the six countries participating in UNODC's Subregional Action Plan on Drug Control. Since these reports, use of the CBT has expanded to other countries in different regions, specifically to Turkey, Nigeria, Jamaica and Fiji. And, new topics, such as money laundering, have been added to the training components. In addition to this limited focus of previous evaluations, the program has also changed conceptually.

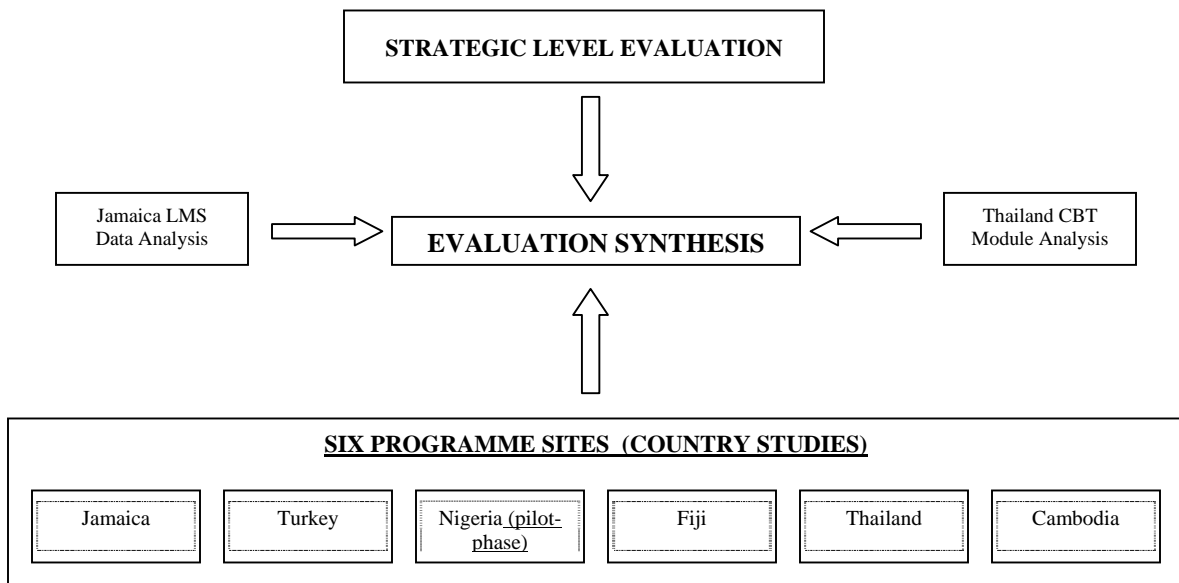
C. Purpose and Objective

With the establishment of the Center for Excellence in Bangkok, Thailand, there is now interest in viewing the CBT as one methodology in a more general e-Learning Program, a more strategic approach to delivering training by UNODC. This raises questions about where and how e-Learning fits strategically within the organization, as well as questions about the content, operations and outcomes of the CBT across sites and regions. The current evaluation attempts to build on these past efforts and expand the scope of the evaluation to include the new developments within the new environment.

D. Scope and Methodology

This evaluation attempted to assess the more general issue of e-Learning as it functions as part of UNODC’s training strategy - the “UNODC Global e-Learning for Drug Control and Crimes Prevention” initiative. UNODC defines e-Learning as, “...a structured, purposeful use of electronic systems or computers in support of the learning process.” Within this definition, CBT represents one component of that system. Realistically, it should be noted that the UNODC initiative to date consists solely of CBT. However, there is value in the broader concept, in that it suggests a more comprehensive learning strategy. From this vantage, it is necessary to address all levels of the initiative for a successful assessment. Figure 1 shows the organization of this evaluation, designed to address the e-Learning initiative comprehensively.

Figure 1: E-Learning Evaluation Structure



As Figure 1 shows, this evaluation attempted to combine information from several sources to answer questions about the e-Learning initiative. The approach was to utilize the information from the various sources independently to answer key evaluation questions, and then synthesize this information into a final analysis and report. This

schematic shows that a major feature of the approach will be a set of country-based studies that span the most current configuration of training sites. This was an added feature to the earlier evaluations that focused on sites from only one region. At this level, we were able to address issues about the operations of the training centers in Jamaica, Turkey, Nigeria, Fiji, Thailand and Cambodia, the content of the training modules and courses, and the outcomes of the training. The six country-based studies provided information that was combined with other information to answer questions in these key areas.

In addition to the strategic level and country-based studies, there were two other components to the evaluation that were exploratory in scope. One was an in-depth probe of the Learning Management System² (LMS) for monitoring learning progress or other features of the CBT system, or to determine how productive this system might be in providing information for future evaluations. In conducting this probe, data were obtained from the LMS on approximately 446 Jamaican participants. These files were reviewed and data extracted which was used to explore the value of utilizing these data in future evaluations or for monitoring. It also gave some insight into the operations and training outcomes for this population. Jamaica was selected because of the advantage of its use of English and a sufficient number of participants for the exploratory analysis.

A second component was to look more closely at the design and content of the training modules. This also was a limited, exploratory effort, designed to determine the feasibility and value of further analyses with additional modules. It consisted of using a set of scaled criteria administered by one of the evaluation team members familiar with the application of this methodology, designed to evaluate the internal quality of the course/modules. Results from this review were also used to answer questions about the content and quality of the course material. The specific module used in the analysis was obtained from courses offered in Thailand.

The data used to answer the basic evaluation questions were obtained from several sources using a number of different collection methods. These consisted of the following:

- **Executive Headquarter and Field Interviews** – A total of twelve executive level interviews were conducted by members of the evaluation team. Ten of these interviews were conducted at UNODC headquarters in Vienna, along with two field interviews conducted in Bangkok and Chiang Mai, Thailand. Individuals interviewed consisted of senior staff representing various management groups and levels within UNODC. The field interviews included John H. Irvin, Training Coordinator, Global e-Learning Project, and Henry Castiel, Managing Director, CET Digital Productions, who designed the CBT modules and the LMS.
- **Donor Survey** – A survey of four donors was conducted using the internet as the delivery and response modes. The survey used a purposive sampling method,

² LMS is a management system (tool) intended to produce periodic reports with the ultimate purpose of assisting CBT administrators.

selecting four donors for convenience among the donor populations. The open-ended questionnaire was sent electronically. An introductory e-mail message was sent to the selected donors prior to their receiving the questionnaire. Follow-up e-mail messages were sent that encouraged responding to the survey. Two of the four selected donors responded.

- **Student Survey** – A survey of student participants was conducted at the six selected sites. It was not practical to select a random sample, so a sample of convenience based upon the availability of students during site visits was used. Evaluation staff visiting each site were asked to select approximately twenty students currently enrolled in a course or who recently completed a course. A self-administered questionnaire was administered at each site. The survey instrument was developed to obtain student reaction to the training, their assessments of its value and their views on how much they benefited from the training. A total of 98 students were surveyed using this method.
- **Survey of Training Center Directors** – During site visits, the evaluation team interviewed the Directors of Training Centers. An interview guide was developed to standardize the information obtained. Interviewers were given discretion to administer this survey as best fitted each site's situation. The six interviews were summarized and used as part of a country report provided by each evaluation team member to the Lead Evaluator. The information obtained included information on the operations at each site, including use of the LMS, and the Directors' appraisal of the training's effectiveness.
- **Survey of Students' Supervisors** – During each site visit, evaluation team members were asked to obtain interviews with students' direct supervisors. An interview guide was developed and used for these interviews. The objective of these interviews was to obtain information about the effects of the training on students' performance at their jobs. These results were summarized and reported to the Lead Evaluator in each country report. A list of those interviewed for this project is found in Annex 3.
- **Learning Management System (LMS) Data** – Data were collected from the LMS on training results for 446 students at the Jamaica training center. These data were made available by the programmer and developer of the LMS. These data are organized in separate files in a software language that allows each data set to generate a separate management report. The files were rewritten as XCEL files to permit consolidation of the data into a format that would permit application of a standard statistical software package, SPSS. The purpose of obtaining these data was to explore their possible uses as monitoring and evaluation tools.
- **Module Content Analysis** – A review of the content of the standards of the CBT program was undertaken by the evaluation team. One complete module, Performing a Car Search, and a demonstration disk on money laundering and law enforcement, were reviewed using a five-point rating scale. The scale ranged from 1=lowest level of agreement to 5=highest level of agreement with statements regarding the quality of the content. The scale was applied to twenty-five criteria consisting of seventy-two item indicators, used to assess all aspects

of these learning materials. A copy of the instrument and results are shown in Annex 2.

- **Document Reviews** – A review of selected documents was undertaken by the Lead Evaluator. These consisted of documents recommended by the UNODC Independent Evaluation Unit and provided by that group for this evaluation. Notes were taken during this review and used during the analyses and the information incorporated in answers to the evaluation questions. Documents reviewed by the Lead Evaluator for this project are listed in Annex 4. Other documents reviewed by evaluation team members for their individual country assessments are not listed here.

The evaluation Terms of Reference (TORs) can be found in Annex 5.

Qualitative data

All data were processed and analyzed by the evaluation team under the direction of the Lead Evaluator. The executive interviews were summarized into key findings by the Lead Evaluator around the key survey questions. Similarly, information from the Training Directors and the Student Supervisors interviews were summarized by the evaluation team into country reports, submitted later to the Lead Evaluator. This summary followed a standard country report outline.

Quantitative data

Data from the Student Survey were processed and entered into an XCEL file by a member of the evaluation team and forwarded to the Lead Evaluator. These data were then copied into a Statistical Package for the Social Sciences (SPSS) file for analysis. Descriptive analyses were conducted with these data mainly used at explaining participants own impressions of the training. Limited data from the LMS were extracted from the various files and combined into a single XCEL file. This was then copied into an SPSS file for analysis. Descriptive statistical methods were applied to these data helping to evaluate the learning gain of participants from the pre- and post knowledge tests. Analyses results were summarized into tables and charts for presentation. Basic characteristics of the students surveyed and of those captured in the LMS knowledge tests from Jamaica are shown in Annex 1.

E. Levels of Analysis

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

1. At the general, Strategic level of operation, the questions focused on where and how the e-Learning Program fit within UNODC's mission.
2. At the Program Design and Resources level, the evaluation addressed questions about the design and operations of the e-Learning Program, and resources available for its operations.

3. At the Project Operations level questions were posed 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. At the Project Results level, data from the LMS for students from Jamaica and the various survey instruments were used.

Additionally, a content analysis of one Module from Thailand and the demonstration disk on money laundering and law enforcement was also conducted.

Below are the key evaluation questions addressed in the report.

Strategic Level Questions

- Generally, where and how does the e-Learning Program fit with UNODC's Operational Priorities?;
- Specifically, how does the e-Learning Program align with each of the Medium Term Operational Priorities?

Program Design and Resource Level Questions

- What are the specific goals and objectives of the e-learning program and are the objectives clear and specific?
- How is the e-Learning program designed and organized?
- Is the e-Learning Program aligned with and organized to meet a set of clear and specific objectives?;
- Are and have adequate staff and budget resources been available to the e-Learning Program?;
- How could resources be leveraged more effectively?

Project Operations Level Questions: How the Training Centers Operate

- What are the perceived strengths and weaknesses of the CBT training courses?;
- How can the course design, delivery and organization be improved?;
- What are the obstacles to access to the CBT training and how can access be improved?;
- What instructional support is provided to students?;
- How are students selected for the CBT and is this selection part of a broader training program?;
- How are pre and posttests formulated and administered?;
- How is the Learning Management System used?

Project Results Level: The Effects of CBT

- How satisfied are students with their CBT?;

- How much new information have students learned as a result of the CBT?;
- What are students' levels of knowledge upon entering the CBT?;
- Have participants improved their job performance as a result of the CBT?;
- Is there a need for follow-up training?;
- Is other training in this area available to students?

F. Limitations

Before presenting our results by each evaluation question, it is important to consider the limitation of this study. Understanding the limitations will help frame the results and the ensuing recommendations so that they will add to our information about the e-Learning Program without being regarded as definitive. The main limitations are:

- The sample of students in the Student Survey is a non-representative sample, having been selected for the convenience of the evaluation team. This requires that the results from this survey not be generalized directly to the full population of students trained at the six sites. While the information does offer valuable insight into the views of students, a probability sample may have yielded different results.
- Data from the LMS is limited to only one site, Jamaica, and includes information from several modules. The data from the pre and posttest scores cannot be generalized to the full population of students across sites.
- The review and assessment of the module was limited to a single example. While this may be accurate in how other modules were designed, it should not be accepted as typical of all modules in either design or content.
- Results from the Training Manager and Supervisor surveys were processed and reported by each evaluation team member visiting these sites. Even though a standard interview guide was provided and the reporting of results structured through a country site report outline, there may be variation across these reports in interpreting the results. Since no cross verification was attempted, it should be recognized that these differences may be a factor in the results from the interviews.
- The survey of donors was conducted using a purposive sample of four. This in itself is a limiting factor, given the small number and the understanding that it was not likely to be representative of the donor population. Further limiting these results, however, was the response to the survey. Only two of the four donors replied to the survey.
- Headquarters and Field Staff interviews were conducted jointly by staff from the UNODC Independent Evaluation Unit and the Lead Evaluator. A structured interview guide was used. However, as the interviews progressed, the questions were altered as the information collected began to suggest that a different line of questioning would be more productive. Responses to the open-ended questions were recorded separately by UNODC staff and the Lead Evaluator and later cross-referenced by the Lead Evaluator before being used to answer the evaluation questions.

II. Major Findings

The following section groups the findings along the major levels of analysis and their corresponding questions.

A. Strategic Level Questions

Generally, where and how does the e-Learning Program fit with UNODC's Operational Priorities?

- A review of UNODC's operational priorities (Operational Priorities: Guidelines for the Medium Term) show no specific identification of e-Learning or a more general training program as part of these priorities. However, they do state that they are meant to be general guidelines and, as such, training and e-Learning may be inferred from them. For example, Priority 5: Help establish institutions that promote international best practices, including the promotion of capacity building, could be interpreted as including training and e-Learning.
- Related documents do make more explicit mention of training as part of a strategy for accomplishing the UNODC mission. The Strategic Programme Framework on Drugs and Crime for South Africa notes, "...specific proposals for concrete training and technical assistance projects...from a strategic perspective." Additionally, this document cites continued training of border and port officials as one of its drug and crime priorities. While this does mention training in general, it should be noted that there is no specific reference to e-Learning.
- Staff interviews suggest that the problem may not be in alignment at the strategic level. A problem arises because there exists no operational plan to provide an organizational link between the existing set of CBT projects and strategic priorities. Mentioned was the need for a more specific "business plan" as a way of providing direction to the existing set of projects which now comprise the e-Learning Program. Consensus is that UNODC relies upon the general conventions as a statement of overall objectives, and the operational priorities and regional strategic frameworks as their operational plans. But these documents are too broad and inclusive, such that many priorities fit but lack a viable operational plan for their implementation.

Specifically, how does the e-Learning Program align with each of the Medium Term Operational Priorities?

- The operational priorities consist of (1) pursuing an integrated approach to drug and crime issues, (2) placing drugs and crime issues in the context of sustainable development, (3) a balanced approach between enforcement and prevention activities, (4) select operations on the basis of knowledge and strategic vision, (5) help establish institutions that promote international best practices, and (6) leveraging resources to exploit the power of partnerships.
- As noted, these priorities are sufficiently general, that it is easy to see the e-Learning Program as consistent with and support them. A related issue which

further complicates the operational alignment of e-Learning with these priorities is the use of the term “program” to describe the e-Learning initiative within the organization. This suggests that e-Learning may not be organized effectively to be part of an overall strategy as it is eventually operationalized. Interviews suggested that the e-Learning initiative is a collection of projects and not a more general program, with a set of goals and objectives that would provide the basis for its full alignment with these priorities.

- It may be valuable, nonetheless, to look at the e-Learning initiative against each of these priorities. This may shed some light on how likely they are to align, were these priorities made more specific:
 - *Pursuing an integrated approach to drug and crime issues* – As the e-Learning initiative moves to encompass a broader set of issue areas, as suggested by the money laundering training conducted in Fiji, it has the potential to provide substantive support for this priority.
 - *Placing drugs and crime issues in the context of sustainable development* – Very generally, a case can be made for the alignment of the e-Learning initiative with this priority. This priority mentions the need to integrate programs as a means for promoting sustainable development. Specifically mentioned are issue areas such as human trafficking and “narco-money.” As the subject matter of the e-Learning initiative expands to include these and other topics, it infers support for this priority.
 - *A balanced approach between enforcement and prevention activities* – The current composition of the e-Learning initiative’s topics consists of enforcement topics. It appears, however, that this range of topics could expand to include training in prevention methods, thus aligning it with this priority.
 - *Select operations on the basis of knowledge and strategic vision* – Results from this study do strongly suggest that the e-Learning training elements are demand driven. They succeed in fulfilling a training need that otherwise would go unmet. In this respect, the e-Learning initiative aligns with this priority of using a more empirical method for the selection of project. Furthermore, the training provides a vehicle for carrying out these policies at the local level by increasing the overall capacity of police and other enforcement agencies.
 - *Help establish institutions that promote international best practices* – While a case can be made that the e-Learning initiative aligns with these priorities at a general level, that case appears stronger with this particular priority. One of the operational features of the e-Learning method is the establishment of sustainable training centers that can continue providing services after the initial set up phase. The strategy for developing the curricula and organize training activities is to utilize what worked best in the past. In this regard, there appears to be a more direct link between this priority and the e-Learning initiative.
 - *Leveraging resources to exploit the power of partnerships* – This priority identifies the specific partnerships of assisted countries, donor

institutions, multilateral development banks and the private sector. The organization and procedures of the e-Learning initiative compliment these features. With donor and UNODC support, close cooperation and involvement are maintained by the assisted country. There is also the prospect of increasing private sector involvement as the topics expand to include issues such as money laundering.

B. Program Design and Resource Level Questions

How is the e-Learning Program designed and organized?

- The current e-Learning initiative evolved from a set of specific projects, beginning with the development of computer based training in the East Asia region (AD/RAS/97/C51), and evolving into a form represented by the UNODC Global e-Learning for Drug Control and Crime Prevention (AD/GLO/03/H17), that sets out a general outline for operating a program across sectoral and regional lines
- The program is organized around an e-Learning support and coordination center located within the UNODC Regional Center for East Asia and the Pacific. The objective of this center is to support the introduction of e-Learning projects into other countries and regions. The program contains a set of specific “outputs” and “activities” which specify the objectives and steps for proceeding at each project site. These steps are presented in a set of “outputs” that include:
 - Conducting an in-depth training needs assessment;
 - Identifying best practices relative to the training needs assessment;
 - Providing general assistance to CBT and e-Learning;
 - Providing Training Advisers
- The Anti-Trafficking Section (ATS) is the Headquarters focal point for CBT and has an overview of CBT issues. There is regular contact between the CBT Program and ATS regarding implementation issues, roll-out of CBT to new countries and regions and the development of new modules.

What are the specific goals and objectives of the e-learning Program and are the objectives clear and specific?

- The e-Learning Program, C51, set forth its objectives in the form of “achievement indicators” for each field project. These are described as:
 - Having an effective e-Learning strategy developed and in place
 - Delivering e-Learning to priority countries and regions;
 - Using a common approach to e-Learning across UNODC projects;
 - Applying best practices in each e-Learning project;
 - Designing and delivering quality products;
 - Having evaluation systems in place;
 - Transferring e-Learning knowledge and skills to headquarter and field offices; and

- Achieving a better understanding of e-Learning issues throughout UNODC.

Is the e-Learning Program aligned with and organized to meet a set of clear and specific objectives?

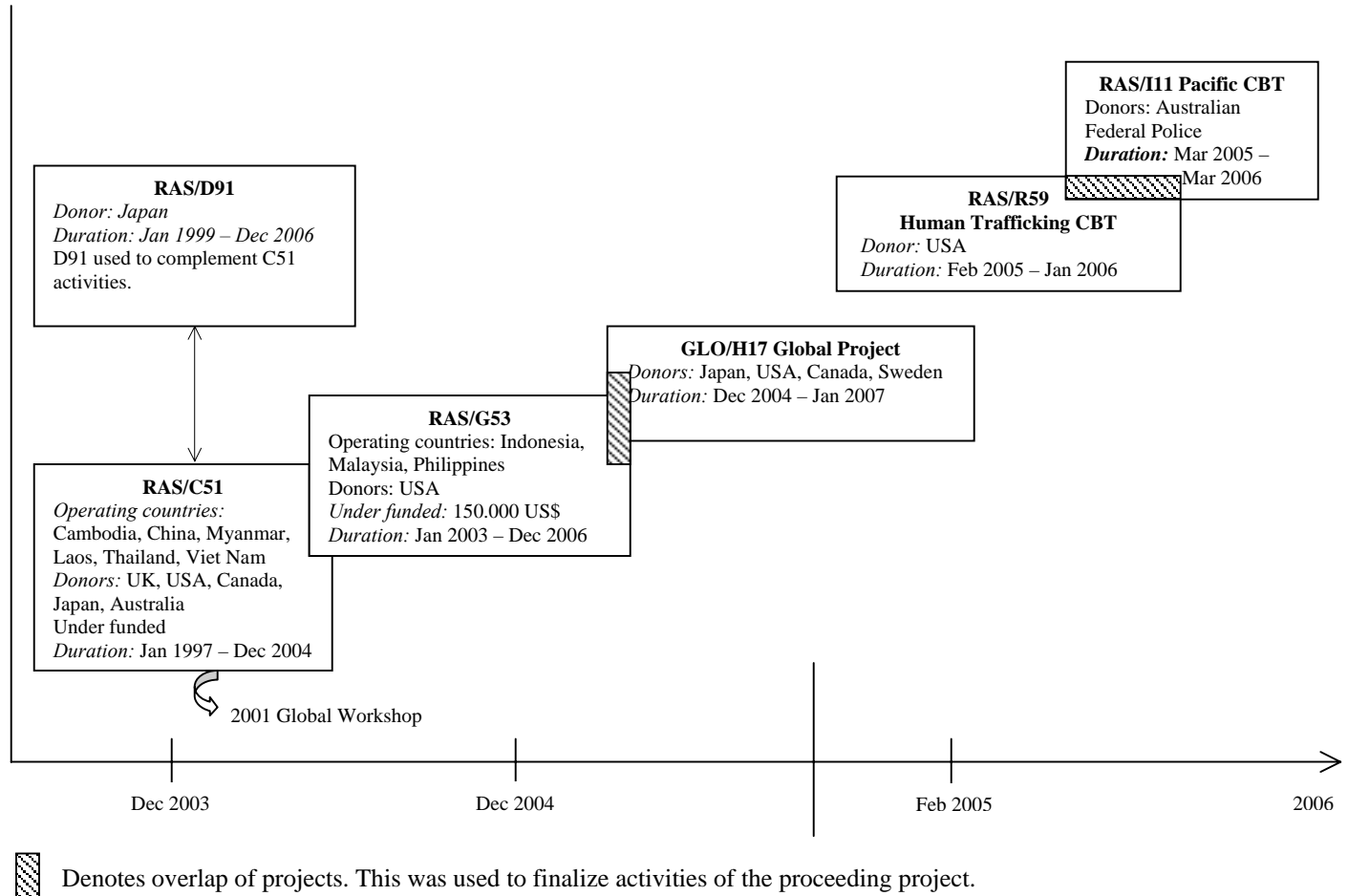
- At the program level as defined by the H17 project, there is sufficient clarity of objectives and the activities that will take place to achieve these objectives.
- However, as a program within the UNODC organization that would encompass H17, there is no identified program or agreement about what the program should be or even if there should be an e-Learning program. This may be in part because the e-Learning Program has evolved from a set of specific projects. Some staff interviewed suggested that e-Learning should be viewed as a service rather than a program, suggesting that its function, rather than its policy substance, may be a more appropriate method for integrating e-Learning into the organization. Presently, the e-Learning program lacks formal recognition as a “program” within UNODC. Given this situation, there are no specific objectives nor the means for achieving them at this level.

Are and have adequate staff and budget resources been available to the e-Learning Program?

- There is general consensus that a major problem faced by the e-Learning Program, in the past, presently and for the future is a lack of core funding.
- Part of the problem can be traced to the general funding method for UNODC. Only ten percent of the budget is supplied by the parent agency, leaving ninety percent to be supplied by donors. This has led to a situation frequently described as “donor driven.” While there is some dispute that this is the sole influence on what does and does not get funded, it is a major influence. Projects that appeal to one or more donors are more likely to be funded. This has apparently been the pattern for the e-Learning projects.
- The CBT courses developed and put into operation are highly popular and in great demand. While this has led to considerable interest on the part of donors and a willingness to fund them, this funding has not been appropriate or adequate to serve the long-term development interests of a broader e-Learning Program.
- Figure 2: CBT Development and Funding Patterns, demonstrates this situation. As the figure shows, the program has evolved over time from its initial project, C51. All funding has been through the individual projects, leaving no opportunity for strategic planning or other long-term activities. It has also made for a tenuous funding situation. The ability to retain the key individual largely responsible for the development of this capacity, and its continued support, is put into question by this funding arrangement. The expertise developed and retained presently by the Training Coordinator, and housed with the CBT Program is in danger of being lost to UNODC if the funding were to be disrupted for any period of time.

- This project-by-project funding pattern for the CBT projects is also viewed as largely responsible for the inability to develop a long-term strategic plan, and develop a full e-Learning Program.

FIGURE 2: CBT DEVELOPMENT AND FUNDING PATTERNS



How could resources be leveraged more effectively?

- Interview results recommend that changes in funding should be aimed at establishing a funding stream that would permit longer-term, more strategic planning and operations, and make e-Learning into a viable program. This would, by necessity, have to involve donors and how they presently fund projects. Funding, with their agreement, would have to be directed by a strategically driven work plan, rather than the current system where donor preference mainly drives the funding. This would likely require that some “up-front” funds be provided by donors to carry the current Global Coordinator, Mr. John Irvin, and his core staff, for a sustained period, at least two years.
- While headquarter staff interviewed felt that donors would likely welcome such a proposal and respond favorably, this opinion may not be shared by the donors.

- From the interview results of a survey of donors, the respondents held that their general policy considerations on how funds are to be used, and their yearly budget process might make a multi-year, general funding method impractical/unlikely.
- Results from staff interviews suggested that UNODC must decide where an e-Learning Program will fit within the agency in order to leverage and use resources more effectively. This would address one of the areas of confusion now present among the projects. The projects that make up the CBT training currently are cross-regional and cross-sectoral. They are present in Asia, Africa, Europe and the Caribbean, and include training in law enforcement and money laundering, with plans to begin working in anti-human trafficking. Some means must be found to manage this effort through its position within the organization. One respondent suggested that it be part of a central training group rather than follow regional or sectoral lines.

C. Project Operations Level Questions: How the Training Centers Operate

What are the perceived strengths and weaknesses of the CBT training courses?

- One method of judging the quality of the CBT training course is to view the results of the content review conducted by the evaluation team on a sample module and demonstration disk. (See Annex 2). It should be emphasized that this is only a snapshot of CBT. Overall, this result showed a high level of quality across the twenty-five criteria. Eighty-six percent (86%) of the item indicators were scored either four or five on the five-point scale. This suggests a generally high quality to the material and one of its major strengths. Only a few weaknesses were identified. However, it should be noted that the development of the programs are poorly documented.
- From the country reports, there is general agreement on some of the project strengths. Mentioned in each report is the strong commitment of the national governments and their agency counterparts of UNODC. This was stressed as creating a positive environment for training. For example, in Turkey the strong support given by TADOC management towards promoting the training, and in Thailand the strong commitment by ONCB and the Royal Thai Police was noted. Also, in Nigeria the commitment of the Government to the making JOS Academy a Regional Training Center, as demonstrated by financial support to CBT, is evidence of support for the program.
- Some other strengths cited include the availability of customized modules for each country, the integrated strategy of the learning design, relevance of the content and the cost effectiveness of the training.
- It should be noted that the tone of the country reports was overwhelmingly positive regarding the CBT. However, some weaknesses were identified in these reports. Several of those cited related to the perceived need for follow up training or more training for additional groups, or in different areas. Other weaknesses cited included insufficient funding, need to improve management skills of CBT Center managers, underutilization of the LMS, some of the CBT modules were too long and the limited number of CBT subjects/titles.

- Information on strengths and weaknesses of the CBT training was learned from the students through the Student Survey. Students were asked both questions directly. On what they found to be “strengths” of the CBT training modules, students identified content design, video/audio quality, physical features (ease of use) and attractiveness as the primary positive features. Mentioned, but far less frequently were the interactive quality of the training modules, and the tests and exercises. (See Tables 4 in Annex 2)
- As for weaknesses, they mentioned difficulty of the content, length of the module (too long) and repetitiveness/monotonous. (See Tables 5 in Annex 2) This appears somewhat inconsistent with the previous set of positive features, which included content design. It would appear that this group of students distinguished between the substance of the module’s content and its physical attractiveness.
- Also mentioned as a weakness was the response that the module did not fit the local environment. One of the planned features of these modules is to “localize” them by making the content fit the participating country’s environment. This view is supported further when students were asked how they would improve the module (Table 6 in Annex 2) and what changes in the module would make the training more effective (Table 7 in Annex 2). In their response to both questions, the most frequently cited item is to make the module fit the local context.

How can the course design, delivery and organization be improved?

- Students were asked this question directly in the Student Survey. (See Tables 6 and 7, in Annex 2) Their suggestions included making the modules more tailored to the local environment, adding additional information, using better animation, covering more topics and shortening the modules. They also mentioned adding more computers, having the training centers in convenient locations and increasing the number of topics as well as obtaining some basic written materials to take home.
- These topics were also discussed with the Center Managers and Supervisors, and are reflected in the country reports. Generally, it should be noted that there is a positive view of the CBT by these parties. But there were some suggestions on how the CBT could be improved. These included fixing the existing minor software problems, improving the method of student selection, developing more CBT course titles, assisting training site managers to understand the needs of all law enforcement agencies, not only the police, and improve interagency communications to help recruit more trainees and improve the follow-up of graduates in order to assess if they use the knowledge acquired.

What are the obstacles to access to the CBT training and how can access be improved?

- Students were asked what factors made it difficult or easy to gain access to the course. These questions were not easily understood by those completing the Student Questionnaire, resulting in a number of missing items across the training sites. However, some insight was obtained from those who did answer the

- questions. Obstacles cited include favoritism in selection, selection by seniority, hard to find time for the training because of work schedule and/or duty post, and a limited number of available spaces.
- Students cited a number of factors that facilitated their access to the CBT. These included duty position and/or schedule, their own strong interest, support from a supervisor, having computer knowledge and ease of registration.

What instructional support is provided students?

- This question was asked as part of the country studies. From these results, it appears that such support is minimal, and provided on a formal and informal basis. None of the sites reported providing any written material to students in support of their CBT training. However, Training Center Managers and their staff are usually available to assist students, to some degree, with content. And, it appears that IT support is available to all students as needed.
- Direct conversations with students at various sites confirmed this general situation. These students did not feel this was a major distraction from the benefits and their positive feelings about the CBT.

How are students selected for the CBT and is this selection part of a broader training program?

- Site interviews show that selections for CBT are made by the students' supervisors, or heads of their agencies. This held true not only for the pilot program observed in Nigeria, but for the other sites as well, all of which were beyond the pilot stage.
- The Student Survey, when asking about some of the weaknesses of the CBT, found that favoritism in selection by supervisors was an issue. It was also noted that other factors, such as schedules and current assignments, go into this decision.
- For the most part, the CBT training is not part of an overall training program or strategy for participants. This may, however, be due to the relative newness of the CBT training project, not having been in place long enough to be incorporated into the centralized training apparatus. For example, in Jamaica it was reported that there is consideration to incorporate the CBT training into the general police population training, making it mandatory for all incoming officers. And, the report for Turkey states that the CBT training is being used in this manner, as mandatory training for new officers.
- Much of the perceived benefit of the training is that it provides some needed basic skills for the law enforcement groups attending. One site manager indicated that using this basic training as a mandatory part of a broader training program was being discussed, but may be curtailed because of lack of funding.

How are pre and posttests formulated and administered?

- Information about the structure and content of the pre/posttests was obtained through interviews with the Managing Director of CET Digital Productions, and the developer of the CBT modules, including the tests. According to this source, the tests were developed for each module by either Director of CET or the, UNODC Training Coordinator, subject matter experts or a combination of these three. Responsibility for the formulation varies across modules. The tests are translated into the language of the instruction.
- The tests consist of choice or multiple-choice questions with from two to six choices. Most questions have four or more choices. The test questions and testing procedures are used and vetted during the pilot phase of the CBT, although it is not clear that all tests have been included. It does not appear that the tests or test-items have been reviewed by testing experts for their psychometric properties or qualities.
- A single pool of questions is provided from which both the pre and posttest questions are drawn. Questions for each test are selected randomly. The same questions can appear on both the pre and posttest. It is estimated that there is a 60% to 70% overlap in the questions on the pre and posttest. Some of the test items were also used in the instructional programs themselves. Students may take the posttest more than one time until a passing grade is obtained. This grade varies by site but is usually set at 70%. Pretest scores of 70% or better are used at some sites to exempt student from taking the module.
- The tests are administered on the computer as part of the CBT system. From the country reports and interviews with training center staff, it appears that there are sufficient safeguards in place to prevent collaboration among students when taking these tests. For example, students are monitored closely during tests by Center staff.

How is the Learning Management System used?

- The LMS is structured so that data collected electronically on each student is streamed into a set of separate files, each designed to support standardized reports. There is no common link between these files and a number of redundancies exist in their elements, although these are needed for the reports. For example, posttest scores are contained in several of the files. A number of the files are organized around the individual student and a common student identification code appears to exist across these files. Other files are organized around other elements, such as the modules or courses, and do not include a common element that could link them. A separate file exists for the students' Level 1³ reaction data that has no identifier because of the desire to maintain confidentiality. This means that any of

³ Level 1 evaluation extracts information on participants overall satisfaction of the training immediately following the event. Level 1 information usually includes measures of the overall quality of the content, presentation and relevance of the training. See "Evaluation Training Programs: The Four Levels" by Donald L. Kirkpatrick, 1994.

the Level 2⁴ testing data cannot be linked to the Level 1 reaction data. Had this link been possible, a relationship could have been established explaining learning gains by training relevance and quality aspects.

- It appears that the LMS is under-utilized at all levels. This data system has the potential to provide UNODC with the basis for a solid monitoring and evaluation system that can extend across sites. At the present, no consideration is being given to this opportunity. At the site level, managers do not use the results to enhance the operations of their facilities. According to the country reports, the results are to, "...manage the training and to generate reports on the number of participants..." (Thailand Country Report) Some of the standardized reports generated are used, but there is no consistent application of these results to improving the operations or management of the facilities. Some use is being made of the reports on individual students by their supervisors. Both participants and their supervisors noted that the training results were used internally as an indication of merit or achievement. This is tied to their successfully completing the training. A more explicit account of how this information is used at that level would require additional data and is beyond the scope of this report.

D. Project Results Level: The Effects of CBT

How satisfied are students with their CBT?

- Data from the Student Survey show a high level of satisfaction with all aspects of the training. (See Tables 1 and 2, Annex 2) General satisfaction and ratings of relevance and usefulness are high especially in Nigeria, Cambodia and Jamaica. In Turkey and Fiji ratings are slightly lower, and in Thailand, much lower. Participants also report being very satisfied with the effectiveness of the instructional methods used. The ability to explore what factors may contribute to these levels of satisfaction was not possible due to the difficulty of accessing data from the LMS
- Country reports results support the views expressed in the Student Survey. Both training site managers and student supervisors express a high level of satisfaction with all aspects of the training. They give special recognition to its bringing needed training to target groups and to areas where that training is needed, the ease with which it can be delivered and its effectiveness.

How much new information have students learned as a result of the CBT?

- Evidence of learning gain comes from several sources. Interviews with Training Site Managers and Supervisors contained in the country reports strongly indicate

⁴ Level 2 evaluation measures the average learning gain of participants by testing their knowledge of the content of the training immediately before and after the training and then estimating the difference in the average test scores. See "Evaluation Training Programs: The Four Levels" by Donald L. Kirkpatrick, 1994.

that these key groups believe that significant learning is taking place. This view was consistent across country sites.

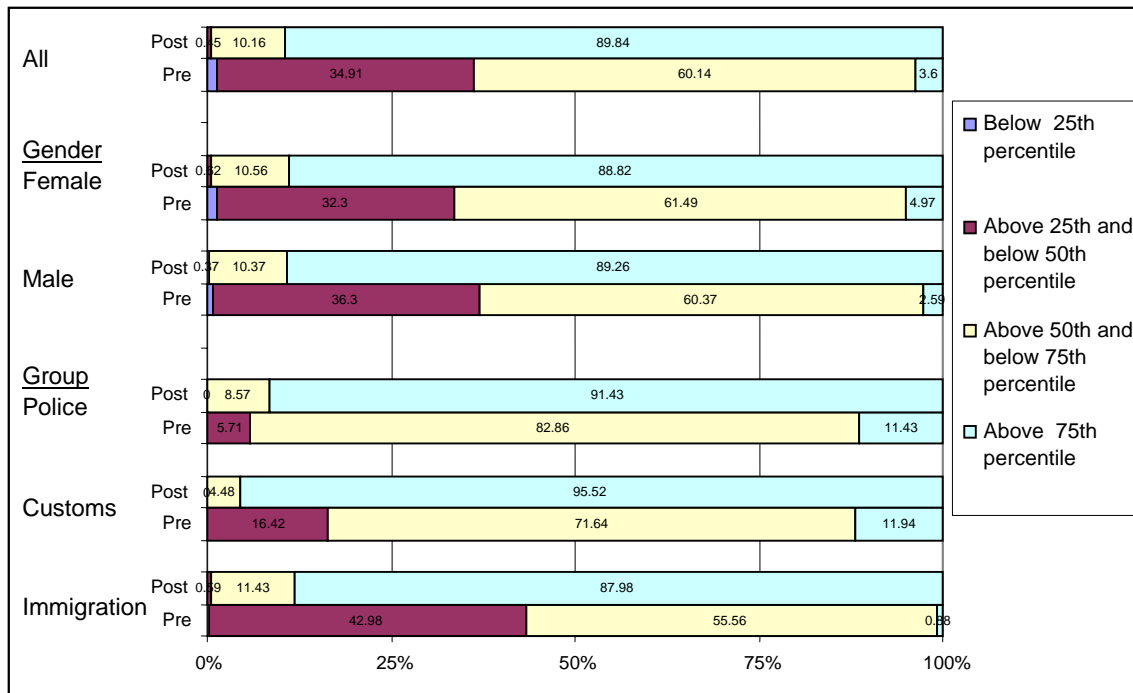
- Evidence from the Student Survey show that students believe that they have gained considerable knowledge through the CBT. All survey respondents report that they gained an understanding of the topic during the training, with a mean rating of 4.74 on a 5.0 scale. (See Table 2, Annex 1) In Turkey, all respondents gave the highest rating (5.0) on this item. This is consistent across countries, with a lower gain reported by the Thai site. And similar gains are reported in the other learning areas with the same general consistency. While this is based upon students' impressions, it is consistent with the Managers and Supervisors' views, and the LMS data reported below.
- The Student Survey additionally asked students to rate their knowledge gain in key areas using a "post-then" method of assessment. This method asks respondents to consider their levels of knowledge for given topics before and after the training, after they have taken the training. This gives respondents a common reference point for making a judgment. Results are shown in Table 3, Annex 1, by topic for the overall population of students and for each country group. The overall results are generally consistent across items. Students tend to rate themselves about two scale points higher after the training on almost all of the items. There is some variation among country groups. For example, on a number of items, Thailand appears to rate their achievements lower than others. But the overall result is that on these key areas, students believe they have learned substantially.
- Data from the LMS on students at the Jamaica training site also show evidence of learning based on the standard pre/posttest results. The method used in calculating gain by the LMS use the pre/posttest difference as a percentage of the pretest score. This method tends to inflate the gain and weights the results for those scoring lower on the pretest more favorably. It is also difficult to interpret this value. This study used a more standard approach to calculating learning increase with these data that simply uses the difference between the pre and posttest scores. Even with this method, there appears to be sizeable learning increase based upon standard test scores (Table 1). The average percentage learning gain as well as the average number of points learning increase are reported and compared in Table 1. At the average trainees improved their test scores by 31.1 points after attending the training.

Table 1: Average LMS test scores, learning gain and learning increase

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

- The improvement in test scores after the training as compared to before the training is easily understood by studying Figure 3 (and Table 8, Annex 1). Figure 3 displays the share of test scores below the 25th percentile, between the 25th and the 50th percentile, between the 50th and 75th percentile and above the 75th percentile for all students, by gender and by group of employment. For all students, 35% scored below 50, 60% scored between 50 and 75 and 4% scored above 75 in the pretest. At the posttest, the distribution moved up the scale and only 0.5% scored below 50, 10 percent between 50 and 75 and as many as 90% scored above 75.

Figure 3: Distribution of LMS test pre- and post-training scores by gender and group



- Overall, the convergence of evidence suggests that students are learning, and may be learning significant amounts, through the CBT. It should be recognized that the LMS data are only based upon a single site, Jamaica. And, lack of additional data made it difficult to determine what factors may be associated with learning gain. For example, information about the educational background, prior training, job experience and age may have made it possible to expand the analysis and help explain variations in learning gain. It should be noted, that this was not an objective when this system was designed, and should not be interpreted to fault the present system.

What are students' levels of knowledge upon entering the CBT?

- This question was raised in order to examine whether the most appropriate groups were being selected for training. As noted earlier, one weakness in the program suggested by some respondents to the Student Survey was that selection

preference directed more frequently to senior staff. If this is the case, these senior officers may have more information about the topic and be less in need of the training than others. To test this hypothesis, we examined the distribution of pretest scores from the LMS from the Jamaica training site. It should be noted that this test would have been more meaningful had the seniority of the participants been recorded. As cited previously, this is a piece of participant background information that is not part of the LMS but which could prove valuable. (See Table 8 Annex 2)

- These results show the pretest scores by quartiles. As is evident, the scores tend to cluster more heavily in the higher ranges, with over 63% falling in the two quartiles above 50%. It means that those entering the course do so knowing at least half of the material. This may not be reflecting the knowledge of the students upon entry, but could be caused by other factors, such as the difficulty of the pretest itself. But if these results do show the level of knowledge upon entry, it does suggest that training is not being offered to those most in need. It should be noted that these are results from only one country site, Jamaica, and should be verified with other sites in other countries before concluding that this is an issue. And, there is some evidence that this may not apply equally to all countries. For example, in Turkey the training is mandatory for all new police officers. However, these findings are consistent with the basic hypothesis and, whatever the cause, should be of considered when viewing the possible usefulness and effectiveness of the training.

Have participants improved their job performance as a result of the CBT?

- Information from the Supervisor Surveys contained in the country reports address this issue. According to these reports, supervisors give a great deal of credit to the CBT for improving on-the-job performance by students.
- This question was also asked on the Student Survey. Here, the results are somewhat more mixed. These results are based upon two survey questions that asked students to rate how much they agree with the following statements: 1) The course information made a positive difference in my work; and 2) The course information helped me do a better job. Overall, students reported a high level of agreement with these statements. (See Table 1, Annex 2) But a breakdown by country shows a more diverse pattern. Students from Nigeria, Turkey and Jamaica were consistent with this overall pattern. However, those from Fiji and Cambodia gave considerably less support to these statements.
- While it appears that there is much expression of support for the idea that students do a better job because of the training, it should be noted that this view is not universally held, at least by students.
- The issue of whether participant job performance is being positively affected by the training cannot be fully assessed in this evaluation. An evaluation that can look at this issue of training impact will require a more focused and technically demanding research effort. But the information collected does give us some insight into the issue and a strong likelihood that there is some positive effect on job performance by the training.

Is there a need for follow-up training?

- This question was asked specifically of the Training Managers and Supervisors, and is reflected in the country reports. Almost all reports address this issue and concur that there is a high demand for additional training. There were some specific recommendations made regarding the form that this follow-up training should take. One recommendation was for “refresher” courses. Another cited specific content for new or additional modules, such as identification of precursors or advanced surveillance techniques. A third even suggested that face-to-face training be provided as follow up.
- Discussions with subject matter experts at the Headquarters also addressed this issue of follow up training. The point of view was presented that the current CBT training works well in part because it is introductory. While the need for additional, follow up training was acknowledged, it was also suggested that this new or additional training, might not be appropriately delivered as CBT. This expands the issue from one of a focus on CBT to the broader issue of more general training and its role within UNODC.

Is other training in this area available to students?

- Again, this question was asked of the Training Managers and Supervisors and is reflected in the country reports. The purpose was to learn of alternatives to this training. There was some evidence of other training. One site mentioned the existence of some comparable internal training and training from other donors. But most felt that it was not on the scale of the CBT, nor was it as consistent or of a high quality.
- A question was asked on the Student Survey directly relevant to this point. Students were asked to respond to the statement that; “The information can easily be obtained somewhere else.” Except for respondents from Cambodia, it was clear in the low rating given this item that students felt there was not an alternative source. The Cambodian was 3.0 versus an overall average score of 2.44 on a 5.0 scale. While this score is higher than the average, it is not in the very high range, suggesting that there is considerable support for the point that the CBT may not have alternatives in these countries. (See Table 1, Annex 1)

III. Outcomes, Impact and Sustainability

A. Outcomes

Program or project outcomes relate to the more immediate effects produced. In this regard, several stand out for the e-Learning Program:

- The method developed by the UNODC Training Coordinator for assessing training need and installing a CB training system appears to be highly effective. The present method has been refined over time and across projects to produce a system that is largely effective in delivering the training with perceived positive results.

- There is a high level of satisfaction with the training among key groups. These include the training participants, their supervisors and the training site managers. This satisfaction spans both the content and effects of the training. These key groups believe that the training is effective, new skills and knowledge are being learned and job performance enhanced.
- A large number of participants are enrolling in and completing the training, for a substantial number of training hours. One of the stated objectives of this initiative was to fill a needed gap in providing basic training that was cost effective and accessible. A total of 38 training centers are up and running and more than 13,000 participants have been trained according to information available at the time of this evaluation- as Table 2 shows.⁵ The value of such training is also being recognized within UNODC for application to other regions and topics. Additionally, there appears to be substantial in-country support for this training and an appreciation of its value.

Table 2: Total number of CBT centers 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 center	90 + 127 from pilot phase
Thailand	11	10,135*
Cambodia	12	>1,188
Total	38 + 1 mobile center	>13,590

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

Overall, the outcomes of the CBT are positive. National governments and UNODC agencies remain engaged and strongly committed to the training in all of the countries. Evidence from some countries point at increased interest for the training and some training centers have been expanded to accommodate more participants. Participants and training managers have provided much positive feedback on the training and the pre-post training knowledge assessment indicated that the training largely increased participants' knowledge base.

B. Impact

Program impact is much harder to assess given the limitations of this evaluation. As noted previously, two of the major impacts to assess are true learning gain and improvement in job performance, both as a result of the CBT. There is ample anecdotal information, and some empirical evidence, that the training has been effective in bringing about these changes. Key groups – participants, training site managers, and supervisors – endorse the conclusion that participants are learning new skills and information, and they

⁵ It is understood that in December 2005 the number of training centres now established totalled 122 in 19 countries delivering training in 13 languages and that an estimated 50,000 students have now received training.

are, as a result, doing their jobs more effectively. Additionally, the pre/posttest data collected through the LMS show that students do score substantially higher on standardized tests after receiving the training. This information should not be ignored and may prove valid in the long run. However, before concluding that the CBT is having this effect, a more rigorous evaluation should be employed to validate these findings and provide more detail on the magnitude specifics of increases in knowledge and job skills.

In addition to the direct feedback received in the Student Survey and the individual country reports and tests of participants learning gain there is some evidence of impact on participants work performance as a result of the training. In Turkey, for example, site managers received positive comments from line managers on officers' performance after they have returned to work. Line managers reported that, after having taken CBT, their staff "seem more confident," "knowledgeable," and "performing better than before (e.g. some officers appear more engaged, asking many questions to their authorities during an investigation, apparently trying to learn more about the operation)." In Fiji, the Financial Intelligence Unit (FIU) of the Reserve Bank of Fiji and Customs considered the CBT training to be adequate and that it gives a standardized level of instruction across the organization, trains participants to a high standard, and increases the quality of the workforce. In Cambodia, the Head of Customs at Phnom Penh's international airport linked a series of drug seizures to techniques (i.e. profiling, body search etc) that officers had learned in the CBT training. And, in Nigeria two banks reported that officers had thwarted three money laundering attempts following the training of two bank officials.

C. Sustainability

The issue of sustainability relates to two levels. At the broader, UNODC level, there is, above all, the need to address the problem of a stable funding stream. As noted, the current funding pattern is project-by-project, with donor support that is focused narrowly on a given project that may fit within their particular policy framework. This system, however, does not ensure a reliable funding mechanism by which a program can be developed effectively over time. Adding to this instability is the organizational question: where does the e-Learning Program fit within UNODC? Its demand has come from the two Branches within the Division for Operations- - the Human Security Branch and the Partnership in Development Branch. But the program really has no organizational-level home.

The second sustainability level is at the project site level. The key question here is whether these training sites and their function will continue without UNODC direct support or indirect support through donors. The country reports point out that there appears to be strong in-country support for the continuation of the training centers. This support includes the evidence that government time and resources were committed in their set up and maintenance.

The evaluation shows that, even with the increasing demand for CBT both from within and outside countries, the CBT program is generally sustainable in all countries. At the country level, local agencies have committed funds to ensure the continuation of the

program by establishing their own CBT centers. CBT training is entrenched in the training practices of the organizations using it. However, as agencies are requesting additional CBT modules to be developed to assist them in their training, flags are raised for a continued sustainable program expansion.

In general, agencies involved have used the LMS to select modules and develop them into courses that meets the needs of their participants. There are some indicators that show that the LMS may have to be adapted to better meet the needs of the program administrators and the participants. Also, particular attention must be given to how LMS may improve student selection and occupancy rate of workstations. Furthermore, the challenges take on different forms in the various countries. The main issues for sustainability are:

Turkey

- Staff resources: Site managers and TADOC CBT team have, in addition to their work on CBT, other “regular assignments and responsibilities” (e.g. police work; IT operation in general for a whole agency) – and feel somewhat “stretched.”
- Expenses of satellite sites: TADOC CBT uses its own funds to pay for various expenses incurred at nine other sites (e.g. internet connection fees, hardware maintenance costs, etc). Eventually TADOC will need additional funding in order to expand CBT.
- Level of support from UNODC: Reported as “generally, sufficient.” Managers, however, noted that they would like to have “refresher training” for CBT managers themselves, and would prefer a “more comprehensive initial training for site managers. TADOC also would like support from UNODC in its establishment of two mobile CBT teams.

Thailand

- Irrelevance of pre and post-tests: There is some indications that the pre and post-tests are not directly related to the objectives and drawn from a relatively small test item bank, which may indicate that the test are not an effective assessment of the participants’ abilities.

Nigeria

- Expandability of the program: As this is a pilot project, sustainability will depend on whether this pilot is converted into a long-term program or not. Further, sustainability will depend on creating satellite centers that serve more people.
- Level of support from UNODC: Although the program is still in its pilot phase, the CBT center is operating well with the support from UNODC and the Government of Nigeria. The sustainability of CBT in Nigeria is nearly guaranteed because CBT is only a part of the broader training offered at JOS Academy. Further, the Nigerian Government has committed financial and human resources to CBT and as part of a regional effort.

Fiji

- Lack of computers and manpower: The major problem in expanding the training is lack of CBT computers in the appropriate locations. Another problem is the

lack of manpower in the FIU for marketing and supporting the CBT training to other agencies. Also there are potential issues with licensing of the CBT program so that the commercial banks can conduct their own training in house.

Jamaica

- General lack of resources for expansion: There is a general plan to move the basic CBT training for law enforcement officials to those directly involved with combating drug trafficking. This would take the form of introducing the course as a basic requirement for all police recruited into the national system. However, the general lack of resources for this expansion, such as computers and staff, is an obstacle.

Cambodia

- Level of support from UNODC: The CBT centers have been operating (after the initial set-up investment) with limited support from UNODC. This has been in the form of a salary subsidy for centre managers and monitoring progress to date. The fact that Customs established its own centre, with UNODC only contributing the software, is an encouraging sign and serves as a model to be emulated. However, national authorities interviewed did express concern that due to financial limitations, it would be difficult to replace/upgrade the hardware in due course.
- Minimal contact between the UNODC e-Learning team and the Cambodian counterparts: Given the staffing/funding realities of the e-Learning team, it is unrealistic to expect any substantial working relationship to be established. If structural obstacles could be overcome, then a more effective use of CBT could be obtained (i.e. technical assistance, training centre management skills enhanced etc).
- Lack of a tracking system of “graduates”: Currently, there is no formal requirement for the officers who received CBT training to stay in jobs where their newly acquired knowledge may be put to use. An added benefit of a tracking system is that it would facilitate more advanced evaluation methodologies to be applied.

In the long run funding will be an issue, especially where there is a desire to expand the number of training sites. Turkey and Jamaica, as explained, note the need for additional funding to expand, as does Fiji. The Cambodian report notes the expected difficulty that will occur when there is a need to upgrade or replace equipment. Jointly, this suggests that some continuing support, if not direct funding, may be needed to sustain the training centers in the longer term.

This is a challenge for UNODC, the donor community and the national governments jointly.

IV. Lessons Learned and Best Practices

A. Lessons Learned

The evaluation identifies a number of lessons learned from the Program and the various

country experiences. Most importantly, the enthusiastic support of management has ensured that the training is integrated in the training mentality of the organizations involved. Especially, the success of pilot phases (such as the one in Nigeria) is due to the Government commitment, collaboration and support for UNODC efforts. Furthermore, the location of the CBT within the East Asia Regional Center and making the CBT training part of the on-going training encourages sustainability.

Developing a wide range of courses using the CBT modules ensures that participants receive only the training that is relevant and useful for them in the performance of their duties. Additional needs assessments may be required to understand the scale of the problem that is to be addressed, additional training and scheduled refresher courses for training centre managers could be needed and more emphasis on student selection and prioritizing so as to reach the correct target group and attend more “urgent” sectors/geographic locations first should be used.

Moreover, CBT can serve as a vehicle to promote inter-agency cooperation within a country, especially when and where mistrust and jurisdictional competition is prevalent. CBT should develop synergies with projects dealing with similar issues that are/may be implemented in the country/region. CBT may potentially piggyback on these projects. Finally, when it comes to funding, socio-economic realities, such as poor government salaries, may threaten center operations if alternative solutions to motivate managers are not found.

In summary:

- Greater thought should be given to “pre-training” issues. This includes more work on conducting needs assessments to help shape the training milieu. Also noted was the need to address student selection into the training. Presently, this appears to be a function of participants’ supervisors. While this may be adequate, especially when basic training is provided, a more systematic approach may be needed for additional or advanced training. Complementing this is the need to provide a sufficient number and variation of training courses in order to provide opportunities for a progressive training plan, including refresher courses.
- The CBT program has created enthusiastic support among law enforcement officials across departments. This 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. More importantly, as was pointed out in the Thailand report, 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 may 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. Some of these were mentioned in the country reports and interviews at the various levels. One area where there appears to be agreement is in follow-up, more advanced training. Several sources reported that 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 program. Also mentioned was the use of more flexible methods for training delivery, especially appropriate for situations where a centralized training center may not reach all who need and can benefit from the training. One example cited was the use of mobile CBT units that can bring the training to the participants.

B. Best Practices

From interview and the country reports, a number of best practices were identified, including:

- 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. For example, in the case of Turkey, this was one of the “problem” areas. CBT was established on the condition that training is open to all law enforcement agencies; in reality, however, due to inter-agency competition/conflict, there has been a significant variability in the distribution of attendance –e.g. participants were mostly from police agencies, and very few from customs.
- The CBT training will be accessed and used if the computers are located in a convenient location to the participants’ 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.
- Localization of materials to fit specific conditions and cultural differences.

V. Recommendations

From multiple sources, it appears that the CBT is well regarded as a training mechanism for basic law enforcement training across multiple sites. While much of the information is based on opinion or anecdote, it does concur on this point. There is also evidence of its effectiveness among various constituency groups. This does not mean that it is completely free of problems or cannot be improved. The findings suggest a number of areas where such improvements can be made or weaknesses exist at the project level, for example, the underutilization of the Learning Management System at the project and headquarters levels, weaknesses in the testing method, under utilization of the CBT as part of an overall training program for participants within their agencies, and the need for follow up or additional training. There are others noted in the text of the evaluation

results. These, while important, should not detract from the overall value of this teaching method as it has been and is being used across the study sites.

The greater challenges facing the current CBT and the more inclusive concept of e-Learning, is institutional. This manifests itself in two ways. First, there is no clear vision of where an e-Learning Program, or even the current set of CBT project(s), fit within the structure of UNODC. The CBT project(s) have grown quickly, and this may partially account for this situation. Regardless of the cause, it is difficult to envision a future for this highly valued service unless it has some official place within the organizational framework.

A second, and related point, is funding for the project. Presently, the overall e-Learning initiative is funded on a CBT project-by-project basis. There is no secure funding stream that would enable development of these projects into a coherent program. Certainly much of this is caused by the overall funding method for UNODC, where 90% of the budget is donor driven. Within this climate, CBT has prospered at the project level in attracting donor funding. This, no doubt, reflects the high demand for the product. And, there is good reason to believe that a high level of demand for the product can be maintained, and even increased, in the future. But for this to occur in a manner consistent with UNODC's strategic objectives, a more secure funding stream will be needed.

Based upon the evaluation, the following observations and recommendations are made:

- There is consistent evidence that the program is valuable and has filled a need for basic law enforcement training across regions and countries.
- The positive impact from the training appears to be significant as reflected in increased knowledge and skills, and in on-the-job behavioral.
- Data from the Student Survey and other sources show a high level of satisfaction with all aspects CBT.

Recommendation 1

CBT/e-Learning should be continued in conjunction with the other recommendations in this report

- At the institutional level, the organizational problem must be fixed. Where and how an e-Learning Program fits within UNODC that includes the present set of CBT projects needs to be addressed and solved. A complicating feature is that demand for the CBT product has come from regionally based sources within the Partnership In Development Branch and substantively based sources within the Human Security Branch. The original C51 grew out of a need for training in

basic law enforcement techniques within the South/East Asia and the Pacific Section. Later projects, however, moved out of this region and began including other areas, such as money laundering and human trafficking. Thus, it may be difficult to place an e-Learning Program within the current structure. For example, the Human Security Branch within the Division of Operations appears to be more oriented to key topical issues, such as anti-corruption, anti-money laundering, anti-human trafficking, etc. The Partnership in Development Branch in the same division is organized on a geographic basis. Both of these have been the source for demand for the CBT in the past. Anchoring the e-Learning Program in either area may be a constraint given its cross-regional and cross-sectoral scope and the potential for in-house use as well.

Recommendation 2

CBT should be placed within a central training unit that supports activities across the organization, including internal training. This is the model presently used at the World Bank where the World Bank Institute functions as the organization's training arm, providing training support to operations across regions and sectors, utilizing substantive experts to deliver the training. Centralizing the e-Learning Program on a functional basis does not mean that the existing Global Learning Center would have to be abandoned or moved to UNODC headquarters. It could still function in its regional location.

- Along with the organizational issue, the current funding method needs to be fixed. The current situation is highly unstable due to the project-by-project funding arrangement. Should there be a sustained gap in funding as it is now arranged, the entire effort could collapse. An explanation for the current situation is that projects tend to be donor driven and therefore very specifically defined to meet the interests of the donors. But the view was expressed during headquarter interviews that donors may very well be amenable to a proposal that they fund an e-Learning Program for multiple years and within a strategic framework. This effort would have to be accepted and organized at the highest levels of UNODC. However, it may be worth the effort in bringing a level of needed funding stability to the individual projects and assist the development of a permanent program.

Recommendation 3

Develop a secure funding stream for this program that will enable it to continue and to grow. In the face of strong demand, it is likely that this program can grow and become self-sustaining in its funding. But it needs to get over an initial period where there is adequate funding to enable the program manager to not only plan for service delivery, but to market this product and develop new products that can meet demand.

- An issue related to the need for stable funding and organizational clarity is the need for sufficient staffing and skill levels for an e-Learning program. Presently,

the e-Learning Program, as it exists, is highly dependent upon one individual. In order to properly run the program and market its products, essential to its growth, a sufficient number of staff with adequate skills is needed. This should include instructional staff who are skilled in developing CBT program. The staffing issue is highly related to the need for a stable funding stream, which is needed to acquire and maintain staff.

Recommendation 4

Conduct a staffing needs assessment and develop a staffing plan for the e-Learning Program.

- UNODC should invest in upgrading and improving the Learning Management System (LMS) so that it can be used centrally as a monitoring and evaluation tool. This system has great potential but is underutilized. It could be modified in a manner that permits UNODC to access the training data and use it for systematic and in-depth analyses of student performance and of training quality. This information could then be fed back to the site managers, and other stakeholders, to be used to make adjustments and improvements in their projects. This would, at minimum, require a method that would permit the linking of the multiple files by some common identifier such as a student identification code. The files linked should include the reaction survey (Level 1) that presently is retained without identification to insure anonymity for security reasons. There are methods that can assure confidentiality without making it impossible to link this valuable information with test results, background information, modules taken and amount of training time. Such information would give analysts the ability to explore some of the causes of learning achievement and use this information to advise sites about how to make improvements. It should be acknowledged that this was not the original purpose of the LMS. However, it is an opportunity that might prove invaluable in the future.

Recommendation 5

Conduct a redesign and upgrading of the Learning Management System (LMS) so that it can support on-going monitoring and evaluation activities. This may require consolidation of existing files and adding additional elements to the database, such as key participant background information.

- A second area for recommended improvement in the LMS is with the tests and testing procedure. As these tests are now constructed, and based on the limited results observed, there may be reason to question their validity. It would be helpful if testing experts reviewed both the procedure for constructing and administering these tests, as well as the content of the test questions and their

relationship to the subject matter covered in each module. This could produce better tests for determining the actual learning gain made from taking one or more of the CBT modules.

Recommendation 6

Employ testing experts to review the current testing content, format and procedures to recommend long-term improvements in the current pre/posttest method.

- Current methods for selecting students to be trained by national counterparts need improvement. During interviews, when asking about some of the weaknesses of the CBT, it emerged that the training may not have reached fully the appropriate target groups in some instances. Results from the interviews also found that favoritism in selection by supervisors was, at times, an issue. It was also noted that other factors, such as schedules and current assignments, go into this decision.

Recommendation 7

Employ training experts to review the current selection method and recommend methods for selecting candidates for training based upon their skill/knowledge needs within a broader training framework.

- Some effort should be undertaken to record and archive the information on past project operations and activities so that this information is not lost if there is disruption in the funding and the current set of projects is discontinued. At present, much of the information and expertise resides with the UNODC Global Coordinator. It is unclear what would happen to projects information if he were to leave the projects or they were discontinued. This would be a loss to UNODC if it were to decide in the future to resurrect the e-Learning Initiative. It also makes sense for the present. Having this information available to share with other agencies or within UNODC can help promote the program's viability and cooperation with other international groups interested in this training.

Recommendation 8

Put in place a sustainable recording and archiving system on past CBT project operations to help track and promote the Program's viability and partnership opportunities.

VI. Overall Conclusions

The overall conclusion of this evaluation is that the e-Learning Program, as it currently exists primarily as CBT, is a highly regarded and successful program. Great demand exists for the training this program provides, and that demand appears to be growing. It has also demonstrated its ability to adapt to a number of areas related to basic law enforcement techniques, such as human trafficking and money laundering, adding enormous potential to its training value. There is also evidence that it is effective. Strong, but consistent, anecdotal evidence from participants, training managers and supervisors

maintain that trainees not only learn, but also become more proficient at the jobs. This anecdotal evidence is supported by the results from an analysis of LMS data for one of the studied countries, Jamaica. It shows through the system of administering pre/posttests to participants, that there has been substantial learning gain, adding some empirical evidence that learning is taking place.

Despite this evidence of success, the e-Learning Program faces significant problems that limit its effectiveness and could result in its demise. Two factors are most significant. One is the lack of a stable funding mechanism. The present system of funding relies heavily on donor contributions that tend to focus on specific projects. This leads to the situation where activities last only as long as the project. This leaves little opportunity for building the support and infrastructure needed to grow the program to meet rising demand.

A second problem facing the e-Learning Program is related to its location within the organization. Presently, there is no clear organizational place for the program within the structure of UNODC. Operational demand for the training has come from both regional and sectoral groups. Placing the program within either of these may limit its ability to respond to demand that crosses organizational boundaries. Additionally, the instruments provided by e-Learning should not only be limited to technical cooperation but utilized in-house as well. And, the lack of a clear and strategic place within the UNODC organization may limit the program's ability to attract funding.

Other problems and issues exist with the e-Learning Program as now organized. These include issues with the follow up support for training sites, lack of product documentation, use of the LMS and the pre/post testing method. These, however, could be addressed, and addressed more easily and effectively, if the more general problems of funding and organizational clarity were solved. At the very least, these are limiting the potential of the e-Learning program and may cause it to terminate.

ANNEX 1: ANALYTICAL RESULTS

1. Descriptive Student Survey Results

Figure 1: Gender distribution of student survey respondents

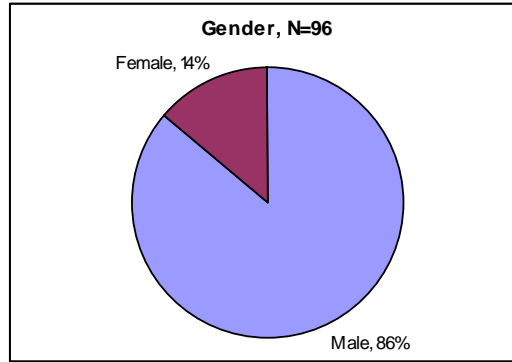


Figure 2: Age distribution of student survey respondents

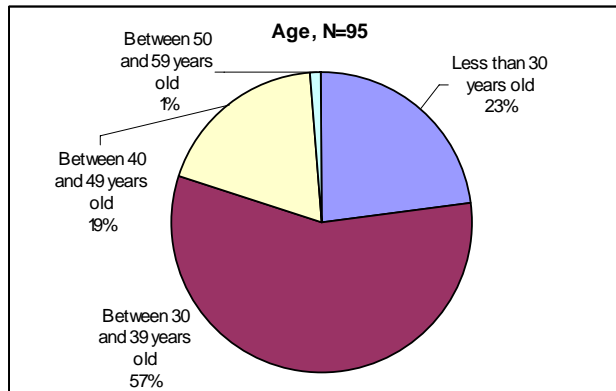
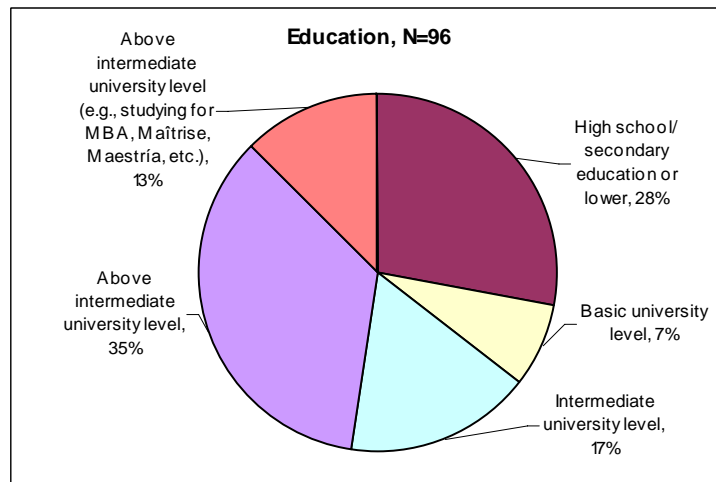


Figure 3: Educational background distribution of student survey respondents



2. Student Survey Questionnaire Responses

Table 1: Participants mean ratings* of the computer based module

Question	Mean						
	All countries	Nigeria	Turkey	Cambodia	Jamaica	Fiji	Thailand
The information is relevant to the work that I do.	4.54	4.77	4.00	4.77	4.82	4.33	3.85
The information is useful in the work that I do.	4.59	4.80	4.42	4.63	4.86	4.33	3.86
The information is current.	4.18	4.36	4.33	4.15	4.10	4.33	3.77
The information appears biased.	1.64	1.43	1.27	2.89	1.28	1.50	2.00
I feel that the information is true.	4.37	4.68	4.92	3.25	4.77	4.50	3.85
The information can make/has made a positive difference in my work.	4.12	4.67	4.83	2.07	4.73	3.33	3.54
The information can help/helped me do a better job.	4.53	4.57	4.55	4.08	4.76	3.67	4.69
The information can easily be obtained somewhere else.	2.45	2.71	2.09	3.00	2.12	2.50	2.50
The information contradicts something I found somewhere else.	1.68	1.41	1.36	3.86	1.32	2.00	1.77
Additional information was available when I returned to my job.	3.64	3.37	4.58	4.82	2.81	2.00	3.60
The information was known to me before the course.	2.89	3.11	2.67	4.33	2.09	3.00	2.31
Reference materials were available to me during the course	2.76	2.45	3.27	2.18	2.71	2.33	3.64
I know where to find additional materials, if needed.	3.04	2.79	3.50	3.10	.	.	.

* Means are based on a five-point scale

Table 2: Participants' mean* ratings of effectiveness of the instructional method used to deliver the learning materials

Question	Mean						
	All countries	Nigeria	Turkey	Cambodia	Jamaica	Fiji	Thailand
Sufficient information in subject matter coverage	4.39	4.67	4.50	3.81	4.77	4.33	3.79
Interesting and engaging	4.72	4.80	4.42	4.81	4.86	4.33	4.57
Good organization of module content	4.61	4.70	4.25	5.00	4.48	4.67	4.50
Text easy to understand	4.75	4.70	4.83	4.77	4.91	4.67	4.54
Helpful graphics to learning	4.87	4.90	5.00	4.93	4.95	4.33	5.64
Helpful audio to learning	4.83	4.87	5.00	4.91	4.95	4.33	4.43
Helpful video to learning	4.80	4.87	4.83	4.88	4.95	4.33	4.43
Use of examples	4.61	4.57	4.58	4.91	4.73	4.33	4.36
Gained understanding of the topic	4.74	4.80	5.00	4.88	4.82	4.33	4.21
Ability to apply learned knowledge	4.66	4.87	4.58	4.75	4.68	4.33	4.21
Would prefer a face-to-face training	2.92	2.39	2.91	4.88	2.05	3.00	3.15

* Means are based on a five-point scale

Table 3: Participant self reported ratings (means*) of their knowledge levels before and after attending the training (although not reported, all variables are statistically significantly higher post than pre at the 5% significance level)

Question		Mean						
		All countries	Nigeria	Turkey	Cambodia	Jamaica	Fiji	Thailand
Knowledge of the topic	Pre	2.48	2.77	2.67	2.12	2.32	2.33	2.40
	Post	4.49	4.83	4.58	4.18	4.68	3.67	3.93
Knowledge of basic ideas and methods	Pre	2.67	3.00	2.83	2.59	2.32	2.00	2.64
	Post	4.54	4.80	4.58	4.71	4.55	4.00	3.86
Noticing the difference in basic ideas and methods	Pre	2.85	2.73	2.83	3.35	2.91	2.33	2.50
	Post	4.29	4.53	4.17	4.12	4.50	4.00	3.79
Understanding of the importance of basic ideas and methods	Pre	2.72	2.87	2.75	3.06	2.59	1.67	2.43
	Post	4.53	4.70	4.83	4.41	4.59	4.33	4.00
Knowing how to compare techniques, methods and procedures	Pre	2.80	2.93	2.58	4.18	2.18	1.33	2.29
	Post	4.43	4.77	4.33	4.29	4.45	3.67	4.07
Knowing how to select best techniques, methods and procedures	Pre	2.77	3.17	2.17	3.65	2.41	1.33	2.21
	Post	4.56	5.07	4.25	4.59	4.55	3.67	3.93
Knowing how to use basic ideas and methods at work	Pre	2.69	2.73	2.83	3.00	2.50	1.67	2.64
	Post	4.57	4.73	4.42	4.71	4.64	3.67	4.29
Knowing how to improve overall quality at work	Pre	2.69	3.03	2.75	2.65	2.41	1.67	2.64
	Post	4.59	4.83	4.58	4.41	4.64	3.67	4.43
Understanding complexity of key concepts and techniques	Pre	2.42	2.33	2.58	3.06	2.14	1.33	2.36
	Post	4.14	4.40	3.50	3.88	4.41	4.00	4.07

* Means are based on a five-point scale

Table 4: Student Survey Question Response: Three things you thought were good about this module:⁶

	Percentage	Frequency
Physical feature (ease of use)	18%	42
Content (design)	38%	90
Visual/Audio aids	22%	52
Exercises/tests	5%	12
Attractiveness	14%	32
Interactivity	2%	5
Other	0%	1
N	100%	234

Table 5: Student Survey Question Response: List up to three things you did not like about this module:

	Percentage	Frequency
Content difficult/not sufficient (unclear, wrong spelling)	30%	38
Not fit to environment	10%	13
Lack of interaction	4%	5
Length of modules (too many questions, timely restricted)	24%	31
Monotonous voices/Repetitiveness	13%	16
Lack of printable materials (no summary, no time for notes)	9%	11
Other	11%	14
N	100%	128

Table 6: Student Survey Question Response: Please list up to three things you would do to improve this module:

	Percentage	Frequency
Better animation/Contents/Voices	16%	19
Fit to local environment	28%	34
Shorter modules/More time	11%	13
Additional information/Summaries (English translated for Cambodia)	22%	26
More interactivity	6%	7
More modules/Topics (bigger coverage)	13%	15
Other	5%	6
N	100%	120

Table 7: Student Survey Question Response: What changes could be made to this module, including follow-up or more training, that would help you do better in your work?

	Percentage	Frequency
Include local realities	9%	11
Requires practical situation within local context (training, face-to-face)	28%	32
More topics	16%	18
Offer a feedback/Summary	16%	18
Increase capacity (more computer, more centers, more courses...)	18%	21
Other	12%	14
N	100%	114

3. Descriptive of Learning Management Population (Jamaica)

Figure 4: Gender distribution of Learning Management System population

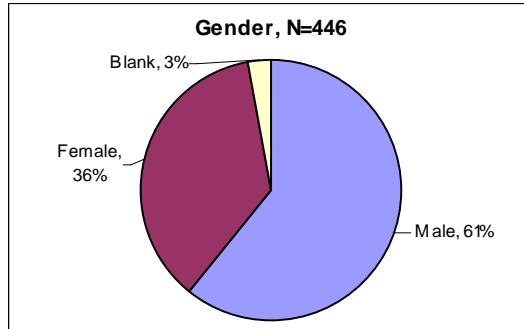


Figure 5: Agency distribution of Learning Management System population

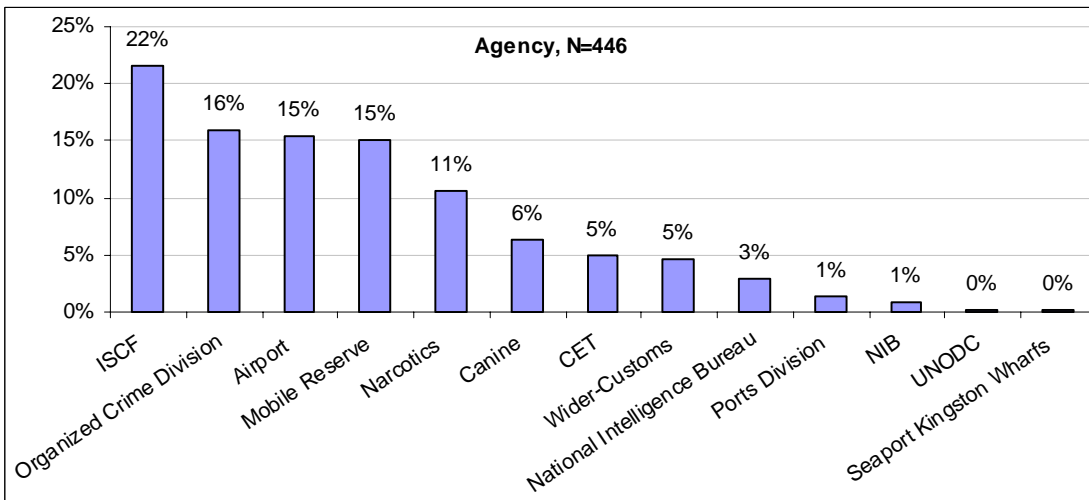
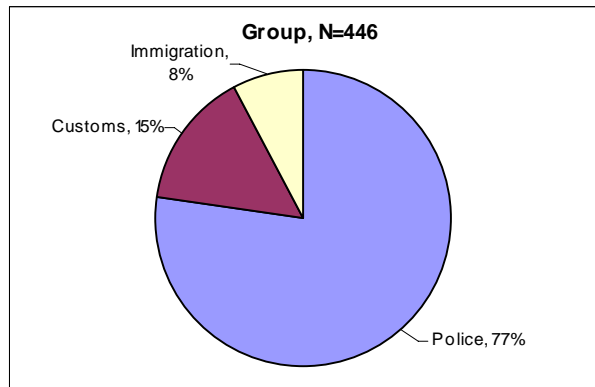


Figure 6: Group distribution of Learning Management System population



4. Learning Management System Test Results

Table 8: Distribution of pre- and post-training test scores by gender and group

			Below 25th percentile	Above 25th and below 50th percentile	Above 50th and below 75th percentile	Above 75th percentile
All		Pre	1.35	34.91	60.14	3.60
		Post	0.00	0.45	10.16	89.84
Gender	Male	Pre	0.74	36.30	60.37	2.59
		Post	0.00	0.37	10.37	89.26
	Female	Pre	1.24	32.30	61.49	4.97
		Post	0.00	0.62	10.56	88.82
Group	Police	Pre	0.29	42.98	55.56	0.88
		Post	0.00	0.59	11.43	87.98
	Customs	Pre	0.00	16.42	71.64	11.94
		Post	0.00	0.00	4.48	95.52
	Immigration	Pre	0.00	5.71	82.86	11.43
		Post	0.00	0.00	8.57	91.43

ANNEX 2: MODULE REVIEW CHECKLIST RESULTS

On-line Learning Materials Overall Evaluation

Review of the CBT for the UNODC Evaluation

This is a summary review of the standard of the CBT programs produced by UNODC. It has been carried out by viewing the complete module on Performing a Car Search and reviewing the demonstration disks on money laundering and law enforcement. This evaluation is only intended as a guide to the general standards of the CBT programs produced by UNODC.

Review Scale

The evaluation questions were adapted from "The Online Learning Handbook".⁷ A 5-point-scale was used in this evaluation, 5 being the highest level of agreement with the statements and 1 being the lowest level of agreement.

Learning Materials Overall Evaluation

Criteria	Indicator(s) of Success	Rating and Comment
Materials Content	The learning includes the right amount and quality of information based on the job family or Profile map.	4, Information presented seems logical and systematically presented, however no objectives are stated.
Overall Design	The learning is designed in such a way that learners will actually learn. Asks learners if they would like their pages in a different language.	5, Information presented in small amounts. 5, Program is in the native language of the participant.
Interactivity	The learners are engaged throughout the learning.	4, Many interactive activities throughout the program, however some are merely mouse clicks.
Navigation	The learners can determine their own course through the learning materials. There is an exit option available. There is a course map accessible. There is an appropriate use of icons and/or clear labels so that learners don't have to read excessively to determine options.	4, Learner can determine their own rate through the materials, but their path is fixed. 5 4, This option is available, but in some case is not made available to the participants because of the configuration of the LMS. 5
Motivational Components	The materials engage learners through a variety of game elements, testing, and unique content.	5, Many relevant interactive exercises and activities.

⁷ Jolliffe, A., Ritter, J. and Stevens, D., "The Online Learning Handbook", Kogan Page, London, 2001

Media	The materials effectively employs animation, sound and other special, but appropriate, visual effects. The gratuitous use of media is avoided.	5, All these are well designed and used appropriately. 5
Assessment	Mastery of each section's content is required before proceeding to later sections? Topic quizzes are used. There is a post-tests if appropriate to the needs of the organization and the learner.	5, This is usually set in the LMS 4, Each section has review questions. 3, Test questions not linked to specific objectives. Some questions are not well design and the item bank is quite small.
Look	The materials are attractive and appealing to the eye and ear.	5, The materials are well designed.
Record Keeping	A Computer Managed Learning component is included as part of the materials and is responsible for record keeping and the collection of learner data The learner data are automatically forwarded to the course manager.	4, The LMS retains participants' records, however the reporting functions do not meet the need of all course managers. 5, Course manager has control of all the data.
Tone	The materials are designed in such a way that it avoids being condescending to the learner.	5, Treats the participants as equal professionals.

Learning Event Evaluation

Criteria	Indicator(s) of Success	Rating
Getting the learners attention	Development of a profile of the topics that have to be learned and organizing them accordingly.	5
	Development of an overview for each part of learning materials.	4
	Development of an introduction for each segment of learning in the actual event.	4
	Development of a summary for each part of learning materials.	3
Telling learners where they are going and how they are to get there.	Written performance objectives for each part of the learning materials.	1
Helping learners remember what they have done before and relate it to what is coming up.	Materials are organized into a systematic presentation format.	4
	Development of an overview of the materials relevant to the learner.	4
	Development of an introduction for each section relevant to the learner	4
	Development of a consistent layout for each screen.	5

Criteria	Indicator(s) of Success	Rating
Provide learners with the learning materials	Matching information with the relevant objective.	3
	Development of a subject heading structure.	4
	The removal of all non relevant information.	4
	The amount of text is reduced to a minimum.	5
	The text is as simple as possible.	4
	The reading level is correct for the learner.	4
	Development of a glossary and telling the learners where to find it and how to use it.	1
	Development of font styles and background to make the screen readable.	5
	Development of materials using colour and/or bold for emphasis.	5
	Simple visual material.	5
	Learners are encouraged to make notes, summaries and concept maps.	3
	Development of a series of questions, where appropriate, to “test” knowledge acquisition as the learning proceeds.	4
	Development of worked examples for the learner to practice.	4
	Navigation without confusion.	5
Clear, rational thought behind the organization of the material and the way the pages are linked.	5	
Showing learners what they have to be able to do, to complete the task.	Development of a series of “worked examples” for the learners.	4
	Development of a series of tutorials linked to the learning materials.	3
	Development of a series of helpful hints linked to the materials.	3
Having learners practice what they have learned.	Simulating a new situation and having learners develop an working example.	5
	Use of activities and questions for the learner to complete.	5
	Use of varied activities and questions.	5
	Use of activities that arouse interest and expand the learning materials.	4
Telling learners how they are doing.	Use of activities that are self assessing.	4
	Development of answers for the learner to consider.	2
Helping learners transfer their learning to a new situation.	Use of collaboration activities with other learners to “discover” the answers to a problem.	1
	Requiring learners to predict, hypothesize and experiment to find a solution to the problem,	4
	Requiring learners to work in groups, discuss issues and report findings.	1

Materials design evaluation

Criteria: Materials Design	Indicator(s) of Success	Rating
Provide the learner with new knowledge and skills.	Development of clearly stated learner goals and objectives written in behavioural terms.	3
Provide the learner with the opportunity to view the materials in the language of his or her choice.	Use of a translation tool or duplicate files in other languages.	5
Provide a graphic design to catch the eye and inform and educate the learner about the topic.	An eye catching and informative design A clear conceptual and intuitive path between areas of information.	5 4
Provide a graphic design within technology limits.	Use of text and images based on screen quality and monitor size, browser and/or access speed of the client computer.	5
Provide multimedia files that do not distract the learner from the learning objectives.	Graphic files that download in 15 seconds or less.	5
Provide an overall design that is both effective and clear to the learner	Clear, rational thought behind the organization of the materials and the manner in which the pages are linked. A coherent, consistent layout style. A design that anticipates learner questions and makes the answers easily accessible. Navigation without confusion. Clear logic behind the way screens are linked and the navigational access the learner has to each part of the programme. Use of space to help set up text and images and make it easier for the learner to focus. Use of space to create an open, balanced feeling and to set off text and images. The overuse of large text, bold style, all caps and coloured text is avoided. Use of the whole width of the screen. Buttons that are easy to use and identify and connected to the indicated item on the screen. The use of lengthy text that requires scrolling to find buttons at the bottom of the screen is avoided. Asks learners if they would like the materials in a different language.	5 5 4 5 4 5 5 5 5 5 5

Provide the learner with an element that grabs their attention and immerses them in an environment.	The element is clearly related to “the suspension of disbelief”	5
	The program is so interesting and appealing or so intellectually stimulation that the learners actually like it!	5

ANNEX 3: PERSONS INTERVIEWED

1. List of Headquarters and Field Staff Interviewed for Strategic Survey

A. Sumru Noyan
Deputy Executive Director
Division of Operations
UNODC

Sandeep Chawla
Chief
Policy Analysis and Research Branch
UNODC

Brian Taylor
Chief, Anti-Trafficking Section
Human Security Branch, Division of Operations
UNODC

Ian Munro
Chief, Anti-Organized Crime and Law Enforcement Unit
Anti-Trafficking Section
Human Security Branch, Division of Operations
UNODC

Lars Pedersen
Program Management Officer
South Asia, East Asia and the Pacific Program
UNODC

Stefanie Eichhorn
Program Management Officer
Latin America and the Caribbean Section
UNODC

Shariq Bin Raza
Chief, South/East Asia and the Pacific Section
Partnership in Development Branch
UNODC

Elizabeth Joyce
Money Laundering Adviser
Global Program against Money Laundering
UNODC

Bernard Frahi
Chief
Partnership in Development Branch
UNODC

John Weijers
Chief
Co-financing and Partnership Section
UNODC

John H. Irvin
Training Coordinator
Global e-Learning Project
UNODC

Henry Castiel
Managing Director
CET Digital Productions
Chang Mai, Thailand

Akira Fujino
Representative
Regional Center
East Asia and Pacific Region
UNODC

Burkhard Dammann
Senior Program Management Officer
UNODC

Berner Mathee
Auditor
Geneva Audit Section
OIOS, UNODP

2. List of Persons Interviewed for Country Studies

Cambodia

Sam Vann Chuon
Deputy Chief Officer
CBT Center
Sihanoukville Port Facility
Sihanoukville, Cambodia

Heng Chandara
Deputy Chief Officer
CBT Center
Sihanoukville Port Facility
Sihanoukville, Cambodia

Khleang Sivorn
Officer
CBT Center
Sihanoukville Port Facility
Sihanoukville, Cambodia

Kuhn Borin
Brigadier General, Deputy Commander, Royal Cambodian Navy
Ream Naval Base
Ream, Cambodia

Ros Veasna
Colonel, Royal Cambodian Navy
Ream Naval Base
Ream, Cambodia

Tep Sam Ol
Captain, Coast Patrol, Royal Cambodian Navy
Ream Naval Base
Ream, Cambodia

Ly Kimlong
Deputy Secretary General, NACD, Ministry of the Interior
National Authority for Combating Drugs
Phnom Penh, Cambodia

Duong Sunnara
Acting Director of Law Enforcement Department, NACD
National Authority for Combating Drugs
Phnom Penh, Cambodia

Srou Mony
Deputy Director, CBT
Anti-Drugs Department CBT Training Centre
Phnom Penh, Cambodia

Moek Dara
Brigadier General
Director of Anti Drugs Department
Anti-Drugs Department

Phnom Penh, Cambodia

Khiev Sam An
Head of Customs Office
Customs and Excise
Airport Cargo Terminal
Phnom Penh, Cambodia

Graham Shaw
Project Officer
UNODC Liaison Office
Phnom Penh, Cambodia

Fiji

Razim Buksh
Team Leader, Financial Intelligence Unit, Reserve Bank of Fiji
Pacific Island Forum Secretariat
Fiji

Bruce Russell
UNODC Mentor, Anti Money Laundering Consultant, Political International and Legal
Affairs Division, Pacific Island Forum Secretariat
Pacific Island Forum Secretariat
Fiji

Shuan Evans
Law Enforcement Advisor, Pacific Island Forum Secretariat
Pacific Island Forum Secretariat
Fiji

Rajas Swamy
Fiji Police Force Detective Inspector, Financial Intelligence Unit
Pacific Island Forum Secretariat
Fiji

Josaia Naigulevu
Director
Office of the Director of Public Prosecutions
Fiji

Monhammed Yunus
Classroom Supervisor, IT Support Officer
Fiji Police Academy
Fiji

Rakesh Lal
Financial Crime Analyst, AML and CFT
Westpac Banking Corporation
Fiji

Author Kumar
Acting Team Leader
Fiji Islands Revenue and Customs Authority
Fiji

Dhiraj Abhinah
Customs Officer
Fiji Islands Revenue and Customs Authority
Fiji

Razim Buksh
Team Leader
Financial Intelligence Unit, Reserve Bank of Fiji
Pacific Island Forum Secretariat
Fiji

Bruce Russell
UNODC Mentor
Anti Money Laundering Consultant, Political International and Legal Affairs Division,
Pacific Island Forum Secretariat
Fiji

John Tanti
Australian Federal Police
Pacific Island Forum Secretariat
Fiji

Rajas Swamy
Fiji Police Force Detective Inspector
Financial Intelligence Unit
Pacific Island Forum Secretariat
Fiji

Jamaica

Bertram Milwood
Director/Principal
Caribbean Regional Drug Law Enforcement Training Center
Kingston, Jamaica

Kingsley L. Robinson
Acting Assistant Commissioner
Training Branch
Jamaica Constabulary Force
Kingston, Jamaica

Karen Martin-Fitzgerald
Corporal
Jamaica Constabulary Force

Jasper L. Grant
Sargent
Jamaica Constabulary Force

Lloyd A. Rodney
Inspector
Jamaica Constabulary Force

Cecil McIntosh
Corporal
Jamaica Constabulary Force

Tracy Ann Green
Supervisor
Jamaica Constabulary Force

Ishmale Leslie
Detective Sergeant
Jamaica Constabulary Force

Patricia Hanson
Special Sergeant
Jamaica Constabulary Force

Nigeria

Kubra S. Abdullahi
National Project Coordinator
UNODC

Peter Finope
CBT Manager

Segun Mohammed
CBT Manager

Paul Dombin
CBT Manager

J. R. Obi
Academic Instructor

M. K. Jirbril
Academic Instructor

Mohammed Yakubu
Academic Instructor

Daniel Yayock
Academic Instructor

Mustapha Umar
Academic Instructor

Ogom Nwadie
Academic Instructor

Mohammed Adamu
Academic Instructor

Micheal Fakinlede
Academic Instructor

Marcus Ayuba
Academic Instructor

Mohammed Sani
Academic Instructor

Fidel Cocodia
Academic Instructor

Simeon Nwobodo
Academic Instructor

Bashir Oladosu
Academic Instructor

Gbadamosi Aderemi
Academic Instructor

Bello Mumuni
Academic Instructor

Sa'id Abubakar
Academic Instructor

Kola Popoola
Academic Instructor

Mike Ettah
Academic Instructor

Shamsudeen Ayodeji

Thailand

Vitawan Sunthornkajit
Director of ONCB region 9
Office of Narcotics Control Board
Bangkok, Thailand

Sombat Punna-opas
HR Officer
Office of Narcotics Control Board
Bangkok, Thailand

Anchalee Sirisabphya
Director HRD Institute on Narcotics Control
Office of Narcotics Control Board
Bangkok, Thailand

Wuthi Vititanon
Pol. Maj. Gen., Deputy Commissioner Provincial
Provincial Police Region 5
Chang Mai, Thailand

Tanyachanor Aoimoon
CBT Training Centre Manager
Provincial Police Region 5
Chang Mai, Thailand

Surajed Dhammadamrong
Deputy Commander Division 2
Police Narcotics Suppression Bureau

Bangkok, Thailand

Jittawattana Chaiyakun
Pol. Maj., Inspector
Police Narcotics Suppression Bureau
Bangkok, Thailand

Rewatt Chatithammanit
Deputy Superintendent, Pol. Lt Col.
Police Narcotics Suppression
Bangkok, Thailand

Satimon Milindankura
Pol. Capt, Deputy Inspector
Police Narcotics Suppression
Bangkok, Thailand

Soontharee Puiphat
Pol. Capt., CBT Training Centre Manager
Police Narcotics Suppression
Bangkok, Thailand

Turkey

Celal Bodur
Director
Turkish International Academy against Drugs and Organized Crime (TADOC)
Ankara, Turkey

Kesban Karakaya
Chief Inspector
Computer Based Training Center
Turkish International Academy against Drugs and Organized Crime (TADOC)
Ankara, Turkey

Mustafa Unal Erten
Inspector
Computer Based Training Section
Turkish International Academy against Drugs and Organized Crime (TADOC)
Ankara, Turkey

Gokhan Aksu
Deputy Inspector
Training Needs Analysis, Evaluation and Program Development Division
Turkish International Academy against Drugs and Organized Crime (TADOC)

Ankara, Turkey

Celal Sel

Superintendent

Central Narcotics Division, Dept. of Anti-Smuggling and Organized Crime

Turkish National Police (TNP), Ministry of Interior

Ankara, Turkey

G. Cem Cehdioglu

Major, Narcotics Division

Dept. of Anti-Smuggling and Organized Crime

Turkish National Police (TNP), Ministry of Interior

Ankara, Turkey

Ibrahim Cihangir

Superintendent

Narcotics Division, Dept. of Anti-Smuggling and Organized Crime

Turkish National Police (TNP), Ministry of Interior

Ankara, Turkey

Ferhat Aslan

Inspector

Narcotics Division, Dept. of Anti-Smuggling and Organized Crime

Turkish National Police (TNP), Ministry of Interior

Ankara, Turkey

Ender Gurleyik

Head of Department

Directorate General of Customs Enforcement

Undersecretariat for Customs

Republic of Turkey Prime Ministry

Ankara, Turkey

Ercan Ugurcan

Customs Enforcement Officer

Dept. of Anti-Smuggling, Narcotic Division, Directorate General of Customs

Enforcement

Undersecretariat for Customs

Republic of Turkey Prime Ministry

Ankara, Turkey

Abdullah Oguz

Assistant Customs Expert

Customs Enforcement

Undersecretariat for Customs

Republic of Turkey Prime Ministry

Ankara, Turkey

Yurt Atayun
Superintendent
Narcotic Branch, Ankara Police Force
Ankara, Turkey

Bahadır Tataroglu
Superintendent, Narcotic Branch, Ankara Police Force
Ankara, Turkey

Ali Unlu
Inspector
Narcotics Dept., Istanbul Police
Istanbul, Turkey

Mark Stanley
UNODC Representative, Bulgaria

Dave Byrom
UNODC International Training Adviser

Yasemin Kaya
UNODC National Project Officer

Cahit Topsever
Enocta, e-Learning
Ankara, Turkey

ANNEX 4: DOCUMENTS REVIEWED

Sub-regional Action Plan on Drug Control Law Enforcement Program Evaluation Report
(February, 2002)

Terminal Evaluation Report
Evaluation of the UNDCP Computer Based Training Project
Thematic Area: Suppression of Illicit Drug Trafficking (April, 2002)

PROJECT DOCUMENT

Creation of the Turkish International Academy Against Drugs and Organized Crime
(TRADOC)
Project Number: AD/TUR/00/F05 (July 2002)

Strategic Framework for Central Asia
Project Number: AD/RER/F60 (January, 2005)

PROJECT DOCUMENT

The Expansion of Computer Based Drug Law Enforcement Training in the Pacific
Project Number: AD/RAS/04/III (September, 2004)

PROJECT DOCUMENT

The Expansion of Computer Based Drug Law Enforcement Training in East Asia
Project Number: AD/RAS/03/G53 (May, 2003)

PROJECT DOCUMENT

Pilot Computer-Based Law Enforcement Training in The Caribbean
Project Number: AD/03/G96 (August, 2003)

PROJECT DOCUMENT

UNODC Global e-Learning for Drug Control and Crime Prevention
Project Number: AD/GLO/03/H17 (September, 2003)

PROJECT DOCUMENT

Enhancement of Drug Law Enforcement Training in East Asia
Project Number: AD/RAS/97/C51 (April, 2002)

UNODC

Operational Priorities
Guidelines for the Medium Term (January, 2003)

UNODC LAW ENFORCEMENT

E-Learning Program Goes Global (undated)

UNODC
Anti-Money Laundering Computer Based Training Program (undated)

UNODC
UNODC E-Learning Center Profile (March, 2004)

UNODC
Strategic Program Framework on Crime and Drugs for Southern Africa
(July, 2003)

UNODC
Annual Evaluation Report of the Independent Evaluation Unit for 2004
(March, 2005)

UNODC
Evaluation of the Computer Based Training in the Caribbean
Jamaica and Barbados (September, 2004)

UNODC
Independent Evaluation Unit
Evaluation of Tools and Toolkits as a Modality of Program Delivery by the United
Nations Office on Drugs and Crime (undated)

UNODC
Independent Evaluation Unit
Evaluation of the Global Program Against Trafficking in Human Beings
(February, 2005)

UNODC
Global Programs: Update (November, 2003)

UNODC
South Asia Strategic Program Framework (2003)

UNODC
Peru Strategic Program Framework (July, 2004)

UNODC
UNODC E-Learning Center Profile (March, 2004)

ANNEX 5: EVALUATION TOR

UNITED NATIONS OFFICE ON DRUGS AND CRIME TERMS OF REFERENCE

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

1. BACKGROUND

In 1995, in order to cope with the important drug production and trafficking in South-East Asia, a drug law enforcement programme was implemented under terms of the Memorandum of Understanding (MOU) between UNODC and six countries in South East Asia (Cambodia, China, Laos, Myanmar, Thailand and VietNam). The Law Enforcement Programme comprises of 12 on-going projects (2 Subregional Action Plan (SAP) projects and 10 other subregional projects).

The project AD/RAS/97/C51 "Enhancement of Drug Law Enforcement Training in East Asia" was part of the drug law enforcement programme mentioned above. The project (C51) aimed to enhance the skills and knowledge of personnel involved in drug law enforcement through the training of staff using computer-based training (CBT). The target audience was the "front line staff" (i.e. Police Officers, Customs agents), the first line of defense against drug trafficking. This project gave rise to subsequent e-Learning initiatives and is therefore an important reference for the current evaluation exercise⁸.

The training modules of C51 were designed and developed by subject experts from all over the world. The end result was a learning experience delivering high quality voice-over, pictures, graphics, video and animation through interaction, simulation and tests in the users' own language. Another characteristic of CBT is the Student Management System database that provides important management information (pre/post test results, student details etc). Two new topics, Money laundering (ML) and anti-human trafficking (AHT), have been added in the last few years.

To date, fifty-seven e-Learning Centres have been established in Cambodia, China, Laos, Myanmar, Thailand and Viet-Nam. In these six countries, more than 100 hours of drug law enforcement CBT training has been developed. Other countries have also set up training centres.⁹

A new initiative entitled "UNODC Global e-Learning for Drug Control and Crimes Prevention" has recently been established. The objective of the initiative is to capitalize on the accomplishments of UNODC's Computer Based Training activities originally

⁸ Other subsequent projects include G53, H17, I11, R59 and D91 that will be used for information and analysis purposes by the evaluation.

⁹ Including Fiji, Turkey and Nigeria.

developed for East Asia (C51 project and others). The initiative integrates CBT into a global e-Learning strategy for training law enforcement personnel, thereby strengthening the capacity of Governments to counter illicit trafficking and transnational organized crime.

e-Learning is defined as *“a structured, purposeful use of electronic systems or computers in support of the learning process”*¹⁰. The term e-Learning is applied to a whole variety of training methods, the common element being the use of information technology to deliver training.

Although humans still provide the support and manage the training, the actual course content is delivered using computers. Courses are provided using the Internet, intranets and extranets. Examples of e-Learning include computer-based training, training presented on interactive CD-ROMs and lessons delivered via interactive television.

A “Centre of Excellence” for e-Learning has been established at the UNODC Regional Centre for East Asia and the Pacific, in Bangkok, Thailand. The Centre aims to support the introduction of e-Learning in other UNODC field projects in various countries and to provide the necessary resources, guidance and skills to establish sustainable and effective worldwide e-Learning applications.

According to previous evaluations (C51 and the Law Enforcement Programme Evaluation), the CBT initiatives were seen as exemplary:

- *“The quickest, most efficient and economical method available to UNODC is the computer-based training developed by ODCCP”*¹¹.

- *“Computer-based training (CBT) is an ideal method of training large numbers of law enforcement officers in a variety of subjects, particularly in developing nations”*¹².

- *“CBT training methodology is the first of its type in the drug law enforcement field and is regarded as a role model, a means of establishing best practices for others to follow”*.¹³

2. EVALUATION PURPOSE

The primary purpose of the evaluation is to identify if and how the e-Learning initiative contributes to the achievement of organizational objectives and goals. Further it is to determine whether UNODC should continue or not with e-Learning and if so, how it can be improved.

¹⁰ UNODC Regional Centre for East Asia and the Pacific e-Learning Brochure, 2004.

¹¹ Subregional Action Plan on Drug Control – Law Enforcement Programme Evaluation: Evaluation Summary, I. H. Bain, February 2002.

¹² Ibidem.

¹³ Enhancement of Drug Law Enforcement Training in East Asia (AD/RAS/97/C51), Evaluation Summary, Mike Robertshaw and Bob Retka, April 2002.

By focusing on CBT, the evaluation will examine the evolution of this training modality from project C51 onwards, identifying how the training method was implemented, administered and how the e-Learning initiative built upon it.

CBT is not only an example of e-Learning but, in the case of UNODC’s initiative in this area, the main source of training.

*A secondary purpose is to propose to UNODC **basic guiding principles** for an organizational e-learning policy. Further, this evaluation seeks to draw lessons and best practices that can be used to improve the design, management and delivery of e-Learning including setting up of new priorities that fully meet the needs of beneficiary countries in the area of training.*

3. EVALUATION SCOPE

The evaluation will cover the UNODC Drug Law Enforcement e-Learning initiative starting from 1997 to the present as well as the more recent computer based training modules on anti money laundering and human trafficking.

The geographical coverage of the evaluation will be global.

The stakeholders of this evaluation are UNODC, the e-Learning Centre in Bangkok and beneficiaries (students/management).

The thematic coverage concerns UNODC’s e-Learning initiative (emphasizing computer-based training initiatives) as a modality of technical cooperation delivery related to law enforcement and the various Global Programmes using CBT.

Key question: How does the e-Learning initiative (eLi) contribute to UNODC achieving its goals and its objectives?

<u>Main Evaluation Questions</u>	<u>Information Needed</u>	<u>Information source</u>	<u>Methodology</u>
<p><u>I. Where does the e-Learning initiative (eLi) fit in relation to UNODC’s priorities?</u></p> <p>► <i>Understanding the context within which eLi operates</i></p>			

<p>1. What are the priority/objectives of UNODC?</p> <p>2. What does eLP seek to address?</p>	<p>- UNODC's mandate/strategy/priorities</p> <p>- eLi strategic objectives, goals, types of activities</p> <p>- eLi workplan</p>	<p>- UNODC's mandate/mission documents; organizational priorities</p> <p>- project documents of all relevant projects, strategy, plans, needs assessments</p>	<p>- Document review</p> <p>- Interviews with UNODC HQ Staff</p> <p>- Document review</p> <p>- Interviews with UNODC Staff</p>
<p><u>II. How has the eLi been implemented?</u></p> <p>► <i>Understanding the process/design of eLi</i></p> <p>1. Is the design of the eLi appropriate to achieve its objectives?</p> <p>2. Does eLi have adequate resources to achieve its objectives?</p> <p>3. What is the implementation process?</p>	<p>- eLi's design appropriateness, evolution from project C51 onwards</p> <p>- budgets, staff details (#, job descriptions), management instructions</p> <p>- causes of bottlenecks, problems, shortcomings, opportunities</p> <p>- eLi indicators, objectives, strategy, work plan</p> <p>- management instructions</p> <p>- causes of bottlenecks, problems, shortcomings, opportunities</p>	<p>- project documents, strategy, plans, evaluation reports</p> <p>- project documents</p> <p>- strategic framework documents</p> <p>- UNODC team, beneficiary agencies, students</p> <p>- project documents</p> <p>- strategic framework documents</p> <p>- progress reports</p> <p>- UNODC team, beneficiary agencies, students</p>	<p>- Document review</p> <p>- Interviews</p> <p>- Document review</p> <p>- Interviews</p> <p>- Document review</p> <p>- Interviews</p> <p>- Questionnaire/surveys</p>
<p><u>III. What have been the results produced by eLi?</u></p> <p>► <i>Understanding the</i></p>			

<i>results of eLi</i>			
1.How does eLi measure outcomes, impact and ensure sustainability of its interventions?	-eLi indicators, objectives, strategy, work plan, monitoring process, post-interventions, follow up	-project documents, progress reports -students, national authorities	- Document review - Interviews - Questionnaire/surveys
2.Has the initiative addressed the identified needs/problems?	-eLi indicators, objectives, strategy, work plan -opinion of students and national authorities -# of trained -level of knowledge acquired -# of modules produced -training statistics -pre/post test results	-project documents, progress reports -students, national authorities -assistance requests, agreements of cooperation, needs assessments	- Document review - Interviews - Questionnaire/surveys - Data analysis
3.Is the initiative sustainable?	-\$/student (eLI vs. traditional methods) -national training priorities -training centres strategies	-project documents -specialized literature -assistance requests, agreements of cooperation, needs assessments	- Document review - Interviews - Data analysis
4. What lessons have been learned and what are the best practices?	-lessons identified, practices implemented	-project documents -progress reports -evaluation reports	- Document review - Interviews

From the questions above, the evaluation team may derive secondary questions that could help the evaluation assess how/if the e-Learning initiative:

- *Identifies training needs;*
- *Determines the target group;*
- *Identifies new training contents (modules);*
- *Determines changes in the level of knowledge/skills among trainees;*
- *Trains the training managers (of the Training Centres);*

- *Manages data;*
- *Updates software;*
- Evaluates the training and measures impact;
- Determines cost effectiveness, specially regarding to other training methodologies;
- Is meeting the expectations of students and senior management;

Additionally, the evaluation may identify:

- Areas for improvement in the current e-Learning initiative;
- The extent to which senior and middle management at UNODC and beneficiary agencies have provided support to the initiative and the nature of the support;
- The synergy among the various projects and their contribution to meeting the initiative goals;

In order to determine:

- Whether this type of training initiative should be expanded or modified.

The evaluation shall determine the needs that the e-Learning initiative is trying to address as well as if the expectations of UNODC Global Programmes that use the modality are being met.

4. EVALUATION METHODS

The evaluation methods include the following:

- Document review and analysis (i.e. projects C51, G53, H17, I11, R59, D91)
- Interview with key informants and a representative sample of beneficiaries: training managers, students, senior and middle managers linked to the relevant training centres
- Participatory observation and rapid appraisal
- An in-depth understanding of the training initiative and student management information system through field observations
- Field visits: UNODC HQ, Regional Centre in Bangkok and Jamaica (Lead Evaluator), selected centres where e-Learning is being implemented and visits to sites where newer thematic modules are being introduced according to the countries listed in the deliverables
- Evaluation instruments designed to gather relevant data and information

The consultants must perform the tasks that culminate in the delivery of the various products as listed below (“Deliverables”) using the methodology stated.

Risk

It is important to note that the evaluation has limited resources and a tight timeframe in which to deliver its results. The Lead Evaluator, in coordination with the other team members, therefore, must take this into consideration while preparing their workplan.

The evaluation will attempt to determine the level of knowledge acquired by students trained by the initiative and therefore will rely on data and analysis collected and prepared by the various training centers.¹⁴

The Chief of the Independent Evaluation Unit must approve any modifications to the TORs that may be required.

5. EVALUATION TEAM

The evaluation team will be made up of two training evaluation specialists to be hired as consultants (Lead and Deputy) and evaluators from UNODC's Independent Evaluation Unit.

The consultants will be professionals with expert knowledge and experience in training evaluations at the international level. The team members from the Independent Evaluation Unit will provide the complementary skills and expertise in evaluation.

Qualifications of the consultants:

- Experience in designing training modules/activities in a multicultural setting
- Experience with e-Learning activities
- Experience in conducting independent evaluations of training initiatives
- Knowledge of learning management systems
- Fluent in the English language and excellent writing skills
- Minimum of 10 years experience in training and/or evaluation
- Master's degree or equivalent in relevant field (social sciences)

6. PLANNING AND MANAGEMENT ARRANGEMENTS

Timeframe

March:	15	Finalize consultant(s) contracts, administrative arrangements, begin document review
	25	Consultants present an evaluation workplan

¹⁴ Depending on the nature and reliability of the data available, the Lead Evaluator may prior agreement of the Chief of the IEU, scale back or even omit making such determination.

	31	Evaluation instruments and Country Profile format presented by consultants
April:	4-6	Work session at UNODC Headquarters (Lead Evaluator)
	7-30	Field visits
May:	1-27	Information analysis, drafting reports
	27	Draft 0 submitted
June:	17	Draft 1 circulated
	24	Comments on Draft 1 received
	30	Final Draft
July:	1-25	UN Editing
	29	Evaluation circulated

Deliverables

Lead Evaluator:

- (i) *Global Report*
- (ii) *1 country profile (Jamaica)*
- (iii) *Evaluation work plan*
- (iv) *Evaluation instruments*

Deputy Evaluator:

- (i) *2 country profiles (Thailand, Fiji)*
- (ii) *Data analysis summary*
- (iii) *Comments/inputs on evaluation methodology (instruments)*

I.E.U. Staff:

- (i) *3 country profiles (Turkey, Senegal and Cambodia)*

The Global Report should not be longer than 25 pages excluding annexes and the executive summary, as per IEU guidelines. “Country Profiles”(CP) are to be used as inputs for the Global Report. The CP is to be a succinct (3-6 pp) summary of the most important findings in the given country. The Lead evaluator, in consultation with the team members, shall present a CP outline/format as well as the various evaluation instruments to be used.

Performance Indicators:

1. Timely delivery of outputs;
2. Use of IEU guidelines for evaluations

Attachments:

- 1.UNODC-STANDARD FORMAT AND GUIDELINES FOR PROJECT EVALUATION REPORT
- 2.GUIDING PRINCIPLES FOR EVALUATIONS AT UNODC
- 3.EVALUATION ASSESSMENT QUESTIONNAIRE

BACKGROUND DOCUMENTS

◆ *Project documents*

- Project AD/RAS/97/C51: Enhancement of Drug Law Enforcement Training in East Asia, UNODC, September 1997-December 2002
- Project AD/RAS/03/G53: The Expansion of Computer Based Drug Law Enforcement Training in East Asia, UNODC, May 2003-October 2004
- Project AD/GLO/03/H17: UNODC global e-Learning for drug control and crime prevention, UNODC, September 2003-September 2005
- Project AD/RAS/04/I11: The Expansion of Computer Based Drug Law Enforcement Training in the Pacific, UNODC, September 2004-September 2005
- Project FS/RAS/03/R59: Computer Based Training (CBT) Module on Human Trafficking, UNODC, January 2005-January 2006
- Project AD/RAS/99/D91: Development of Cross-Border Law Enforcement Cooperation in East Asia, UNODC, August 1999-December 2003

◆ *Evaluation reports*

- *Evaluation of the UNODC Computer Based Training Project RAS/97/C51*, M. Robertshaw, B. Retka, April 2002
- *Evaluation of the Law Enforcement Programme*, I. H. Bain, February 2002

◆ *Other documents*

- UNODC Regional Centre for East Asia and the Pacific e-Learning Brochure, 2004

- *UNODC e-Learning Centre Profile*, UNODC Regional Centre for East Asia and the Pacific, March 2004
- Operational priorities: guidelines for the medium term, UNODC, January 2003