Inter-American Center of Tax Administrations – CIAT

43ʳᵈ CIAT GENERAL ASSEMBLY

"A MODERN VISION OF THE TAX ADMINISTRATION"

Case Study 3.2

HUMAN RESOURCES MANAGEMENT: TRAINING, STRATEGIES, PLATFORMS AND TOOLS THAT FACILITATE E-LEARNING

**Inter-American Center of Tax Administrations
CIAT**

**Santo Domingo, Dominican Republic
April 20 – 23, 2009**

Introduction

E-learning, is a distance education concept where the use of information technologies and other educational (teaching) elements are integrated to develop, train and teach online users or students, that is, it may be understood as a learning modality within Distance Learning and is defined as *e-learning*. It uses different elements and means, such as the Internet, Intranets, CD-ROMs, productions multimedia (texts, images, audio, video, etc.), among others... Literally, e-learning is learning with electronic means: technology guided learning[1].

Based on the above definition, the topic of this practical case, based on CIAT's experience will be analyzed, which is relatively recent, it was cautiously, but decisively implemented in July 2004. Perhaps this is the first win, to carry the program from less to more, constantly and soundly.

Based on this experience and on the experience complied from member countries, this practical case will succinctly present and analyze the main aspects that led the Center to opt for virtual training, considering the organization's mission, vision and the institutional objectives and strategies, defined by the their own member countries. Similarly, obstacles and how to overcome them will be considered, as well as the results obtained to date, the trends that must be overcome and considered in the short, medium and long-term to consolidate, not virtual training per se, but CIAT's training strategy and in the same, virtual education as a tool that has proven to be effective and proficient in meeting the Center's objectives.

Similarly, the Center is responsible of complementing the programs of its member countries in issues pertaining to taxation, but also to identify efficient, efficacious and in some cases innovative practices, so the training programs of the Tax Administrations are successfully carried out from the point of view of not only the contexts but of the tools that facilitate education. Therefore, the conclusions of the Seminar "**KEY SUCCESS FACTORS OF VIRTUAL TRAINING: IT TOOLS, CONTENTS, TUTORS AND MANAGEMENT,**" an event organized by CIAT in May 2007 will be taken as a starting point. This seminar was attended by important officials from member countries, with ample and little experience on the topics covered, resulting in the decision on the most important aspects to be taken into consideration for the implementation, improvement and in sum, the success of virtual training as a strategic tool when executing an institutional training plan.

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[1] Definition given by Wikipedia.

More important than the analysis and the results presented herein, I must take a minute or maybe two, however, time shall not be enough, to recall, thank, and not thoughtlessly forget a dear friend who would surely be present here today at this General Assembly. I'm talking about Professor Hugo González Cano, who CIAT and I personally, are indebted to him because of not only his generous disposition to collaborate with any initiative of the Center, which until the last moment as the Coordinator of our Specialized Course in Tax Policy and Technique, but he also gave us his friendship, good humor and evident chivalry and who even forgave me for calling him in public the "The King of *Merengue* and *Miloga*," not because this is not true but because of his foolproof modesty.

I. HUMAN RESOURCES MANAGEMENT: CIAT TRAINING AND E-LEARNING STRATEGY

i.The Relevance of HR Management:

The importance of HR in the tax administration has been amply reiterated by CIAT, not only through different presentations prepared and presented within the Framework of the General Assemblies and Technical Conferences, but also through manuals and models that have been developed and put at the disposal of the TAs to assist them in their management.

Recent evidence of this, among other, is CIAT's Manual for the Management of HR, which will be put at the disposition of the member countries during October this year. The same contains the most important issues related to performance management, recruitment, selection, training, career path and the promotion of ethics, among others.

Therefore it is necessary to reiterate the important role that the personnel of a tax administration play and the need to strengthen that human capital to strengthen and consolidate the tax administration itself. In this regard, it is import to quote Dr. Claudino Pita, CIAT's Executive Secretary:

"…..all functions and purposes of a modern tax administration, regarding its possibilities of success, are supported on a tripod formed by information, technology and human resources that it has available. However, if we turn this into a mathematical formula, we would have to say that while information and technology is the addition portion, human resources are the multiplier of the result of that sum"[2].

Now if human resources are the multipliers in this tripod of success of the tax administration, training, I have mentioned before, is the factor impelling human resources in the tax administration to the "n" power.

This is expressed in the following mathematical formula:

$$\text{TA Success = Information + Technology x RH x Training = } (RH^n)$$

This document analyzes the combination of two factors that when applied to HR Management can positively vary the results for the tax administration. These are: Technology and Training or better said, Technology applied to Training understanding that any tool, technological or not, must be at the service of the administration, and not vice versa.

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[2] Pita, Claudino in the General Rapporteur Report, 38th CIAT General Assembly,
Bolivia, 2004; IEF; p 260.

ii. CIAT's E-learning Strategy

As well as any area of the tax administration, HR Management and training in the same is benefited from the advantages that technology can provide in terms of efficiency.

Recently, we could say that during the last decade, solution alternatives through e-learning have attained greater prevalence in any organization and are seen as effective tools to achieve concrete solutions at a relatively low cost.

Within CIAT's Training Strategy, "e-learning" has followed the steps and has submitted to the analysis and the considerations that any tax administration would carry out prior to implementing this alternative as a useful instrument in attaining their objectives.

The first analysis to define the Strategy or the starting point that must be set forth in the organization's Strategic Plan. In CIAT's case, the basis of the training program are the Strategic Directions contained in the 2007-2010 Strategic Plan and specifically the direction relating to training in member countries, namely:

Strategic Direction Nº 3: *To promote and execute training and professional development activities for tax administrations officials, and provide technical assistance in this field for countries requesting the same.*
This Direction contains, mainly the essence of CIAT's training program and foresees its development through three Strategic Initiatives[3].

The Strategic Plan in Strategic Direction No 3 as well as the other directions complementing this one contains the challenges and tasks that the Center must undertake to meet the strategic objectives as well as the key aspects thereof, which can be summarized, as follows:

Strategic Objective: To promote and facilitate the transfer of knowledge towards and between the TAs of the member countries, as a key aspect for the strengthening thereof with the purpose of generating a tax culture;

Regarding the key aspects to comply with said strategic objective, these are summarized in the following table.
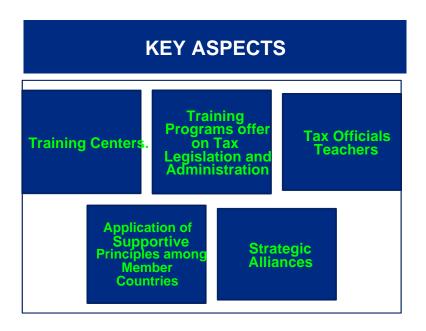
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[3] *Strategic Initiative Nº 3 A*
Support to the creation and development of training centers in member countries.
Strategic Initiative Nº 3 B
Promote the offer of training programs on tax legislation and the tax administrations.
Strategic Initiative Nº 3 C
Promote the exchange of officials-teachers from the different areas of the tax administrations of the member countries, to execute training activities.

KEY ASPECTS

- Training Centers.
- Training Programs offer on Tax Legislation and Administration
- Tax Officials Teachers
- Application of Supportive Principles among Member Countries
- Strategic Alliances

Particularly Strategic Initiative IA: Promote and execute training and professional development activities in the legislation and the tax administration, which is also considered within the key aspects, such as: the offer of multilingual training programs on legislation and tax administration was the most complex for CIAT. In person meetings had been carried out and the same had and still have the support of the member countries and other international organizations, the field of action is limited and the same are addressed more to discuss very punctual or specific issues.

Considering the limitations posed by the in person seminars or activities regarding coverage and theme, it was important to consider other options to overcome the barriers imposed in practice by the modality, in spite of all the positive aspects that may be highlighted on the same. Without abandoning the in class modality which continues to be used for the specific topics and audiences it addresses.

Regarding coverage, with the exception of very short-term activities, in class training limits the number of participants, not only to assure the efficacy of the methodology, even more in the case of the countries members of CIAT, but because of the high cost incurred when mobilizing participants as well as organizing the meeting, in terms of the logistics required. Similarly, in the case of the Center, when analyzing the number of potential participants, there was a broad spectrum, therefore, it was necessary to adopt innovative strategies to meet the demand.

In terms of the topics, it was concluded that according to the experience resulting from the Strengthening of Training Centers BID/CIAT/AEAT/IEF/SAT[4] Project, that many officials, specially from Latin America and the Caribbean, did not have – because it was missing in the national professional development plans or in the organization's training plan – the fundamental or strategic knowledge on taxation issues: tax policy and techniques, tax law, tax administration and international taxation, which should not be seen as value added or a luxury, but as the main base to fully develop their tasks and improve the tax administration's management.

In addition to the subject matter factor, considerable time is required to teach the fundamental knowledge of the training plan that could easily be compared to a post-graduate program, which execution involves beforehand high costs if it were to be taught in-class, in person.

These conditions, coverage and the fundamental tax subject matter, in addition to the duration of the programs, constitute some of the main factors that give place to the re-direction and strengthening CIAT's Training Strategy as from the year 2005, which are analyzed in detail in item II of this paper.

The reasons or the arguments leading CIAT to decide for e-learning as a valid tool to execute its training program, can be summarized in the words expressed by Pierre Lafamme[5], an official of Canada's Tax Administration when speaking about the origins of e-learning in his organization:

What drives on-line learning?

From the organization's point of view:
- Ease and speed in updating knowledge
- Timely training
- The search for profitable Solutions to reach disperse personnel – greater scope and coverage
- The need to find new learning models
- Increased efficacy
- Reduced learning times
- Coherence and consistency in the contents taught
- Share knowledge
- Less costs

From the technological point of view:
- On the job and at home Internet access
- Standards facilitate compatibility and manageability
- Increased bandwidth allows rich multimedia interactive contents
- High-quality on-line products and services

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[4] Strengthening of Training Centers Project
[5] Paper presented during the SEMINAR – WORKSHOP ON KEY SUCCESS FACTORS OF VIRTUAL TRAINING: IT TOOLS, CONTENTS, TUTOR AND ADMINISTRATION, PANAMA CITY, JUNE 10 – 12, 2007.

However, as Pierre superbly asserts, not all are positive aspects, the disadvantages must also be assess when deciding on implementing the modality, and these are summarized as follows:

- A more significant initial investment
- Access limits
- Limitations in the technological infrastructure that the administration may have available.
- Technical literacy and change Management, which are influenced by aspects such as age and technological culture.
- Reduced social and cultural interaction. Students may have feelings of abandonment or loneliness during their development process.
- It is not applicable to all study topics. Topics where the student's in-class presence is considered to be the primary element in learning, it is not advisable to offer these through this method.

II. KEY FACTORS TO BE CONSIDERED FOR IMPLEMENTING THE MODALITY.

Based on the conclusions of the Seminar organized by CIAT in June 2007 and in the experience of the Center, we can summarize and group the most relevant aspects to implement e-learning in any organization, including the use of technological platforms, in the following manner:

i. Designing the Strategy

    a. <u>Analysis Phase</u>: the crucial aspects that will influence decision making on whether or not this training modality will be implemented. It includes, among others, the following issues:

– Diagnose of the current situation of the training plan and its execution. It answers, among other things, the following questions:

- What is the current situation of the tax administration regarding the training program?
- What is the future perspective of the tax administration regarding the training program?
- What are the training needs of the administration, what areas and what issues are in great demand?
- What is the cost of the operational training plan in development? What is the return on your investment[6]? (If it is possible to establish the same).

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[6] The return on the investment made in training is a complex measurement to perform and which results are not accurate. There are methods used in both the private and public sector to determine the cost-benefit ratio between the investment and what is obtained.

- What is the coverage at the level of officials benefited and issues covered?
- How many and is the profile of the faculty the tax administration has available?

– Reasons to justify or not the implementation of e-learning and the use of a technological platform on a tax administration where, for example, through a SWOT analysis the following aspects are considered:

- Alignment of the implementation strategy with the organization's Strategic Plan.
- Determination of which is the strategic value of e-learning for the tax administration
- Establishment of the short, medium and long-term economic advantages of the e-learning project. (Hardware and software purchases, personnel training, etc.).
- The project's sustainability in the medium and long-term.
- The degree of democratization of the expected knowledge and updating of human capital.
- Reduction in estimated times with the use of the modality.
- Availability of technological resources
- Risk analysis: possible disadvantages or risks if the modality is implemented: cost, lack of technological resources, difficulty in recruiting or contracting human capital to assume the role of tutors and educational advisors to adapt contents, operational capacity limitations, resistance to change by officials.
- Availability of technical materials to serve as a basis for the design of the courses.
- Operational capacity for the administration and follow-up of e-learning courses
- The support of the organization's Top Management
- Combine virtual and in-class training (blend training)

b. Implementation Phase

– Develop an e-learning implementation strategy that considers:

- Top management support.
- Alignment with the strategic goals of the administration and with each of its areas: ICT, HR, Collection, Examination, etc.
- Conceive e-learning as a continuous plan/program, and as one more offer, among the educational options of the tax administration. E-learning is tool that complements training modalities in force; it must not necessarily substitute the same.
- State the project's scope through the establishment of achievement phases, establishing compliance with partial objectives or advances.

- Establish an operational or tactical plan for the implementation of the e-learning project.

    - Define the tactical objectives of e-learning and their alignment with the organization's strategic plan and the training strategic plan.
    - Establish activities to be developed to attain the objectives of the operational plan.
    - Establish indicators for each objective as from the activities and establish a method receive feedback on the Project.
    - State awareness tactics focused on reducing the impact of resistance to change (transformation of paradigms) as from risk analysis.
    - State tactics to prevent or reduce the impact of key obstacles or risks (disadvantages). Establish contingency premises.

- Prepare the budget for the e-learning project.

    - Must be aligned with the operational and strategic plan.
    - Must be aligned with the project's strategic allies, i.e., IT area.

- Organize the resources to be used for the project:

    - Human capital
    - Areas involved
    - Responsible area
    - Assignment of resources pursuant to the operational plan and budget
    - Technological resources required
    - Other resources: materials and equipment

ii.   IT Platform:

The current offer of technological tools at the service of e-learning is ample and varied. Unlike what happened years ago when the method was just beginning, open source software becomes an interesting and excellent alternative for any organization. Logically this option entails the development of modules or compliments that each organization must assume if it wishes to modify the original features of the program.

CIAT has experienced e-learning through the use of licensed and open source software (Moodle) which is the one that it currently uses.

To determine the software to be purchased or used, during the Seminar organized by CIAT and held in Panama a checklist was developed to identify the most relevant issues to be taken into consideration during a first analysis of this training alternative. Similarly, to decide on the platform to adopt, CIAT analyzed and quoted some options available in the market, and compared prices, features available and support offered.

Undoubtedly, this list cannot be limited to the aspects mentioned herein, because each tax administration must analyze, from its own point of view and circumstances, which should be the topics to consider and their priority.

Therefore, we first begin this list with a consideration:

- To select a IT platform:

  - There are not pre-established recipes
  - The decision depends on objective, subjective and situational aspects.
  - What is good for an administration is not necessarily good for others.
  - It is important to carry out benchmarking of lessons learned in the TAs where the e-learning modality has been implemented.
  - Options to be considered will be more or less complex depending on the degree of communication tools required. That is, if you are thinking about the inclusion of videos, video conferences, simulators, etc.
  - E-learning does not exclude in-class training, but activities can be combined so that they complement each other. For example, work support or evaluations must be done in-class.

Among the subjective aspects to be considered, the following are important:

- Functional requirements: analyze the options offered by the different technological alternatives that allow:

  - The easy and effective management of resources.
  - The development of technical contents through tutorials or evaluate the alternative of outsourcing.
  - Follow-up and track courses, tutors and students.
  - Students, tutors and course evaluations, as such, including the same technological tool.
  - The possibility of obtaining and exporting to other file formats, periodical and final reports on the course's development and the evaluation thereof.

- Technical Requirements

  - Minimum technical requirements for each software considered as an alternative.
  - Analysis of the infrastructure that the tax administration has at the IT level, such as hardware and everything relating to software.
  - Human resources specialized in IT to support the project.
  - Hosting: which will be the decision regarding the repository for the courses: contract an external server or a server hosted by the tax administration? This issue directly influences the administration of the software such as, since it implies the designation of the person or persons responsible of updating the different versions of the program, information security copies, technical support, etc.
  - Cost-benefit ratio between the investment to be made and the benefits to be obtained, pursuant to the alternatives analyzed.

- Weighting of Features: Within the features of the different options it is advisable to establish where are those of greatest interest for the administration in agreement with the priorities and strategies defined.

  A fundamental point is to know if the organization can and decides to Outsourced the administration of the courses, including the hosting of the same and the design of the self-development materials, being only in charge of the technical follow-up at the level of tutors and general supervision of the courses.

  "Can," because the cost of this service can be high because of the potential number of students that will receive the courses. Therefore, in most cases, this is the basis for the companies that provide these services take as reference to estimate the cost thereof.

- Comparison of Solutions: comparative analysis of the different options available, including the technical, fundamental and financial aspects in agreement with the previously designed strategic plan, which, as said before, must also consider a budgetary plan.

- Selection of LMS: The best solution will be the one that adjusts the most to the strategy defined by the administration in agreement to their needs, realities and the availability of human, technological and financial resources.

iii. The Tutor:

Tutors are in charge of carrying out orientation sessions on technical contents. Their participation is essential within the implementation of e-learning because it is responsible of serving as a contract between the virtual World and the real World through the support provided to students in regards to the technical issues covered. The tutor is the guide, the motivator and the leader of the e-learning process. The tutor is also a source of an invaluable feedback for the organization.

For the Executive Secretariat, the tutor is a facilitator and a representative of the organization before the institutions and persons that participate in courses, and in mot courses the tutors are officials of the TAs of the member countries.

Also, every course is a means to inform participating officials, the services that the organization offers and at the same time, a means to obtain important and interesting statements and the opinions of the people that live daily with relevant and current issues.

On the subject of the checklist on key aspects to consider concerning tutors, the following may be determined:

- Must be an expert on the issue or issues to be developed during the course.
- Must constantly update their knowledge
- Must have the educational knowledge
- Must have the management of the platform and mainly the features relating to their job: test evaluations, forums, chats, etc.
- Must have clear academic conditions of the course to manage.
- Must have the possibility of combining their tutor role with other activities to prevent the excessive wearing out as a result of their tutorial activities.

iv.   Educational Material

Technical materials are a fundamental element in e-learning, because based on these the professor and the student develops.

In the case of the courses offered by CIAT, material has been developed as lessons taught by Experts on the issue.

Learning by lessons allows professors as well as students to have a better control of the learning and the activities designed to reinforce the same.

Currently, CIAT has worked on designing excellent technical contents which are updated and improved through the periodical review of contents by Experts on the issue and feedback obtained from tutors and students. However, the presentation and editing of the same must be improved, and with this in mind software was purchased and the same will improve the interactivity and the presentation of the courses.

Another important aspect to be considered is the participation of educational advisors, in charge of providing the adequate structure to the course to turn it into material that is fit for self-development education. These advisors are important support for the training and follow-of the course, providing support and orientation in the development of their educational tasks.

The degree of intervention of the educational advisors will depend on the subject matter of the course because it determines the design required, considering the public it is addresses. Various TAs have their educational advisors and course designers.

This is not the case of CIAT because of the limitations of its current staff, the cost that this entails and the level of design given to the courses. In this sense it is important to consider, as it was mentioned in the design of the implementation strategy of this modality, which is the future perspective and the scope that e-learning is going to have in the organization so that it justifies the disposition of a multidisciplinary and broad human resources team. That is, the sustainability and the continuity of the project as such.

An e-learning project that begins by generating great expectations, which later are impossible to continue because of the organization's budgetary restrictions or changes in its priorities, it creates great disenchantment and lack of credibility in the human resource and negatively predisposes it to accept similar projects in the future.

Some of the most relevant aspects to be considered regarding technical materials in the checklist are:

- Conditions or background: The plan of the courses to be developed must be based on the training needs diagnose.

- Develop the course plan, defining:
  - The course's learning objectives
  - Target group: how it learns easier and therefore how to present the contents
  - Duration
  - Conditions for the realization

- Establish the balance between the educational ideal and what is technically possible to do. Not starting from complex or costly designs.
  - Design the course considering a versatile structure to update contents.
  - Define the methodology and the instruments to be used.
  - Define the synchronous or asynchronous tools to be used.

- Development of contents in agreement with the responsibility that they have: the educational advisor, the technical expert author of the contents, the graphical designer and the IT personnel required)

- Carry out the activities plan that forms part of the course: execution timetable, development of lessons, intermediate tests, final tests, complementary materials, etc.

- Carry out a pilot test of the course, in order to:

  - Obtain validation of the contents and the educational and IT design.
  - Feedback on all the aspects related to the course.

- Implementation and execution

- Evaluation and monitoring

- Feedback that determines the needs for design and contents adjustments.

v. **The Student**

CIAT has attempted to a maximum to perfect the information the student receives so that it can have clear the entire procedure from the enrollment in the course up to its termination. (Student guides).

The familiarization of people with the use of the platform, significantly contributes to take advantage of the time and the course and consequently to its success.

III. RESULTS OBTAINED SO FAR. WHAT HAVE BEEN THE MAIN OBSTACLES FACED AND STRATEGIES IMPLEMENTED AND DEVELOPED TO OVERCOME THEM.

i. Training Evaluation

Worldwide, many different evaluation models are applied in training, and so far it cannot be said that one is better or more complete than another one, because the final goal, which is to measure the impact of training in the organization and determine what is the return on what has been invested in training programs, is highly complex and costly.

The most used model is the one designed by Donald Kirkpatrick, considered as the pioneer evaluation model. Ever since its appearance in 1959, it has stood out for its simplicity, flexibility and coverage characteristics. It is composed of four levels, arrayed in a hierarchy in such a way that evaluation always begins on level I and ends in level IV, and each level is the basis upon which the following are built.

These levels are:

Level I: Evaluate Reaction.
Level II: Evaluate Learning.
Level III: Evaluate Behavior.
Level IV: Evaluate Results.

Later, in 1997, Jack Phillips, based on the Kirkpatrick Model, developed Level IV "Evaluate Results", establishing a series of phases that give enable the establishment of a Level V called: ROI (Return on Investment). These phases may be summarized as follows:
- Data collection.
- Isolation of the training effects.
- Conversion to monetary values.
- Classification of benefits: monetary and non-monetary
- Return on Investment (ROI) calculation

This document will not discuss the models in depth in order to determine which is better than another and how they are applied, but rather proposes that they serve as reference to determine what has been done so far in the matter and what is yet to be done.

CIAT and, generally, all TAs, evaluate levels I and II of the models mentioned above. That is to say, the student's reaction to logistic, technical and technological aspects of the course is always evaluated. (The student's level of satisfaction with respect to administrative support, the quality of materials or contents, follow-up or tutorials and the facilities of the platform for the development of the course, in conformity to the structure given to the same).

With respect to Level II, learning evaluation, this is done through tests, written papers, and participation in forums, among others, where the level of knowledge acquired by the student is measured and whether the same passed the course or not is determined.

These two levels are permanently and constantly applied and provide feedback to the administration to improve specific aspects of its own processes.

Now, Levels III, IV and V, the latter added by Phillips, are applied by some TAs but not by CIAT.

Perform an evaluation to establish how received training influences better behavior and greater skills acquired by the official in his work, that is to say, how training contributed to the application of new knowledge to improve the development of the official's work, on the one hand; (Level III Evaluation of behavior), or establish the scope of greater and better results of an area and of an administration as result of the training of their officials (Level IV Evaluate results), or finally what is the return on investment in training (Level V evaluation ROI), requires great efforts from the human resources areas, considerable financial investment and commitment from the organization at the middle and top management level.

Creating groups to track work performed carried out by trained officials, design and application of surveys, performing interviews, monitoring by the immediate chiefs of the work performed by their reports and top management's support to the process are required among other key aspects, specially for levels III, IV and V. The impact training has on the organization's results may be measured in that manner, at the level of increase in efficiency and of the return on the investment made.

These are processes that demand time, dedication, continuity and specialized personnel to guarantee reliable and objective results. These are some of the main reasons why these types of evaluations are not permanent or generalized but rather sporadic and focalized.

There is factor in CIAT that makes more complex the application of the evaluation levels mentioned above. This is the students' origin, because they come from diverse TAs and, therefore, the difficulty to track their work. These three aspects can only be measured by the TAs themselves, differentiating between officials that have taken courses given by CIAT and other officials.

ii. CIAT's Results

Having made, in the foregoing section, the clarification of the evaluations made by the Center, the results obtained from the beginning (tables 1a and table 1b) of the program up to now, considering the 3,332 students trained (see table 2), are as follows:

Period	2004-2005			2005-2006		2006-2007		2007-2008		
AVERAGED DETAILS	Certificate 1ed	Certificate 2ed	Certificate 3ed	Certificate 4ed	Certificate 5ed	Certificate 6ed AB	Certificate 6ed C	CT Ed Esp 2007	CEPTT 2ed	CIOF 1ed
No. of participants	51,67	47,00	44,00	53,33	57,00	45,00	20,33	228,25	207,00	28,00
No. students approved	48,33	45,00	37,67	41,33	53,00	30,75	16,33	196,25	148,00	20,00
No. of not approved	2,00	0,00	2,33	4,00	2,00	7,75	2,33	11,50	18,00	3,00
No. students retired	1,33	6,00	4,00	8,00	2,00	6,50	2,00	20,50	20,00	5,00
No. students reincorporated (in cycle)	-	-	3,00	4,33	4,00	-	-	-	-	-
Average grade (approved)	90,43%	92,63%	87,07%	89,81%	89,25%	88,56%	89,34%	89,26%	88,33%	91,80%
Evaluation of modules										
Operation of virtual campus	-	-	4,69	4,73	4,50	4,53	4,22	4,57	4,47	4,88
Support material	-	-	4,57	4,59	4,52	4,40	4,27	4,48	4,48	4,88
Technical material	-	-	4,55	4,36	4,41	4,09	4,25	4,37	4,36	4,71
Administrative & IT support	-	-	4,24	4,50	4,35	3,72	3,51	4,38	4,49	4,94
Academic support	-	-	3,96	4,23	4,15	3,60	3,92	4,59	4,59	4,76
Others										

Table 1 a

Period	2008-2009							
AVERAGED DETAILS	CT Ed Spc 2008 (Spanish)	CT Ed Spc 2008 (Aux)	CT Ed Spc 2008 (English)	CEPTT 3ed	CIOF 2ed	CIOF 3ed	CPT 1Ed	CEAT 1ed
No. of participants	230,33	18,67	28,50	69,00	51,00	23,00	101,00	230,00
No. students approved	182,67	13,67	22,50	27,00	49,00	18,00	72,50	149,00
No. of not approved	32,33	2,33	1,00	11,00	-	5,00	9,00	24,00
No. students retired	8,67	2,33	3,25	7,00	2,00	-	10,00	20,00
No. students reincorporated (in cycle)	-	-	-	-	-	-	-	-
Average grade (approved)	89,39%	88,20%	92,47%	84,45%	91,02%	89,21%	89,61%	89,68%
Evaluation of modules								
Operation of virtual campus	4,24	4,51	4,38	-	4,40	4,29	4,51	4,50
Support material	4,28	4,47	4,27	-	4,41	4,27	4,51	4,37
Technical material	4,30	4,47	3,98	-	4,27	4,37	4,36	4,28
Administrative & IT support	4,23	4,53	3,23	-	4,47	4,05	4,29	4,56
Academic support	4,44	4,33	4,11	-	4,55	4,47	4,59	4,55
Others								

Table 1 b

A quick analysis of the results that appear in the tables lead to the establishing the following conclusions based on the six aspects evaluated:

| Operation of the Virtual Campus |
| Support material for the participant |
| Technical material |
| Administrative and IT support |
| Academic support: tutors |
| Others |

- Course dropout percentage is very low if we take into account that one of the risks of distance education, generally speaking, is high desertion or drop out rates. In CIAT courses, in average, it does not reach 5%.
- Passing percentage is quite acceptable, because it reaches 90% considering that the academic burden and demand is high.
- The course evaluation in its 6 aspects is high, an average of 4.6 out of 5.00.
- One of the best-rated aspects is the academic support provided by the tutors or facilitators.

Participant countries	# of students 2005-2006	# of students 2006-2007	# of students 2007-2008	# of students 2008-2009	Total
Argentina	85	12	48	34	179
Barbados				20	20
Bolivia	19	0	185	126	330
Brazil	1	0	37	22	60
Chile	16	1	91	66	174
Colombia	17	166	75	157	415
Costa Rica	0	0	201	80	281
Ecuador	110	3	177	179	469
U.S.A.	1	0	0		1
El Salvador	0	0	64		64
Guatemala	11	0	65	13	89
Honduras	0	0	41		41
Jamaica	0	0	7	6	13
Kenya	0	0	25	17	42
Mexico	7	0	84	53	144
Nicaragua	14	0	79	15	108
Panama	1	0	4	8	13
Paraguay	0		73	23	96
Peru	113	40	193	194	540
Portugal				1	1
Dominican Republic	11	0	3	18	32
Trinidad and Tobago				76	76
Uruguay	14	2	14	18	48
Venezuela	12	1	17	39	69
IDB	1	0	0	0	1
CIAT	0	**16**	5	5	26
Total Participants	**433**	**241**	**1488**	**1170**	**3332**

Table 2

The table above shows by country the participation of tax officials in the virtual training activities scheduled by the Center. Ample participation is observed by officials from SUNAT of Peru (540), SRI of Ecuador (469), DIAN of Colombia (415), SIN of Bolivia (330), DGI of Costa Rica (281) and AFIP of Argentina (179).

iii. Obstacles

The Center counts with few human resources to execute the virtual program although their disposition and commitment to fulfill each task has made the good results obtained up to now possible.

Among the limitations or obstacles that may be mentioned, we must underscore the lack of personnel specialized in "e-learning", and the lack of timely IT support to develop, update and complement the Moodle platform.

The lack of specialization is specifically reflected in the matter of converting the material into texts with a greater pedagogic content. One of the options to overcome this inconvenience is to establish strategic alliances with TAs that count with these resources.

In what respects to the development of some Moodle functions necessary to manage the courses and improve the environment for the student, the training area has assumed its personnel's training so that they be the ones in charge, with support from the IT area, of carrying out adjustments and developments in the near future.

IV. FUTURE TRENDS AND TOPICS TO BE CONSIDERED.

E-learning will surely become a priority alternative for TAs not only because it has shown to be efficient and efficacious but because in times of economic recession the search for different options that allow to meet institutional goals at a low cost, is a need of the organizations more than an alternative.

The degree of growth or expansion of any e-learning program using technological platforms must be determined by each organization depending on their needs and priorities. The decision of some TAs will surely be to transfer to e-learning some courses that are currently being given in person, if the subject matter and administrative and technical conditions allow it.

TAs that do not count with training under any e-learning modality may consider its use as an effective means to continue developing their training program and thus avoid the impact of budget cuts. In this case the recommendation is to be cautious and gradually design the modality implementation strategy, allowing for an optimum adjustment to this human resource system, at the student, tutor and administrator levels.

The combination of "e-learning" and in-person activities seem to be the best option for the organizations because they allow contact between students and between students and tutors and offer greater security and guarantee in key processes such as knowledge evaluations and in measuring concrete results.

Strategic alliances with local educational organizations, particularly of a governmental nature, may save time and money in the implementation or improvement of the organization's "e-learning" program. In the case of CIAT, the Masters in Tax Administration and Treasury (Maestría en Administración Fiscal y Hacienda Pública) program, developed through the Tax Studies Institute (Instituto de Estudios Fiscales), the State Tax Administration Agency (Agencia Estatal de Administración Fiscal), the Distance Learning for Economic and Technological Development Foundation Center (Fundación Centro de Educación a Distancia para el Desarrollo Económico y Tecnológico-CEDDET) and the National University for Distance Education of Spain (Universidad Nacional de Educación a Distancia de España-UNED), has shown to be key to successfully carry out, through 6 editions, a graduate course for officials from the Spanish-speaking TAs.

As part of these strategic alliances, CIAT, with the cooperation of the Brazilian tax administration and the tax administration school of Brazil will expand its courses program for Portuguese-speaking officials.

Likewise, next steps include the decentralization of the courses and technical assistance for the development of national modules in the essential topics listed: Tax policy and technique, tax law, tax administration and international taxation.

V.   CONCLUSIONS

− HR management and, within the same, training benefits from the advantages technology may provide in terms of efficacy; however, to implement any "e-learning" strategy, the starting point must be the organization's Strategic Plan.

− Counting with top management's constant support to implement the "e-learning" strategy is essential in the project's success.

− The implementation strategy must consider the institution's training needs, and the available human, technological and financial resources.

− Tutors, students, pedagogic advisers and technical contents are crucial aspects in the success of the implementation and development of the "e-learning" modality.

- There are many and diverse alternatives available in the market to implement "e-learning". The decision on which could be the best one for the organization will depend on its specific needs, priorities and circumstances and the future perspectives the program has.

- For the selection of an IT platform, consideration must be given, among other aspects, to the fact that there are no established recipes, but rather the decision will depend on objective, subjective and situational aspects.

- It is advisable to gradually develop the implementation of the modality so as to allow the organization to adjust to the same.

- Although impact and return on investment evaluations are complex to materialize, it is important that they be seen as objective to be met in the medium and long term.

- The "e-learning" modality does not exclude the possibility of carrying out training activities under the in-person modality. On the contrary, these complement each other and may work in harmony and efficiently.

- Strategic alliances with other organizations may facilitate the implementation of one or several aspects related to "e-learning" contributing not only to guaranteeing the success of the project but also saving time and resources.