Strategy for implementing a Distance Learning (DL) process in UNCTAD

for strengthening training capacities in international trade in developing countries

United Nations Conference on Trade and Development
Geneva
Revised January, 2004

Table of Contents

Summary

Distance Learning is not the same thing as ICT. The growth of the Internet and other digital technologies, however, has expanded the potential of distance learning in terms of access, quality and support.

Distance Learning offers great potential for UNCTAD: The UNCTAD target-training population largely consists of mid-to-high level trade professionals with existing skills and career experience. Their learning is likely to take place alongside professional responsibilities; so training activities need to be flexible and accessible. Distance Learning can address the following issues:

Access:

Perhaps the key promise of distance learning is that it allows people to learn when, for whatever reason, they are unable to attend formal educational institutions.

Human resource capacity:

Through the use of distance learning techniques such as email forums and chat, as well as through the use of ICT in developing interactive learning materials, UNCTAD expertise can be more widely distributed.

Adaptability

The systematic approach to the design of training courses and learning materials that distance learning requires means that courses are constantly revised and updated and that learning objectives and outcomes are clearly stated.

Distance learning, however, also presents many challenges:

- **Drop out rates**

Without the regular face-to-face support of both tutors and peers, many distance-learning programmes suffer from very high dropout rates.

- **Cost**

Properly considered distance learning courses are actually very expensive.

- **Support**

Providing support for students can be difficult with distance learning. The lack of face-to-face support and human interaction can lead to student isolation and high dropout rates.

- **Evaluation**

Assessing and evaluating trainees undertaking distance learning is also a challenge.

- **Infrastructure**

Distance Learning requires a reliable communications infrastructure to ensure that the training material reaches the trainee.

- **Sustainability**

If 'expert' knowledge and expertise remains in developed countries and developing countries remain passive consumers of that knowledge at a distance, then existing inequalities in human resource capacity will be maintained.

Based on our existing experiences and practices – as outlined in this report – this strategy presents a framework of how to meet these challenges and to integrate Distance Learning into the capacity development activities of UNCTAD, through:

- Collaboration within UNCTAD
- Partnerships and projects in the field

Introduction

2. Training Context: Trade for Trade

TrainForTrade is UNCTAD's leading programme for training and capacity building in the fields of international trade, trade-related services, investment and port management in developing countries, particularly in the least developed (LDCs). It creates original training packages adapted to local conditions using a systematic course design methodology.

TrainForTrade delivers its training packages and trains local instructors in the framework of technical cooperation projects. These projects are designed to develop and sustain human resources in the key UNCTAD areas in beneficiary countries. It works primarily with ministries of trade, economy, finance, investment, environment, tourism, foreign affairs and development, as well as trade and investment operators and port communities. Academic and training institutions in developing countries are involved in TrainForTrade as members of the national and regional pedagogical committees that are created to support the implementation and sustainability of project activities. These institutions are also part of the virtual network of TrainForTrade partners.

TrainForTrade courses are developed using the Train X methodology. This is a structured approach to the development, delivery and evaluation of courses that ensures that training tasks are appropriate to the training needs of the target population. The use of a rigorous methodological approach to course development is highly compatible with distance learning in that it breaks down training tasks and activities into their component parts?.

3. Definition of Distance Learning

Distance Learning has a long history going back to the use of correspondence courses by mail for learning shorthand in the 19th century. The key promise of distance learning is that it makes it possible for an individual to learn outside the traditional boundaries of a classroom, school or college. This gives learning opportunities to students who may be restricted by time, geography or other factors from participating in formal education.

Distance learning, then, is not dependent on the use of ICTs. However, the growth of the Internet and other digital technologies has expanded the potential of distance learning in terms of access, quality and support.

Access: The Internet provides a powerful distribution mechanism for distance learning with a global reach.

Quality: Effective and appropriate use of ICTs, such as the incorporation of video and audio, can improve the quality of learning materials . ICTs can also be used to add interactivity to learning materials through the use of assessment tools and task-based activities.

Learner Support: Internet supported technologies such as Chat, online forums and video-conferencing provide opportunities for students to interact with tutors and each other to receive targeted and individualised support.

It is important to note however, that all of these benefits are not the result of the technology alone but require organisation of human resources (e.g. assigning tasks and responsibilities to tutors) careful matching of training objectives to production of training materials (e.g. considering which media is most appropriate to get across a particular piece of information) and proper consideration of the use of and access to Internet tools (e.g. is there access to sufficient bandwidth within a particular country to support web based video or audio).

Therefore, it is useful to consider distance learning not in terms of a technical problem but as essentially similar to traditional learning. Distance learning can be seen as comprising the following functions that broadly correspond with the TrainX methodology.

Administration	**Student Support**
Course design	**Course delivery**
Development of materials	**Assessment**
Evaluation	

The use of ICTs in distance learning can be used to enhance and/or to simplify each of these functions.

- Administration – unique identification numbers and databases for registering and tracking students
- Course design – use of communication tools to share materials, work collaboratively and involve course designers/trainers in other locations in training design
- Development of materials - use of video, audio and animation that can enhance the interactivity of materials
- Course delivery – use of an Internet platform to distribute materials and communication tools to facilitate exchange between tutor and trainee
- Student support – email, forums and chat to address particular trainees' concerns, databases to track trainees' attendance and participation so as to tailor individual responses
- Assessment – use of online tests and other measurement tools
- Evaluation – interactive communication tools to follow up on trainees' experiences and to monitor how successful the training was in addressing the trainees' learning needs

Distance Learning: What does it mean?
Distance learning is all education that delivers training and information between two places. Including:

Synchronous – training that happens at the same time in the two different places e.g. Internet chat or video-conferencing.

Asynchronous – exchange of information that happens at different times e.g. sending an email or correspondence.

One-way – information delivered from one point (e.g. a university campus) to another or many other points, for example, the trainees' workplace, but with no opportunity for response e.g. a television broadcast.

Two-way – exchange of information where the trainee can respond to the trainer

Multi-point – information delivered simultaneously from one place to many other places e.g. video-conferencing from one classroom to several other remote classrooms

Multi-cast – the transmission of media technologies such as video and audio to the computers of many trainees *Carty 1999*

4. Distance Learning training market

Although distance learning has a long history, recent developments in ICT alongside changes in the world economy and patterns of employment, have led to an explosion in the number of e-learning and distance learning courses and programmes available (Capper and Potashnik. 1998). Many major corporations use e learning or distance learning to train their staff. Many universities now offer some or all of their courses online (e.g. MIT through their Open Courseware programme have made all of their courses freely available on the Internet). The increased use of distance and e-learning has led to an internationalisation of the training and education market where students from one country can theoretically gain a qualification from another country using distance learning.

Who wants Distance Learning training? The 'typical' distant learning student:
- Is over 25
- Studies part time
- Also has other professional responsibilities
- Wants 'on-the-job' or 'just-in-time' training to meet specific objectives
- Is self-directed
- Has reasonable access to technology (TV, video, computers)
- Already has some basic education

Parallel to this growth in the market for distance learning has been the development of the market for technical tools and products to provide e-learning solutions. Learning management software such as Lotus Learning Space, WebCT and Top Class are just three prominent examples of proprietary software that offer many of the functionalities to run distance-learning courses.

In addition, there has been a growth in the number of open source software solutions that can be used to organise distance learning, such as test generators, chat software or customisable open source forums. In accordance with the recommendations of the UNCTAD E-commerce Report 2003, the distance learning strategy of UNCTAD should be committed to exploring open source solutions to developing and improving its learning platform (UNCTAD. 2003). See annex 1 for overview of potential software.

4.1. UNCTAD's training population

The UNCTAD target-training population largely consists of mid-to-high level trade professionals with existing skills and career experience. Their learning is likely to take place alongside professional responsibilities; so training activities need to be flexible and accessible. UNCTAD training requires no formal entry criteria and because of the international and cultural diversity of the training population it is also likely that there will be no standard base of knowledge that all trainees can be expected to share (unlike say a university diploma). For these reasons, open and distance learning can be particularly applicable to the training needs of the target population.

While UNCTAD's training population shares some of the characteristics of the 'typical' distance-learning student -- professionals from some of the least developed countries -- access to technology and infrastructure cannot be taken for granted. Alongside the issue of infrastructure is the wider issue of 'information literacy' – not just having access to ICT, but also knowing how, when and why to use it. For this reason, UNCTAD's distance learning strategy takes into account the specific needs of trainees from developing countries.

5. Potential of Distance Learning

Traditional face-to-face training by UNCTAD in the form of seminars and workshops has a number of limitations:

- Human resource capacity

There is a limit to the skills, experience and knowledge of trainers available both within UNCTAD and in beneficiary countries

- Cost

Organising training sessions for participants from many different countries is expensive (DSA, transport, venue hire) and can reach only a limited number of participants.

- Adaptability

UNCTAD's training population is international and diverse. Training material appropriate to one setting may not be suitable to another. Similarly, the arena of trade and investment is constantly changing. Designing training that is both appropriate and up to date is a particular challenge.

- Access

Given the above limitations, there are limits to the number of people who can attend UNCTAD training events.

If properly applied, distance-learning techniques have the potential to address these issues.

Access:

Perhaps the key promise of distance learning is that it allows people to learn when, for whatever reason, they are unable to attend formal educational institutions. This is of particular relevance in countries where there are limited educational opportunities, problems of infrastructure, shortage of qualified personnel, or where people need to work as well as study.

As Judith Adler Hellman points out, distance learning offers:

> flexibility of scheduling, the possibility of proceeding at one's own pace, the opportunity to study without having to travel, indeed without leaving home, and, in the best funded programmes, the individualised attention from the instructor
> *Helllman 2003*

Human resource capacity:

Through the use of distance learning techniques such as email forums and chat, as well as through the use of ICT in developing interactive learning materials, UNCTAD and other expertise can be more widely distributed. For example, a video presentation of a seminar on Trade in Agriculture integrated into a distance learning presentation and distributed via the Internet and CD-ROM can reach many more people than a seminar limited to 14 participants (through either cost or logistics). In this way, human resource capacity and knowledge can be utilised more efficiently.

Adaptability

The systematic approach to the design of training courses and learning materials that distance learning requires means that courses are constantly revised and updated and that learning objectives and outcomes are clearly stated. This builds into the process of training development the opportunity to adapt and refine materials.

Additionally the networking and knowledge-sharing potential of Internet communication tools, when used in distance learning, can facilitate communication, knowledge sharing and provide a tool for south-south cooperation.

Again, the technology alone is not enough to make this happen: Knowledge sharing and networking are as much about cultural and professional values as they are about technology.

Access to the Internet does not inevitably lead to the sharing of resources, but it represents a new capacity and opportunity to facilitate these practices.

6. Challenges of Distance Learning

While distance learning clearly offers opportunities to increase access to training in developing countries, it also presents particular challenges.

- **Drop out rates**

Without the regular face-to-face support of both tutors and peers, many distance-learning programmes suffer from very high dropout rates.

- **Cost**

Distance learning can be seen as a way of providing training "on the cheap," or as a means of shifting some of the costs of training onto the trainee (e.g. putting pdf documents online so that the printing costs are born by the user). However, this is based on a misconception. Properly considered distance learning courses are actually very expensive. For example, the Open University in the UK develop courses using design teams who can spend up to three years and as much as £1 million to produce a new course. (Potashnik and Capper 1998)

Of course it is possible to produce distance learning courses for much less than this sum, but the real costs of adapting material to distance learning, employing tutors to provide online support and to assess and evaluate trainees is considerably more than the cost of a licence for a piece of software that promises to be a learning "solution".

- **Support**

Providing support for students can be difficult with distance learning. This can be exacerbated in developing countries where trainees may lack other kinds of support and be widely dispersed. The lack of face-to-face support and human interaction can lead to student isolation and high dropout rates.

Providing support to distance learning trainees – either through online forums, telephone or mail, requires proper coordination of human resources and/or the provision of additional face-to-face training opportunities.

- **Evaluation**

Assessing and evaluating trainees undertaking distance learning is also a challenge.

ICTs present many opportunities for students to 'copy and paste,' which raises questions over the reliability of trainees' responses. This tendency is heightened in distance learning when tutors do not have the opportunity to get to know the student and the subtleties of communication style and presentation that can mark out a trainees work as their own. Anecdotally, some international distance learning programmes in English or French have reported receiving work from students with little or no grasp of the language who have used Internet translation programmes to write their answers (WIPO. 2003).

The issue of assessment – of evaluating whether or not trainees have achieved the learning objectives -- is more difficult in situations where trainers and trainees seldom (if ever) get to meet each other.

- **Infrastructure**

Distance Learning – even in the 19th century – requires a reliable communications infrastructure to ensure that the training material reaches the trainee. In countries where there is an unreliable supply of electricity, not to mention telecommunications or even mail, then distance learning requiring access to the Internet presents many problems.

Even where there is adequate telecommunications and Internet access, there is an issue of bandwidth. Training materials that rely on images, video and audio are impossible to download on a 28K connection.

- **Sustainability**

There is also some concern over the sustainability of training programmes that only take place at a distance. If 'expert' knowledge and expertise remains in developed countries and developing countries remain passive consumers of that knowledge at a distance, then existing inequalities in human resource capacity will be maintained. For training programmes to be sustainable it is important that expertise *in training* as well as in the subject of the training is shared more widely.

Concerns have also been raised about the possibility that distance-learning programmes within developing countries can also exacerbate existing inequalities. Because of the self-directed nature of study, distance learning is only appropriate for people who already have quite high levels of information literacy and access to information and equipment. As a UN study points out, even when telecommunication systems are available, many people lack the requisite levels of literacy and computer skills to make use of the Internet and other forms of communication (Hellman 2003).

7. Definition of actions

Therefore UNCTAD distance learning activities are structured to take into account the following:

- Technical capacity

A careful analysis of existing technical capacity is undertaken in any potential partner country. All distance learning training materials are also made available on CD ROM (so as to account for problems in connectivity). All distance learning training is supported by some face-to-face training, or is scheduled so that trainees are supported in using the web platform or CD-ROM through dedicated distance learning seminars. This approach also leads to the development of ICT skills and Information Literacy more generally.

- Ongoing support to trainees

Ongoing support is provided by using local networks and trainers and through a 'training of trainers' programme. Distance learning activities use regularly scheduled chat sessions to provide opportunities for feedback and questions as well as regular e-mail contact or telephone support where appropriate.

- Sustainability

In order to promote a wider distribution of expertise and knowledge and so that the beneficiary countries feel some ownership over the training, regional pedagogical committees are established to oversee the training and distance learning activities.

Taking into account all of the above, a feasibility analysis of the use of distance learning methods is carried out before any distance learning programme is undertaken.

UNCTAD Distance Learning: Basic Conditions for the Implementation of Distance Learning Activities

In order to assess the conditions for the implementation of DL activities in developing countries (and particularly in the least developed countries) a feasibility study is required. This study shall take into account the following criteria:

Type of activities or resources in the country	**Yes (+1) / No (-1)**
Is the target population dispersed throughout a range of locations?	
Are trainers dispersed throughout a range of locations?	
Are trainers involved in additional professional activities to training?	
Are there more than twenty people to be trained per year?	
Is there an existing learning network (e.g. local university or college, government community access initiative) and could local trainers use this?	
Is there a national e-learning strategy or programme for distance learning?	
Does the target population use computers as part of their professional activities?	
Does the training planned require that the trainees undertake individual work (self-study)?	
Could the responses to trainees' questions or concerns be delayed for a couple of days without compromising the quality of the training?	

If the score is:

Less than -4 Distance Learning is not applicable
- 3 to - 2 Distance Learning not particularly appropriate
- 1 to 0 A combination of Distance and face to face (hybrid) training applicable
More than 1 Distance Learning recommended

The distance learning activities that will be implemented are likely to differ from one country to the other. Any distance learning programme will take into account the wider national context in terms of ICT infrastructure, training capacity and substantive knowledge.

8. UNCTAD objectives of Distance Learning in training for capacity building

The UNCTAD/TrainForTrade approach to distance learning is based on specific projects. This involves establishing partnerships with local training centres, training trainers and combining distance learning with face-to-face training.

The key objective of this project-based approach is to build capacity in developing countries both *in training* (e.g. through pedagogical seminars) and in the substantive area (e.g. competition law and policy).

Example project of the use of Distance Learning to develop capacity in ports
The objective of the UNCTAD/TrainForTrade Port Training Programme (PTP) is to contribute to the progress of trade and regional integration in the beneficiary countries through the improvement of the port manager's qualification; the development of cooperation activities between ports using the same TrainForTrade approach; and the set-up of a regional network of training capabilities.

In 2003 the Port Training Programme (PTP) worked in Benin, Cameroon, Guinea, Senegal, Togo, Tunisia for the French speaking countries and Cap-Verde and Angola for the Portuguese-speaking countries. In these projects Distance Learning has been used to accompany the local trainers in their preparation for deliveries of the "Modern Port Management course". A chat session (in French and in Portuguese) for each module of this course was organized in cooperation with partner ports in developed countries such as the Port of Marseilles and Dunkerque in France, Ghent in Belgium, and Porto in Portugal. The port provided an online 'expert' in each Module or sub-Module to answer the queries of the trainees and to develop their own knowledge and capacity. These sessions took place over a period of 8 months (representing sixteen hours of chat sessions in two languages). However, because of their working schedules and other commitments there were difficulties for the trainees (national instructors) to be online at the right session for various reasons (availability, understanding of the system, discipline, interest, etc.)

In 2004, the focus will be to target the direct recipients of the technical assistance programme, e.g. the participants in the "Modern Port Management" course.
One or two modules out of the eight will be run using CHAT and FORUM sessions accompanied by local tutors that will be trained and selected beforehand.

8.1. Collaboration within UNCTAD

In order to integrate a successful distance learning strategy, UNCTAD has nominated the HRD team of the SITE division to take the lead. The HRD team of the SITE Division assists other divisions to develop Distance Learning training applicable to their subject matter.

The TrainForTrade programme cooperates with UNCTAD's substantive divisions to design and deliver training. The combination of the pedagogical expertise of TrainForTrade with the substantive knowledge within the divisions gives TrainForTrade courses their comparative advantage. This collaboration can also be enhanced and extended through the use of Distance Learning.

	Contribution of DL (using ICTs)	**UNCTAD substantive divisions**	**TrainForTrade**
Administration (registration and tracking of students)	Providing registered trainees with unique ID, database automatically generating information	Sharing information about trainees or course participants	Registering and updating trainee databases
Course design	Providing a feasibility analysis of the appropriateness of different aspects of	Sharing information about upcoming projects, training objectives in each	Pedagogical expertise, network of experts in the field, application of training

	DL	area, technical cooperation activities	methodology
Development of materials	Using instructional design methods to make sure that information is structured and presented using multimedia	Sharing work-in-progress, such as PowerPoint presentations, lecture notes with DL team so as to tailor them to distance learning	Pedagogical expertise, application of training methodology
Course delivery	Structured online and interactive training materials, use of chat and electronic communication	Availability to take part in chat sessions, answer e-mails. Use of DL materials in face to face sessions Building distance learning elements into face-to-face training seminars and events	Use of TrainForTrade expertise and methodology in face to face sessions
Student Support	Forum, scheduled chat sessions	Availability to answer email enquiries and participate in chat sessions about substantive matters	
Assessment	Carefully structured online tests providing feedback to students	Sharing learning objectives and assessment criteria with TrainForTrade so as to design effective assessment tools. Being available to mark tests and give feedback to students	
Evaluation	Use of database to track student progress Online questionnaires into the effectiveness of training	Undertake questionnaire and other evaluations into the effectiveness of the training and sharing outcomes with TrainForTrade	Use of TrainForTrade expertise and methodology to evaluate training

The following existing human resources are available within UNCTAD:
* Central information and technology support service (ITS: Information Technology Support) for expertise and coherence;
* Pedagogical competence and training tools at the level of information and training (Information and Training Branch) of the SITE Division;
* A computer specialist to support the information and communication technology aspects of the training programme.

In order for the distance learning strategy to be implemented in the field, the following technical resources are recommended.

* Installation of a central Internet server hosting a training platform;
* Installation of national mirror servers in beneficiary countries that are appropriate to the local characteristics and capacities;
* Computers for DL participants (multimedia computers Sound Card + Speaker, Microphone, WebCam26);
* A video card to convert certain video sequences into a video file.

Example of UNCTAD best practice
In the context of a project funded by Belgium, two UNCTAD courses were identified for the use of distance learning techniques: International Investment agreements (IIA) and Commercial Diplomacy (CommDip). A number of modules were developed (20 hours for IIA, 5 hours for CommDip and made available in French and English.

IIA: Although the target population for this project was international, the specific training population was specific. For example, in each country there are approximately only five people requiring this kind of highly specialised course.
The distance learning modules were made available to participants to be used for self-study shortly before regionally based face-to-face seminars as a way of providing essential background knowledge and information.
Those participants involved in this first delivery will now be used as local facilitators or 'compatriot-fellows' for the second delivery of the distance learning materials.

CommDip: The target population has been different for each module (Trade in Agriculture, Trade in Services).In addition, the subject of each module is subject to regular changes through ongoing trade negotiations. This has made it more difficult to produce and maintain relevant and up-to-date materials.
Because of the heterogeneity of the target population, most participants were only able to access between two to three hours of the courses online.
CommDip courses have been delivered in Vietnam, Cambodia and LAO PDR. Face-to face seminars have been conducted in Vietnam for one module, and in Cambodia for the other. The aim of the Distance Learning component was to give entry-level knowledge to participants before the face-to-face delivery. Reading material was made available that covered specific research on the local and regional trade situation on the specified topics. This material will be delivered in Africa and other Asian countries in 2004.

8.2. Collaboration with partners in the field

The role of UNCTAD/TrainForTrade is central to the implementation of all distance learning training activities on the ground. As well as using the methodology to design the training programme, UNCTAD personnel are involved in providing technical support, subject matter tuition and facilitating/moderating training activities.

The partners in the field may have a combination of the following roles.

- The Director of the partner local centre in the field undertakes executive responsibility for the programme.
- The training manager (usually a senior teacher or government official) takes day-to-day responsibility for coordination between the local centre and the UNCTAD central team.
- The local instructors deliver the training modules. They may also be involved in delivering training modules in other countries in the region where no suitably qualified instructor is available.
- The tutor mediates between the instructor, the trainees and the other partners within the distance-learning network (e.g. another regional centre). He/she provides support to the

trainee both technically and substantively and refers the trainee to the appropriate person for more specific advice (e.g. by sending an email to an UNCTAD expert).

The interaction between these roles and functions is designed to provide support to trainees, to facilitate exchange of documents, ideas and experiences between tutors, participants and instructors, and to ensure that the training remains focused and relevant.

8.3 An example project:
Training of trainers on Competition Law and Policy. November 2001.

Trainers were trained to deliver two courses that would partially utilize distance learning: the Formulation of a Competition Law and Policy, and the Implementation of a Competition Law and Policy.
The seminar on using Distance Learning was conducted in cooperation with the national TrainForTrade coordinators in Benin, Burkina Faso and Mali and the RESAFAD training centre in Benin and Burkina Faso.

How it worked:
Subject matter experts at UNCTAD in Geneva worked in collaboration with pedagogical and distance-learning experts to design appropriate training materials and activities.
Prior to the seminar, there was an analysis of the technical and human resource capacities in the participating countries and to identify centres equipped for distance learning using ICT.
Particular attention was given to the centres where there were technically proficient tutors capable of managing such training. A national coordinator was identified to facilitate and organize local and national training.

The training material:

- The distance learning material consisted of a participant's manual, user's guide, a CD-ROM with multimedia presentations, videos and case studies adapted to local situations, as well as questions and exercises which the instructor was required to distribute. This material was prepared in close collaboration between the TrainForTrade Central Support Team and the team of subject matter experts of Competition Law and Policy in UNCTAD.

- A tutor (the local coordinator of RESAFAD for supervised training activities

Benin and Burkina Faso and a Distance Learning Associate Expert of UNCTAD for Mali)

- In Geneva the TrainForTrade team looked after the overall implementation and management of training exchanges and the preparation of tutors for each session. This support team also assisted the subject matter expert to answer questions raised by participants.

- To facilitate the use of pedagogical material, a tutor's guide was produced. A Chat/Forum was held prior to each training session between the tutors and the Central Support Team of TrainForTrade. This ensured that the tutor had a good overview of the development of the next session while enabling him/her to prepare adequate materials needed for the following sessions.

Training Activities:
The training consisted of four half-day sessions over a period of one month. For each session, an exchange between participants and subject matter experts of UNCTAD took place through the Chat/Forum simultaneously in the three countries. During these live sessions, subject matter

experts from UNCTAD answered the questions of participants. Case studies and more complex questions were discussed using the forum on the training platform.

Results:
Thirty high-level officials in the field of Competition Law and Policy (ten per country) were trained in the three countries. These officials have now acquired knowledge allowing them to contribute to the implementation of reforms in the field of Competition Law and Policy in their countries and at the regional level. Among these participants, some may become instructors to diffuse some modules locally.
The centres used for this training, may also be used by local government to train local instructors with the support and intervention of subject matter experts of UNCTAD through the E-Platform.

Conclusion:
This project using distance learning to implement pedagogical training in three Least Developed Countries, demonstrates that alternatives exist to traditional training. It is not necessary to wait until countries have elaborate telecommunication infrastructures. Providing that training activities are properly planned and managed, a simple telephone line linked to a local Internet provider is enough to provide quality training. It is now possible to extend this training to other countries and in other languages. Other courses that are presently under development will follow the same framework and will be available on line shortly.

9. Technical Specification

Central to the Distance Learning strategy are the technical solutions developed to implement distance-learning activities using ICTs. These solutions should never be 'fixed in stone' and should be able to respond to changing technologies and developments in access and use of technology in partner countries.
The UNCTAD/TrainForTrade Distance Learning strategy uses a standardised learning platform open to registered trainers and trainees. Its combined chat and forum tools are driven by an Access database used to register and track trainees.
In order to minimise the disruption caused by low bandwidth and connection problems as well as to promote the sustainability of the DL tools on a local level, the Distance Learning Platform is replicated on a local server in parter countries.

In order to keep the training up to date it is recommended that there is ongoing training for the TrainForTrade DL teams. It is also important that the distance learning personnel attend relevant conferences and participate in networks of expertise and experience in distance and e learning. This process will not be confined simply to technical developments but also to issues concerning pedagogy, educational policy and theory.

UNCTAD/TrainForTrade distance learning networks
Conferences attended
L'usage des réseaux pour l'éducations en Afrique RESAFAD-TICE/UNESCO conference in Paris 2003
EBologna: Progressing the European Learning Space – European Association of Distance Teaching Universities. Madrid 2003
The Commonwealth Information Society Summit – Commonwealth Business Council. London 2003
UNEP: Distance Learning programme – Geneva 2003
World Summit for the Information Society – Geneva 2003
Membership of Networks
Emint - network of online community managers

Digital Divide – network of information and resource exchange
United Nations Geneva training group

10. Expected Outcomes of distance learning using ICTs

The intended outcomes of implementing distance learning within UNCTAD/TrainForTrade include the following:

Outcome	Benefit
To achieve scale economies in the implementation of training activities	More people trained effectively at reduced cost
To establish networks of trainers within beneficiary countries who can support and deliver training in using distance learning techniques	Transfer of skills and knowledge South-south cooperation Development of ICT-literacy
To ensure that training materials are designed to support training objectives using a range of instructional design techniques	Training tasks and activities more closely linked with training objectives Higher quality of training materials
To facilitate regular communication between UNCTAD, trainees and partners in technical cooperation projects	Knowledge sharing to help trainees learn from each other and to ensure that UNCTAD's training is relevant and responds to the needs of the target population
To build up case studies of 'best practice' through the sharing of information via distance learning tools	Enabling access to up-to-date knowledge and experience to help promote UNCTAD's mission to be a knowledge-based institution

11. Conclusion

The UNCTAD Distance Learning strategy takes into account the exciting potential represented by the use of new technologies in distance learning. However, it is mindful of the challenges and the realities of using these technologies, particularly in relation to LDCs. To this end it takes into account the existing capacities and networks that exist in each of the partner countries.

Therefore, customized solutions are developed for each country so that a variety of training techniques can be implemented to the best interest of these countries.

This strategy is designed to be flexible and to adapt to the realities of development on the ground.

This flexibility can also enable Distance Learning to be used by staff members of the Secretariat so that the benefits can contribute to the whole range of training actions and research activities so as to support the process of intergovernmental meetings.

References:

Judith Adler Hellman (2003) *The Riddle of Distance Education: Promise, Problems and Applications for Development*
UN Research Institute for Social Development
Winthrop Carty (1999) *Distance Education in the Developing World*
The Advising Quarterly www.amideast.org/publications
Michael Potashnik and Joanne Capper (1998) *Distance Education: Growth and Diversity*
Finance and Development, March 1998

Annex1: Software for Distance Learning

Programme	Registrations	QCM	chat	mails	forum	video	Total Cost	Technology Used	Management	Creation and management of documents
ACOLAD	15 000	No	Yes	Yes	Yes		Free	SQL, Access 2000, ASP, JRE, PHP4	Instructor	All types of files accessible via a browser
GANESHA	Unlimited	No	Yes	Yes	Yes	No	Free (open source)	PHP / MySQL	Administrator	All types of files accessible via a browser
CLAROLINE	20 000	Yes	No	Yes	Yes		Free (open source)	PHP / MySQL	Instructor	All types of files accessible via a browser
MOODLE	20 000	Yes	No	No	Yes	No	Free (open source)	PHP / MySQL	Administrator	Integrated proprietary system
VIGIPORTAL	20 000	Yes	Yes	Yes	Yes	No	30 000 € + training for administrators and hotline support	PHP / MySQL	Administrator ou bien géré par Vigiportal (moyennant supplément de prix)	Integrated proprietary system
WEBCT	25 000	Yes	Yes	Yes	Yes		33 260 € HT (annual licence for 15000 users)	Oracle / Java / PHP	Instructor	Integrated proprietary system
LEARNINGSPACE	20 000	Yes	Yes	Yes	Yes	No	55 € per user	PHP / MySQL	Instructor	All types of files accessible via a browser