## **CHAPTER 7**

# DISTANCE LEARNING AND NATIONAL TRADE CAPACITY BUILDING IN BRAZIL: THE EXPERIENCE OF CATHOLIC UNIVERSITY OF BRASÍLIA (UCB)

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### 7.1 Introduction

In 2003, a very successful partnership established by the Catholic Virtual Center of the Catholic University of Brasília (CCV-UCB) was signed with the Brazilian National Service for Industrial Learning (SENAI/DF) to plan and execute of a distance learning postgraduate course on foreign trade. The postgraduate course was originally designed to have a direct impact on the export performance of Brazilian small enterprises.

The partnership was part of an initiative aimed to contribute to the National Foreign Trade Agents Network (REDEAGENTES), a federal government project designed and executed by the Brazilian Ministry of Industry, Development and Trade (MDIC). The REDEAGENTES Project aims to disseminate and strengthen an export culture among small enterprises at all units of the country, with the ultimate goal of enhancing their export performance and integrating them into international trade (MDIC, 2006).

Through this project, the Brazilian federal government registers professionals willing to become a Foreign Trade Agent (FTA) on a voluntary basis. These professionals come from a wide range of Brazilian institutions such as federation of industries, commercial associations, and regional banks. Once a FTA, one commits himself to offer permanent support to local small enterprises already engaged, or intending to engage, in export activities (MDIC, 2006a).

Even though distance learning was a suitable strategy to the challenge of developing the trade capacity among FTAs located in different parts of the country, there were several concerns. First of all, 400 FTAs from all States of the country were registered to attend the course, some of them living in quite remote areas, accessing the Internet using low speed dial-up connections. Secondly, virtually all FTAs were, in fact, starting a distance learning

experience for the first time. Thirdly, the course term – a total of ten months – was relatively short. Fourth, the initiative went beyond transmitting trade contents to a group of graduate students; it involved a national economic and social commitment. It was necessary to capacitate small entrepreneurs for a direct impact on the improvement of small enterprises' export performance and, indirectly, on income and job generation in the country.

Small enterprises in Brazil constantly face adverse conditions that result in a general tendency to perform badly in exports to foreign markets. La Revere (2001) concludes that from 1991 to 2001 at least half of all new enterprises established in Brazil were small enterprises, from which only 30% did succeed in the market. These enterprises, on the other hand, correspond to 66% of all formal jobs in the country (Ibid.). Moreover, such enterprises face common constraints such as obsolete equipment and machinery, inappropriate management techniques, and difficulties in commercializing their products in new markets (Levistky, 1996, *in* La Revere, 2001).

This chapter provides a description of the pioneering experience and results from the distance-learning postgraduate course on foreign trade with emphasis on small enterprises, offered by CCV-UCB to 400 FTAs in the period from May 2003 to February 2004. Results are shown in two different perspectives. From a student perspective, 261 respondents provided key data on the student level of satisfaction with the course, with their virtual interaction with professors, with the quality of contents, and with its practical applicability. From a national trade and development capacity perspective, key data on the participation of Brazilian small enterprises in the international market were utilized. Except for the latter data, all data and information were taken from internal documents and reports available at CCV-UCB.

The chapter is divided in three parts. The first part introduces the discussion on the relation between distance learning and Trade Capacity Building (TCB). The second part brings a detailed description of the key elements that constituted the distance learning working methodology, and the course results. Conclusions are presented in the last part.

# 7.2 Distance Learning and Trade Capacity Building

Since 2001, Trade Capacity Building (TCB) in the so-called developing countries has become a core issue on the international agenda. According to OECD (2003), finance ministers at the World Trade Organization (WTO) ministerial meeting in Doha, in 2001, recognized that trade is a means to achieving broader development and that "the integration of the world's least developed countries into the multilateral trading system requires meaningful market access, support for the diversification of their production and export bases, and trade-related technical assistance and capacity building" (p. 4).

The concept of TCB innovates as it proposes a broader perspective to capacity building, not limited to the traditional individual training perspective. According to OECD (2001: 4), "Capacity development for trade today is about mobilizing participatory approaches to deal with complex trade agendas." It goes further:

"Trade capacity building enhances the ability of partner country policy-makers, enterprises and civil society actors to: collaborate in formulating and implementing a trade development strategy that is embedded in a broader national development strategy; strengthen trade policy and institutions as a basis for reforming import regimes, increasing the volume and added-value of exports, diversifying export products and markets

and increasing foreign investment to generate jobs and exports; and participate in – and benefit from – the institutions, negotiations and processes that shape national trade policy and the rules and practices of international commerce" (Ibid: 4).

While TCB assumes an evident place in the current international agenda, distance learning is gradually recognized as a strategic tool for that purpose. The XI United Nations Conference on Trade and Development (UNCTAD XI), held in São Paulo, Brazil, 13 to 18 June, 2004, in recognition to the potential role of distance learning, devoted one entire thematic session – Session III of June 17 – to the topic "A Partnership for Training, Distance Learning and Networking: Information and Knowledge for Development."

Among the priorities and guidelines set at the XI UNCTAD, one can read as follows:

"Recent advances in information and communication technologies can facilitate the process of capacity development by providing access to a wider range of sources of information and educational programmes (...). In particular, Internet-facilitated networks have the potential to be used as an empowering capacity development tool, owing to their participatory and demand-driven nature" (UNCTAD XI, 2004).

The experience described below, therefore, projects distance learning as a capacity development tool. It is part of a timely international discussion and search for adequate development policies and strategies to promote TCB in developing countries. We hope this chapter may eventually contribute to future reflections on distance learning and TCB.

# 7.3 The Distance-learning Postgraduate Course on Foreign Trade with Emphasis on Small Enterprises

CCV-UCB is an academic environment established in 1996 with the responsibility of developing and providing distance-learning courses through the Internet. Distance-learning working methodologies, as defined by CCV-UCB, rest upon strong interaction and cooperation oriented towards developing autonomous, critical and creative thinking amongst students, and exploring their reflection-in-action ability.

CCV-UCB, conscious of its proximity to decision-makers from the central government in Brasília, capital city of Brazil, as well as its capacity-building role in local and national development programs with large socio-economic impacts, has engaged in different innovative partnerships. The partnership with SENAI/DF took place within this context, and all CCV-UCB efforts for the design and implementation of the postgraduate course were motivated by expectations of assuming that role and fulfilling its original mission.

#### 7.3.1 The working methodologies

Due to the challenges it faced, the course distance-learning model was based on a holistic combination of educational strategies and activities. Some strategies and methodologies were already part of CCV-UCB approach to distance learning, and part of them was created in response to the aforementioned challenges concerning FTAs and their ultimate goal in the national development strategy.

The Course ten months term – from May 2003 to March 2004 – was structured on nine units of thirty-five days each, arranged around three key thematic axes: Export Cul-

ture, Export Marketing Strategies, and Entrepreneurship. Professionals with long and broad experience in foreign trade in Brazil authored those units.

Each thematic ax is was strategically designed by CCV-UCB in close collaboration with MDIC. Export Culture aimed to develop among FTAs a broader and deeper perspective of the benefits from selling products/services in the international market. Export Marketing Strategies aimed to provide FTAs with economically affordable and easy-to-apply planning tools designed to help national products entering and conquering foreign markets. Lastly, but not least, Entrepreneurship aimed to explore each individual's entrepreneurial attitude, along with a deep sense of shared social responsibility and reflection-in-action.

Due to Internet connection constraints, hypertext-based contents composed each of the nine units. The hypertext-based contents provided internal links to glossary and further readings, and external links to the Internet in order to deepen specific subjects. Each unit was composed of an average of ten printable lessons. Each lesson, based on specific foreign trade topics, had an average of six to eight practical exercises that challenged FTAs to do further research on key topics. Figure 7.1 shows a one-page sample of the hypertext-contents.

At the end of each unit, each student had to prepare and send by e-mail a final paper. The team of professors, based on reality-inspired situations, elaborated all paper proposals. Each situation could have different solutions. This solution, by its turn, depended on a critical analysis of several parts of the contents and an ability to solve complex problems. For this reason, some students organized themselves in groups to discuss those paper proposals – either face-to-face or virtually –, and some preferred to take the challenges individually.

At the end of the last unit, each student had supervision from one professor to prepare a final report. The report was designed so that the student had to apply export marketing planning tools at one small enterprise of his/her choice. Students had the task to identify small enterprises established in their region, with an exporting potential. Once a few enterprises were identified, students contacted them to check which one was

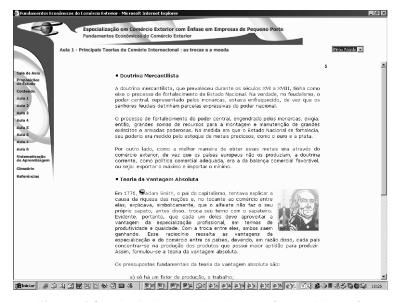


Figure 7.1 Sample of a hypertext-based content (Lesson 1, Page 5)

interested in having its export marketing strategies reviewed or planned for the first time. Students had the additional task of motivating that enterprise to initiate or to expand its exports. By the end of the course, each student defended his/her final report for a committee of two professors established in the capital city of each State in Brazil.

Interaction between the team of professors and students was sought in ways that did not require high-speed Internet connection. The most intense interaction happened through online discussion groups. Groups of students were formed based on the proximity of their geographical locations, and debates were promoted and facilitated within those groups around topics previously defined by the team of professors. For each unit of thirty-five days, students got involved in at least two to three debates. Participation in such debates was also subject to evaluation. Criteria for evaluating participation were frequency, interaction, coherence, ability of critical questioning, and analysis.

E-mail was also an important tool to promote interaction between students and professors. By e-mail, students were able to do any kind of inquiries such as the final paper of a unit, specific issues concerning foreign trade legislation and policies at their original location in the country, issues concerning his/her final report, and any other doubts.

Professors also utilized e-mail on a constant basis. At the beginning of each new unit, professors posted e-mails to introduce themselves, to introduce students to the main topics of that unit, and also to establish a detailed schedule or organize students' readings and participation in online discussions. E-mail was also widely used to answer queries and provide supervision during the preparation of students' final report.

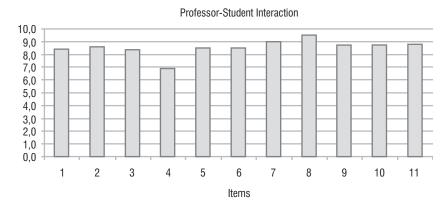
Two additional key strategies must be mentioned. First, the joint initiative taken by the university and the government for the monitoring and evaluation of the course: a methodology was developed to allow both immediate feedback from/to students during the course, and proper evaluation of its adequacy and impacts at the end of the course. Second, all online discussions were saved and stored for eventual consultations or research.

#### 7.3.2 The results

Concerning students' opinion on their interaction with professors, eleven items were evaluated¹ on a scale from 0 (zero) to 10 (ten). Results from those eleven items are showed on Graph 7.1. One can observe a high level of satisfaction among students. The overall average was 8,6, with a standard deviation of 1,8. The item with the highest score – average 9,5 with standard deviation 1,0 – was number 8 "Professor was respectful and careful in his/her interaction with students." The item with the lowest score – average 7,0 and standard deviation 2,8 – was number 4 "Professor stimulated my communication by email with my colleagues."

<sup>1 261</sup> questionnaires were responded, for which scores from 0 (zero) to 10 (ten) were attributed to eleven items, as follows: 1. Professor stimulated my participation in online discussions; 2. Professor participated actively in online discussions; 3. Professor frequently participated in online discussions; 4. Professor stimulated my communication by e-mail with my colleagues; 5. Professor was available during daytime; 6. Professor replied my messages promptly; 7. Professor accepted well my ideas; 8. Professor was respectful and careful in his/her interaction with students; 9. Professor motivated students to become more autonomous; 10. Professor evaluated and scored my paper/report in a comprehensive way; 11. Professor made use of evaluation criteria in a coherent way.

Concerning the quality of contents, fourteen items were evaluated<sup>2</sup>. Overall average was also high: 8,7 with standard deviation 1,6. The item with the highest score – average 9,2 and standard deviation 1,2 – was number 7 "All indicated links to external websites were coherent with the course contents." The item with the lowest score – average 7,6 and standard deviation 2,2 – was number 5 "The complexity of the contents was compatible with each unit's length". Results are shown on Graph 7.2.



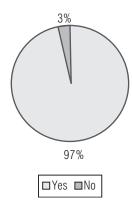
Graph 7.1 Students' level of satisfaction in their interaction with professors



**Graph 7.2** Students' level of satisfaction with the quality of the course

<sup>2 261</sup> questionnaires were responded, for which scores from 0 (zero) to 10 (ten) were attributed to fourteen items, as follows: 1. Course objectives were clear; 2. Course contents were well articulated with proposed objectives; 3. Course contents were well written; 4. The amount of reading was compatible with each unit's length; 5. The complexity of the contents was compatible with each unit's length; 6. Bibliographical references were up-to-date; 7. All indicated links to external websites were coherent with the course contents; 8. There was an adequate amount of recommended links; 9. Each lesson activities were coherent with the contents; 10. Activities of each lesson were expressed on a clear way; 11. The final paper proposal was coherent with the unit's proposed objectives; 12. The final paper proposal was expressed on a clear way; 13. Evaluation criteria were expressed clearly; 14. Evaluation criteria were coherent with proposed objectives.

#### **Applicability of the Course on Practice**



**Graph 7.3** Students' reply to the applicability of the course on practice

Concerning the applicability of the course on practice, as shown on Graph 7.3, 97% of respondents replied "Yes", while 3% replied "No".

Concerning the national development impact of the course, 70% of FTAs from all regions of Brazil completed the course and as such developed high skills in virtual learning and virtual interaction with learning communities. In addition to that, from a questionnaire survey conducted by e-mail at the end of the course, more than 150 students' final reports were instrumental in allowing more than 120 small enterprises to sell their products and services to international markets for the first time in 2004. In fact, this figure represented 20% of a total of 865 Brazilian small enterprises that initiated their exports in 2004 (*O Estado de S. Paulo*, 16-Jan-2005).

Based on students' final reports, a public access online database was gradually built, containing the best export marketing strategic plans designed for the exportation of small enterprises' products and services to many different countries, called Database of Export Projects.<sup>3</sup>

The Database of Export Projects contains 154 projects available in PDF format, each project with detailed surveys on specific products and services in specific international markets, and with detailed export marketing strategies for the introduction of these products and services into these markets. The database has been online since December 2004, and, up to July 2006, had had more than 13.000 visits, and has 4.354 registered users from regions all over Brazil. Among all registered users, there are entrepreneurs (41%), students (23%), consultants (16%), artisans (2%), and users not classified under any specific group (18%).

Last, but not least, the Database will have the ability to extend these results much beyond those initial figures in terms of a multiplicative spillover effect. The database is unique in Brazil, and has become strategic among entrepreneurs, consultants, government officials, and students directly or indirectly involved in the export business, helping them in their support for a greater involvement of Brazilian small enterprises in international trade.

<sup>3</sup> The online database, called "Banco de Projetos", is accessible at http://www.catolicavirtual.br/cursos/secex \_redeagentes/bp/index.asp

#### 7.4 Final Considerations

The course distance-learning model described in this chapter innovated in terms of its holistic and integrated combination of distance learning educational strategies and activities, an easy-to-access hypertext content and virtual environment, and a good match between national trade capacity demands and the structural conception of the course and its units. The initiative of constituting an online Database of Export Projects, which has assured sustainability to the initiative, may be also considered an important innovation.

Distance learning proved to be quite effective for the learning process and its impacts on local and national development. The levels of satisfaction with the course, the interaction with professors, the quality of contents, and its practical applicability were quite high. Moreover, the substantial increase in the participation of Brazilian small enterprises in international trade not only benefited the entire country economy, but also helped CCV-UCB fulfilling its social mission by accomplishing a challenging task of national trade capacity building.

This pioneering experience and its results could not be achieved without a distance-learning technology. This evidence, despite its simplicity, reveals the potential role distance learning is yet to play in the future.

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