ENTREPRENEURIAL DEVELOPMENT IN A NATIONAL BASIS

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Summary:

This paper presents the use of innovative educational methodology, by the CDEE-ICESI, to spread entrepreneurial education and assistance to young entrepreneurs living in different cities of Colombia. Web CT and Internet were used as educational technology tools with designs and application specifically developed for the Colombian users by CDEE staff.

1. The Center for Entrepreneurship Development at Universidad ICESI

The Universidad Icesi was founded in 1979, by the main entrepreneurial leaders from the Valle del Cauca, with the purpose of contributing to the harmonic development of the region, shaping the new entrepreneurial leaders, under the basic principles of: free enterprise system, entrepreneurship, democracy, social responsibility, ethics and justice.

The "Centro de Desarrollo del Espíritu Empresarial" (Center for Entrepreneurship Development) (CDEE) was created on January 1st 1985, as an academic unit of the university, with the mission of forging a new Entrepreneurial Culture through academic processes and with the permanent participation of the academic and entrepreneurial community. The entrepreneurial culture should be full of innovation and social responsibility and able to become an engine of development in all its facets.

The fundamental purpose of the CDEE is to motivate and to shape, through educational activities, the members of the community under its area of influence, in the development of innovative and creative actions that will allow them to become, throughout their lives: creators of new and competitive organizations, leaders of the existing ones, creators of wealth, productive employment, social wellbeing and personal, professional and social satisfaction.

Through special educational processes denominated Entrepreneurial Education, the CDEE is committed to provide a learning, motivational, development, conviction and support environment, which will significantly improve the disposition of the members of the

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community to act, towards the surge of new competitive organizations and to the preservation and growth of existing ones, whether they may be private or public, profit or non-profit and from any of the sectors of the economy.

The areas of creation, appropriation, and diffusion of knowledge in which the CDEE works are: the development of the entrepreneurial spirit and culture, the creation of enterprises, the shaping of entrepreneurial leaders, entrepreneurial education, the management of family businesses and the management of SME (Small and Medium Enterprises).

The CDEE firmly believes that the socio-economic development is basically a human process, in which people find the appropriate ways to use production resources: natural, human, financial, technological and informative. These creative and innovative human beings, capable of overcoming the limitations that the environment presents them with, skilled to take advantage of opportunities independent of the volume of the own tangible resources they may have, eager to transform their ideas into actions capable of nurturing the economy, the business activity and the quality of life, are the business leaders that the CDEE seeks to shape.

Through the years many programs, activities, research publications and projects has been developed not only for ICESI's community but also for many Colombian groups and even for several Latin American groups (www.icesi.edu.co/cdee/es). In this paper four experiences using new educational technology are presented.

3. Activities

3.1 Entrepreneurship course using Web CT

Since 1985, all undergraduate ICESI's students have had to take as mandatory course the Entrepreneurial Creativity course. In the business program for the last 8 years two mandatory courses are required: Entrepreneurial Spirit and Business Planning.

In 1999, CDEE started a joint project with several Canadian and Latin American Schools oriented to the use of Web CT or other technological platforms in business education. Initially we just used two facilities: the calendar to allow the student to monitor all the activities of the course and the e-mail to communicate with them. Later we were able to include in Web CT all the written material used for the class discussions. Later we were able

to use chats, business ideas and business opportunities presentations and evaluations, but we had difficulties due to our connections. Later we got more experience and found necessary to design specific education activities for every written materials and we included some graphical design to allow a better education process. After that we started to do quizzes and reading control using the system.

This semester we are using all the facilities that Web CT has, except the chat facility which is very heavy for our system and the auto evaluation facilities that we have found not very useful for our evaluations system. The following figure shows some of the elements of our course:

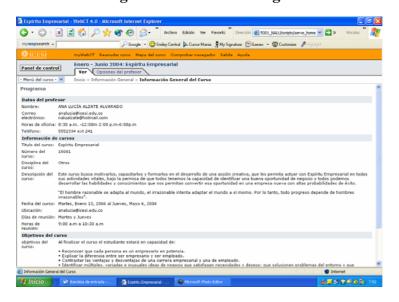


Figure No. 1 Course Program

Figure No.2 Pedagogical Strategy

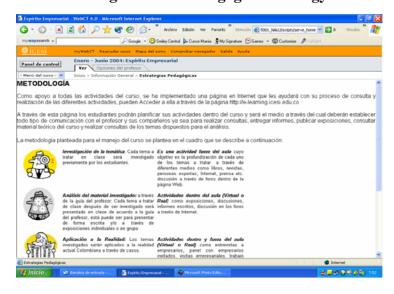


Figure No.3 Evaluation Strategy

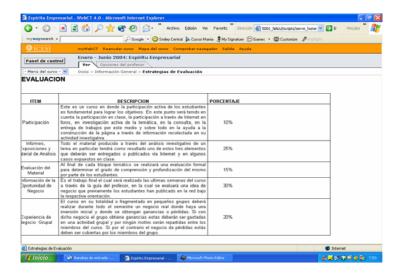


Figure No. 4 Course Calendar

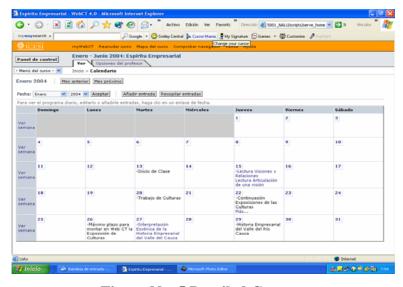


Figure No. 5 Detailed Content

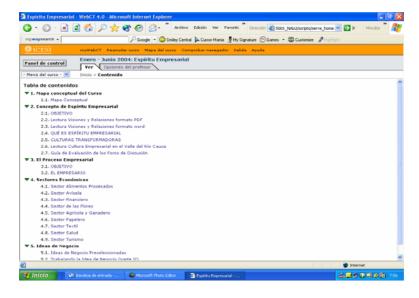
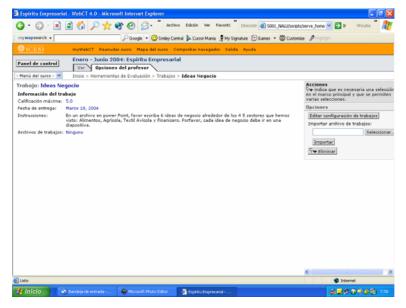


Figure No. 6 Example of Homework



Through the last 5 years a total of 375 students of first semester of Business Administration had taken the Entrepreneurship course using Web CT. This one was the first course in Web CT established in our university and it's the basic training for business students in that methodology. Today there are more than 50 course offered with Web CT support.

We have learnt many things in educational terms:

- The system gives back to the student the responsibility for all their readings, cases, home works, quizzes, papers, etc., and the student assumes his responsibility fully and then finds very tiresome that in other course this facilities are not available.
- The system is a very useful tool to get all the students to participate, especially for the timid ones that in the traditional class are not able to ask question or to make oral comments.
- For first semester students it's an integration tool which facilitates their communications.
- It allows the students to monitor their academic results, because they are able to know the grades they are having in every evaluation.
- It did require from the professors a more analytical work about the structure and content of the course, and an additional work for the design of the materials. It's not enough to get a paper and included it just as a word document or as a PDF file.
- It the professor to provide direct feedback and direct communication with each student instead of the global and impersonal communication that is provided in the traditional classroom.

- It requires lot's of time of the professor to carry on this methodology because it's a 24hrs/7day compromise. The students always expect immediate answer from the professor.

3.2 CEINFI's Cathedra

In October 2000 the Colombian government presented the "Entrepreneurship and new Enterprise Colombian Policy" (Política Nacional por el Fomento del Espíritu Empresarial y la Creación de Empresas), as a tool of progress and development for Colombia. In that policy, which was part of the MiPyme's law, several strategies were designed to create an entrepreneurial culture all over the country. One of the specific strategies was to achieve the inclusion in the curricula of all Colombian universities, of a course in Entrepreneurship. Following these basic indications, the Minister of Industry, Commerce and Tourism, created the Entrepreneurship Culture Program and from it the CEINFI's Cathedra. CEINFI holds in Spanish for Cathedra for the Creation of New Enterprises with National Impact and International Perspective's and the main objectives that the government defined for it were:

- a) To promote the implementation of courses, seminars and extracurricular activities at the university level that will allow the development of new ventures with high impact in the national economy and with future possibilities in the international market.
- b) To develop an academic community in Entrepreneurship which could be dedicated to the subject and that will be able to adapt knowledge, technologies and better practices to the Colombian environment.

One of the main difficulties the Ministry had to implement these ideas was that in many of the Colombian Universities there were not university professors oriented to these subjects, thus the implementation of CEINFI's Cathedra has to be started by motivating and training university professor in the basic concepts of entrepreneurship, entrepreneurial education and new business development.

The Ministry, with very limited resources, did open a public call for bids to provide the basic training to 120 university professors and to design in detail a basic course that the professor could adapt to their specific students according to regions, profession, etc. The Center for Entrepreneurship Development of Universidad ICESI was the winner of the bid, especially due to its long and wide experience in all entrepreneurship education areas.

The basic course was designed with the experience we have built teaching Entrepreneurship at different groups during the last 20 years and the main objectives designed for the course were:

- To understand the economic, social, historic, psychological and professional implications of entrepreneurship worldwide and specially in Colombia.
- To motivate university students toward an entrepreneurial career.
- To develop the values, beliefs and attitudes of the entrepreneurial spirit.
- To develop a set of goals, strategies and tactics to carry on an entrepreneurial career
- To identify multiple different and unusual business ideas that may become business opportunities.
- To prepare a full business plan that allow the student to understand all the key component of the new business, the resources required and the support system to carry on the project The course was designed under four basic pillars:
- Motivation to become entrepreneur
- Entrepreneurial environment
- New business concept development
- Business Planning

The course is supported by the book "Innovación Empresarial: Arte y Ciencia en la Creación de Empresas" Pearson Educación, Bogotá, 2001, and by several other books and papers at the national and international level.

The training to the professors was done in two groups each one of about 60 professors and with a direct contact of about 12 hours in which the main subject of entrepreneurial education were addressed: Motivation, Entrepreneurial Process, Creativity and Innovation. It's expected that in the near future additional training in business planning will be offered.

In 2004 around 80 universities and technology institutes course started activities in Entrepreneurship, some of them as core requirement courses, others as elective courses and others as extracurricular seminars.

In addition to the activities that the Ministry is planning for 2004 and 2005, there is another big initiative for some Colombian Universities that is going to be supported by IDB. This project, that started from our Center and it's going to be managed by "Fundación Corona", titled "Programa de Empresarialidad para los jóvenes en Colombia" is going to support universities in the main three cities of Colombia in the establishment of programs in Entrepreneurship. The goals for the next three year are: 300 university professor trained in entrepreneurial education, 100 technical advisers trained in entrepreneurial support, 3000

young entrepreneurs motivated and oriented, 300 new business created and some support networks developed. We expect to have a significant role in this project to continue our mission of expanding entrepreneurial culture all over Colombia and the Latin American continent.

3.3 Business Plan Training

Since 1999, the Ministry of Trade, Industry and Tourism, at that time Ministry for International Trade designed a special program to promote new business among young university professional that was called "Jóvenes Emprendedores Exportadores".

This program which had very significant diffusion through the country brought the opportunity to young university professional to present their business opportunities to regional entities, especially Chambers of Commerce, in order to be evaluated. From that evaluation the most promising opportunities and entrepreneurial teams were selected in order to develop their business plan. After very detailed selection, the best business plan did received support from the Ministry to find financial resources, support for attendance to trade fairs, support for technical adviser and networking with other entrepreneurial teams and programs.

In 2003 the program was redesigned and it was called "Emprendedores Colombia". Some big changes were implemented, not only in terms of the participants in which the age limit was eliminated but also in terms that basic university studies were not required, and also in terms of business prospective because no longer export orientation was a prerequisite. The new idea was to select the most innovative opportunities and the best entrepreneurial teams.

In terms of methodology also big changes were included, because the Ministry consider that all the entrepreneurial teams should receive specific training in business plan and also that they should receive technical advice and assistance to get their business plan to an acceptable level.

However two big difficulties did have the Ministry: a) The 53 entrepreneurial groups that they selected, which were in total around 150 potential entrepreneurs, they lived in 17 different cities of the country with significant distances of the main cities; b) The budget that the Ministry had was very low for a traditional scheme of training.

The Ministry thought that 24 hrs. of training could be enough, but didn't realize the fact that due to the heterogeneity of the participants not only in educational levels but also in managerial subjects, they will require a more intense training program.

The Ministry called a public bid to select an institution that could design a program with the budget limitations but able to satisfy the expectative and goals of the Ministry. The Center for Entrepreneurship Development of the Universidad ICESI designed a proposal, that could be operational and cost – effective based in two complementary approaches:

- Traditional Training: The 53 groups were split according to their geographical position in five cities and to each one a twelve hour seminar was offered to cover basic concepts of business plan, methodology for business plan development and basic training.
- Virtual training: A training program was designed and implemented in Web CT to give the opportunity to all groups to receive a complete course in business planning using internet as media. It has three big modules: Market analysis, Operational and Organizational Analysis and Economic and Financial Analysis

The traditional training was conducted in five groups: two in Bogotá, one in Medellín, one in Cali and one in Florencia to get the participants to the closest and easiest place to reduce the cost of transportation and stay. The traditional sessions did reach the objective of presenting them: the methodology that we were going to apply during the training, sharing with them the business plan goals, design and contents; sharing with them general methodology for business plan; providing them the basic orientation for e-learning and specially for the Web CT platform.

With our staff the three big modules were designed and implemented in Web CT, and we assigned the professor that were going provide the follow – up to the potential entrepreneurs through their learning process. The following figures show some of the facilities of the course.



Figure No. 7 Presentation of the training program

Figure No. 8 General content for each one of the modules

Tabla de contenidos ▼ 1. INFORMACIÓN BÁSICA PARA EL PLAN DE MERCADEO 1.1. Evaluación del Negocio e Investigación de Mercados 1.1.1. Información General de la Unidad 1.1.2. Presentación de la Unidad 1.1.2.1. Análisis del Sector 1.1.2.2. Análisis del Producto/Servicio 1.1.2.3. Análisis del Mercado Meta 1.1.2.4. Índices y hábitos de compra 1.1.2.5. Análisis del Proceso de Distribución 1.1.2.6. Fijación de Precios 1.1.2.7. Análisis de la Competencia ▼ 2. Conclusión del Análisis del Negocio 2.1. Conclusión del Análisis del negocio y determinación de problemas y oportunidades **▼** 3. PLAN DE MERCADEO 3.1. Información General de la Unidad 3.2. Conceptualización y Objetivos 3.3. Reformulación del Producto 3.4. Selección del Mercado Meta 3.5. Proyección de Ventas 3.6. Estrategias de Mercadeo 3.7. Ejecución del Plan de Negocio

Tabla de contenidos ▼ 1. UNIDAD 1 - ANÁLISIS TÉCNICO 1.1. Descripción Genera 1.2. ¿Por qué hacer un Análisis Técnico? 1.3. Análisis del Producto 1.4. Facilidades 1.5. Distribución de Planta 1.6. Equipos y Maquinarias 1.7. Plan de Producción ▶ 1.8. Plan de Consumo ▶ 1.9. Plan de Compras 1.10, Sistemas de Control 1.11. Errores más frecuentes 1.12. Recomendaciones ▼ 2. UNIDAD 2 -ANÁLISIS ADMINISTRATIVO 2.1. Descripción General 2.2. Aspectos a tener en cuenta 2.3. Desarrollo del análisis administrativo: Grupo Empresarial, Personal Ejecutivo, Organización, Equipos, Organizaciones de Apovo 2.4. Recomendaciones 2.5. Errores más frecuentes 2.6. Lista de Comprobación Organizaciones de Apoyo 2.7. Lista de Comprobación para las Organizaci 2.8. Lista de Comprobación para el Personal Ejecutivo ▼ 3. UNIDAD 3 - ANÁLISIS CUALITATIVO 3.1. Análisis Legal 3.2. Principales Impuestos 3.3. Análisis de Riesgos 3.4. Trámites 3.5. Le MIPYME



Figure No. 9 Example of the marketing module material



Figure No. 10 Example of the operation and organizational module material



Figure No. 11 Example of the Economic and Financial Module Material



Figure No. 12 Example of an assignment



Figure No. 13 Example of a homework presented by the student

Actividad 2. Etapas de Proyecto

El objetivo de esta actividad es que elabore su cronograma en el que detalle los siguientes datos:

- Mes y año en que iniciaran y terminaran la etapa de estudios y de consecución de recursos.
- · Mes v año en que iniciaran v terminaran la etana de construcción v

Análisis del Producto o Servicio

Defina su producto/servicio

El producto que se quiere comercializar, es el camarón tipo gourmet de la especie Litopenaeus vannamei, la cual se produce en Colombia, este producto es presentado como camarón langostino, entero, talla 21-25 (talla expresada en el número de camarones que pesan una libra) ofrecido al consumidor primario como producto fresco, que no ha sido llevado a punto de congelación y solo se ha mantenido refrigerado en un rango de 1-4°C, por este motivo se demuestra su buena calidad, proporcionada por su frescura gracias a la costa manipulación que se le da desde su cosecha hasta su preparación (96 horas) y el hecho de no pasar por periodos muy largos de congelación.



Defina el producto/servicio de los competidores principales

Es un producto con características muy similares, se diferencia del CAMARINO Gourmet por su procedencia (pesca en el mar) y además que son congelados (-18°C) durante un periodo relativamente largo (20 días). De igual manera se ofrecen al mercado diversidad de especies y presentaciones como Camarones congelados con/sin cabeza y con/sin cáscara ó pelados y devenados etc.

Figure No. 14 Example of answers to questions

Archivos calificados:	Ninguno Para cargar los archivos calificados de este alumno, haga clic en C argar archivo.
	Cargar archivo Eliminar archivos
Comentarios:	Sabemos que es dificil suponer un valor, sin embargo deben tener una base para poder tomar una decision acerca de la factibilidad del proyecto, ya que este es el objetivo.(tir>tmr)
	Al menos supongan una tasa esperada de rentabilidad, puede ser por ejemplo: que pasaria si en vez de montar la empresa decidieran
*Calificación:	sobre 5
Archivos calificados:	Ninguno
	Para cargar los archivos calificados de este alumno, haga clic en Cargar archivo.
	Cargar archivo Eliminar archivos
Comentarios:	EI PAAG DEBE SER ANUAL. DE RESTO TODO ESTA MUY BIEN. SOLO QUE SI VAN A REALIZAR ANALISIS A 5 AÑOS (SEGUN LA ACTIVIDAD 2) DEBEN INCLUIR ESTAS POLITICAS PARA ESTOS AÑOS.
*Calificación:	sobre 5

¿Nuestro Plan de Negocio ofrece una respuesta a las siguientes preguntas?:

 ¿Cuál será la ubicación geográfica exacta de la planta o empresa? Indique dirección probable de la misma.

La empresa se ubicará en Bogotá Sector Norte, trabajando con talleres satélites ubicados en Chapinero y el otro en la Calle 6 Sur.

Exactamente dónde va a estar ubicada la empresa? Cuál es la dirección?

 De acuerdo a la ubicación antes definida ¿es estrategica su ubicación? (Argumente su respuesta teniendo en cuenta: distancia a clientes y proveedores, facilidades de transporte, vías de acceso, etc.)

Teniendo en cuenta las distancias en Bogotá es difícil supeditarnos a la ubicación de cada satélite. Respecto a los clientes en el exterior es indiferente esta ubicación.

Independiente de la variabilidad en la ubicación de los talleres satélites, si la distancia de la empresa a los talleres es grande, cómo enfrentaría este problema? (defina estrategias). Hay facilidades de transporte para llegar a ellos? Vías de acceso?

Como están ustedes respecto a los centros de distribución internacionales?

Desde dónde van a despachar la mercancía? Directamente desde los talleres o desde la empresa? De acuerdo a ello, que facilidades hay y cuán lejos o cerca están de los centros de despacho internacional, es decir, aeropuertos, puertos, etc.

The virtual seminar was designed to require to each group at least 60 hrs of training, but also it was project oriented learning and in that sense every group was doing applications and receiving support for their specific business plan.

Even though, we got confirmation from every group that they had access to Internet, in the process we found that some of them didn't have equipments good enough to run Web CT and for them we had to sent by traditional mail the material in a CD to allow them to be able to follow the seminars.

As it's normal in e learning, and due to the design which required not only the reading of the material, but also the immediate application to their ventures, a lot of question were formulated for each area: for example in marketing more than 900 question were sent by the participant, either to clarify concepts or to ask for support in the definition of key aspects of their business plan.

It was impossible to get all the groups working at the speed that the training and the assistance was going but about 60% of the groups have been very active through the whole process. Lots of flexibility was needed, because the basic knowledge in business plan was quite heterogeneous and the data they had gathered about their business were also quite different. So even though a very strict calendar was designed and implemented, in many cases we had to change the closing date to give time to the groups in the development of the data.

The results has been so good in terms of education and training that we are planning to use these materials, since august 2004, as support system in our traditional undergraduate and graduate courses in Business Planning and in Entrepreneurial Creativity that we offer not only to the Business students but also to the Engineering students (Systems, Industrial, Telematic, Industrial Design), to the Economic student (International Business & Economics, International Finance and Accounting) and even to some to the Law students. In addition to that we are using it in the continuing education seminar "Business Creation", that is being offer at this time.

3.4 Support for business plans

As a complement to the previous program the Center for Entrepreneurship Development of Universidad ICESI is going to provide support to the entrepreneurial groups that effectively did take the previous training and again we had designed a support program that mixes the traditional and the virtual phases.

We are planning to use e-mail and Web CT to receive all the preliminary section of the business plans, and with that we will provide assistance to help improve the development of the business plan to a good level of accomplishment. In this activity we hope to do all the suggestion to orient the participants in the development of their business plan using Internet as main communication tool.

When the Business Plan will have had all the initial adjustments and very close to the final date defined by the Ministry to select the business plan and the entrepreneurial teams that will receive financial, logistical and network support, we are planning to have traditional meeting in five cities: Bogotá, Cali, Medellín, Riohacha, Florencia to do the final assistance and to provide some training in the oral presentation of business plans.

We expect that with these mixed methodology the percentage of entrepreneurial teams doing an integral business plan will show a significant increase and that also the quality of the business plan will improve. In addition to that the use of one business plan scheme will make easier for the Ministry to compare the business plan and to choose the best ones.

3.5 Business Plan Software

Other support activity that was developed in the last year and it is being used not only in the undergraduate and graduate courses and in the Emprendedores Colombia Program, but also will be distributed free of cost to all university professors associated to the CEINFI's Cathedra is HAZ PLANN, a business plan software specifically designed for the Colombian regulations in terms of accountancy schemes, tax schemes, labor and commercial regulations. We have found that this software allow the students to spent their time more on the data collection , on the strategy formulation and on the analysis of results than on the tedious financial projections.

4. Conclusion

These five specific actions that we had developed during the last years have allowed us to show that:

- It's possible, in a resource limited environment, to find ways to use advanced technological educations tools to improve entrepreneurial education.

- It's feasible to share at the national level, among universities, knowledge and know how to get entrepreneurship spread all over the country.
- It's feasible and very cost effective to provide training in Business Plan to a community of people with very diverse basic training and spread over the geography of a country using Web CT as a tool.
- It's feasible and very cost effective to provide assistance and support in the development of their business plans to entrepreneurial teams using internet as communications tool.
- All the technology developments for the entrepreneurship university programs could be used for extension programs and vice versa
- There are many of opportunities nation wide and even maybe in other countries to provide training and assistant to all groups of potential entrepreneurs and the Center for Entrepreneurship Development continue taking these opportunities.
- The entrepreneurship professors should learn about the use of the new educational technologies to be able to improve their entrepreneurship courses.

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