

CLADEA - CFDMAS

SUBPROJECT D: ENTREPRENEURSHIP AND BUSINESS SCHOOLS

**TEACHING AND RESEARCH OF ENTREPRENEURSHIP IN CANADIAN
AND LATIN AMERICAN BUSINESS SCHOOLS**

THE CENTER FOR ENTREPRENEURSHIP DEVELOPMENT AT ICESI

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1 THE ORGANIZATION

1 History and Philosophy

In the 1970's a selected group of business managers and owners, and community leaders who had been involved in the development of INCOLDA (Colombia Institute of Management) and of several other academic activities in Cali, decided to work toward the development of a new university in our city, which main field of knowledge would be: "Management and Business".

One of their goals was to provide an integral formation to the students: Academical, personal, moral, spiritual and ethical under the political ideology of free enterprise, the democratic system and the Colombian socio-economical and legal environment. Additionally, they establish that the new institution should work in a completely new academic scheme, such that its graduates should be able to produce a new wave of development in the country by designing, creating and managing new organizations in order to help to solve the biggest Colombian problem: the unemployment.

The new institution was established in 1978 as ICESI (Colombian Institute of Higher Education of INCOLDA) as a private, non profit organization

which main purpose is the formation of new professional in the Business Management and related areas, able to promote and to leader the socio-cultural and economic development of Colombia and to produce a better quality of life for Colombians.

1.2 Scope of Activities of ICESI

ICESI, is an educational institution at the Higher Educational Level in Colombia, fully recognized by the Colombian Institute for the Development of Higher Education, a branch of the Colombian government. ICESI is a member of the Colombian Association of Universities (ASCUN), is member of the following organizations: CLADEA, BALAS, ASCOLFA (Colombian Association of Business Administration Schools).

At the undergraduate level, ICESI has the following programs:

Bachelor in Business Management (10 semesters)-A

Bachelor in Business Management - Night Program (semesters)-B

Bachelor in Systems and Informatics (10 semesters)-C

At the graduate level, ICESI has the following programs:

- Master in Business Administration (2.5 years)
- Specialization in Marketing (.5 years)
- Specialization in Finance (.5 years)
- Specialization in Industrial Relations (.5 years)
- Specialization in Management of Information systems (.5 years)
- Specialization in Management of Agroindustrial business (.5 years)
- Specialization in Tax Management (.5 years)
- Specialization in International Management (.5 years)
- Specialization in Management of Commercial Business (.5 years)

Actually ICESI's enrollment is about: 1250 students at the undergraduate level and 360 at the graduate level.

In all its academic activities, ICESI works closely with the business community not only in searching new areas of work but also providing to the business community the professional they require and asking the business community to help in the teaching learning process, not only by allowing some of their directives to be member of our board of directors, but also by providing time to some of their managers to come and teach at ICESI, and by creating special trainership positions in order that our students, when they are in the ninth semester, they spend one semester as interns on those institutions, acquiring the experiences meanwhile they are doing their undergraduate studies.

One of the demonstration of this close relations with the business community is the fact that the construction of our new campus, to be inaugurated in August 1988, was fully financed by donations of the private sector.

.3 History of Involvement with Entrepreneurship

Eventhough, since its establishment, ICESI started to work with Entrepreneurship ideals, the initial activities in terms of forming entrepreneurs, were isolated activities, not really framed in a very definite scheme. Initially it was just two courses: one in general project evaluation techniques and the second one in the formulation of a feasibility study.

Given the fact that we were not satisfied with that orientation it was decided by the middle of 1984 to send a directive of ICESI with training and experience in the field to visit several universities to learn about the formation schemes used in the U.S.A., in order to start from there a process of adequation and development of a educational scheme for entrepreneurship at ICESI, which could bispread to Colombia educational system and hopefully to the Latin American

Countries.

Through the help of the Fulbright Commission the following institutions were visited in the U.S.A.:

Small Business Administration (Washington), Center for International Private Enterprise (Washington), Bureau of Private Enterprise (AID-Washington), Entrepreneurial Center (Wharton School - University of Pennsylvania - Philadelphia), Center for Entrepreneurial Development (Carnegie Mellon University - Pittsburgh), The Entrepreneurial Corporation (Pittsburgh), Westinghouse Venture Program (Pittsburgh), Center for Entrepreneurial Development (Baylor University Waco Texas), University of Texas (Dallas), Caruth Institute for Owner Managed Business (Southern Methodist University - Dallas), Invent (Texas A & M - College Station), Utah Innovation Center Inc. (Salt Lake City), University of Utah (Salt Lake City), Saint Louis University (St. Louis), MIT Innovation Center (Cambridge), Babson College (Wellesley - Mass.), University of South Carolina (Columbia).

Its worth to mention that Dr. Rodrigo Varela, who was selected for the mission, went to the following institutions through the help of the Intermediate Technology Development Group of London: before going to the U.S.A.

Georgia Tech (Atlanta), Intermediate Technology Development Group (London), Intermediate Technology - Industrial Services (Rugby), Project Planning Center for Developing Countries - University of Bradford (Bradford), Birla Institute of Technology (Mesra, India), Institute for Small Scale Industries - University of Philippines (Manila), East-West Center (Honolulu).

And have had experience in Colombia in designing and developing curricula design to train Industrial Promoters and Industrial Engineers. Also he have had the experience of directing through 1976-1978 the Industrial Development Program at Intermediate Cities that the Banco Popular founded in 1976.

After the study trip to the U.S.A., Dr. Varela presented to the board of directors a proposal to establish a new academic unit, called the Center for Entrepreneurship Development, which was approved and started to work in January 1985.

2 THE CENTER FOR ENTREPRENEURSHIP DEVELOPMENT AT ICESI

a { The Center is an Academic unit, reporting directly to the President of the school and with activities covering all the programs of the school

and even with activities outside of the school. The Center has its own budget and its own organization which provides freedom for the development of its activities.

The main purpose of the Center is to motivate and to form all the community under ICESI's influence in the development of a creative action which allows the birth of new organizations and the development and improvement of existing ones, in order to improve the employment opportunities of Colombian people, to produce added value to our economy, and to provide to the founders a truth sense of professional satisfaction.

The commitment is to develop an environment which encourage the rising of new private enterprises, and the preservation and strengthen of the entrepreneurial activities in the members of the community under ICESI's influence.

The aim is to provide an atmosphere of learning, support, inducement, motivation and conviction which significantly improves the disposition to act of the rising entrepreneur and the possibility of success in their new ventures.

The Center has the conviction that the entrepreneur is the most important factor for the socio-economical development and thus all its effort are

oriented to help and to promote the rising of a new generation of Colombian entrepreneurs.

The Center understands the entrepreneurs as the creative and innovative beings, able to surpass their own limitations and the environmental difficulties, desirous to transform their ideas into reality through their catalytic action produces growth, progress, employment, added value, profits and personal satisfaction in order to nourish the economic and entrepreneurial activity and to enrich the community's quality of life.

This entrepreneur: innovative, independent, creative, leader, original, risk-taker, self-confident, visionary, is the target of all the activities of the Center.

2.1 Colombian Environment

Colombia, as many other countries in Latin America, is facing very difficult political and social issues, which are growing to the point that the stability of our democratic systems could be affected however they are more the symptoms of a deep sickness: the lack of an adequate rate of economical development, which had produced an increase in the rate of unemployment, which still today is above the 16%.

Five years ago the government designed a very specialized commission, which was directed by Mr. Chenery to figure out ways to decrease the unemployment rate. They presented many ideas at the macroeconomic and macropolitical levels. One of the ideas was that the Colombian economy should grow steadily at a real rate of 6%/year for the next 20 years if we want to bring the unemployment rate to 8%.

According to the last figures provided by the government in a bill proposal presented to the Congress in 1986, about 10.3% of the professional people of the country were unemployed. The Director of a National Institution (SENA) indicated that in 1987 about 95000 professionals were unemployed in Colombia. Today Colombia's universities have a total enrollment above 400000 and they are granting about 50000 degrees every year.

At ICESI we decided to face those facts with a sense of social responsibility, and instead of considering that it was a governmental problem, we decided to pose several big questions:

What should be done at the University level, and mainly in all the university programs directly related to business to help to solve the problem?

How should be oriented our educational systems? Which values should we reinforced? What knowledge should be provided to our students?

The answers to these questions bring back to the university the most important responsibility: to provide to the society the leaders, the values, the scientific and technical knowledges, the technologies the operative schemes and in general the culture which can drive the transformations and changes that our countries are requiring in order to be able to meet the social demands that our people has been asking and expecting for a very long period of time.

Educators in Colombia, thus, had to realize and understand these changes and start doing something to help to solve the problems. Universities had to become the active entities and maybe the leader entities in the study and the solution of the national problems. Educators, have to include national goals in their own academic goals.

At ICESI we came to translate all those problems in two central questions:

- 1) Is it possible and convenient that our undergraduate and graduate student become able to generate their own jobs and support?

2) There is a social responsibility of the University's graduates, to produce employments for the Colombian less trained?

And we considered two possible answers: The first one was to answer negatively, and then the procedure would be to ask for to the government and to the business community to create employments for our graduates because we were unable to find a solution to the lack of employment opportunities and also we have to ask for to be exonerated of all social responsibilities. Undoubtedly this wasn't a rational position.

The second one was to answer positively and then the procedure was to search for positive forms which allow us to inspire our students toward the alternative of solutions: The starting of a new productive business, or in other words to assume fully our responsibilities and became part of the solution and not of the problem.

ICESI believes that the Government is not able and should not be requested to assume all the responsibility in this endeavor, and that part of it should go to the private citizens and business, because when the number of citizens able to solve their jobs situation by themselves grows, less and less people will required of the government to solve their problems.

All this educational ideology and social responsibility make very easy for

the Center of Entrepreneurship Development to start and to grow, in many directions inside ICESI, and very easy for it to become the Center of ideas for so many Universities and groups in Cali, in Colombia and in many other countries of Latin America as will be shown.

3. CONCEPTUAL CHANGES

The Center started its educational activities defining some changes which it considered basic to reach the goals, which could be relatively easy to implement and which have produced in other countries excellent results. This was the first research activity of the Center. The proposed changes were:

- a. We have to change the idea that natural resources and money are the basis for development, and bring back the idea that something else called the Entrepreneurs is the acting element for the development process. Further Latin American education had to accept that unless we jump and realize that information and technology is the main resource we will not be able to grow and partially close the gap. This means that we have to train our students to work in an environment intensive in knowledge, brains, innovation, creativity, continuous learning. Thus, our university system should be oriented not only to

provide obsolete information, but to teach the student how to learn in the future. As Peter Drucker mentioned: "The Productivity of knowledge has become the basis of all the productivities, of the competitive strategy and of the economic success; it is the basic industry, the one which provide the main and essential resources to the productive system".

- b. We have to change the perception about the business oriented person. Professors, even the ones with extreme leftist political orientations should be convinced ideologically, and should help to create in the student the conscience that producing with economic efficiency is not sinfull, illegal, dishonest, and that one of our main objectives has to be the development and grow of our productive systems as the only way to develop our countries. Our graduates should work always with productivity as their main goals.
- c. We have to change the idea, that the unique, repeat, the unique way of professional and personnel development is to be an employee in an organization.
- d. We have to train our students for working which is always in abundance, and not for jobs, especially bureaucratic jobs, which are and will always be scarce. Thus we have to develop in our student the

value of self sufficiency not in terms of being proud of nothing, but in terms that they will not have to be dependent exclusively of a position and that they will be able to search for many different ways of work and of professional and economic development.

- e. We have to change our curriculum development scheme, which usually design the programs using as unique basis the possible positions (jobs) that the future professional will be holding and forgets all the other work opportunities that the professional will have.

We have to return to an University oriented to the formation of people, to generate special values on them, to provide some development tools for the people which spent time and efforts in the University, and set away the "recorder style University" which only transmit the prerecorded melodies and forces the student to memorize them. In other words the University has to be an University and not a vocational school.

- f. We have to make concience in our student that the professional suces have different measures, and that it is not only the job position or the tittle or the money, what makes somebody the most sucessfull person of the class. There are some other values that we as teachers should lay stression: Achievement, Self realization,

Independence, Social Responsibility, Self control, Brain usages, Employment generation, Number of persons which make their living from our activities, Help provided to others, Intellectual production etc. Curricula should not be evaluated by the job training provided but for the capacity that the students develop to think with creativeness.

- g. We have to change our idea that educational process consists in saving in the brains of the students a whole series of informations, procedures, theories, and so forth, which produces a student programmed, static and short of ideas. We have to figure educational ways which will allow the students to be creative, imaginative, to search new solutions or procedures to invent, to research, to avoid the "Unique solution symptom", to question, to adapt to new circumstances, to be dynamic and to understand that he lives in a dynamic environment.

Students should be challenged to develop all their talents by involving them in real problems. Should be allowed to be open minded, so they can give birth to alternative solution.

- h. We have to change the idea that the degree holding people are just a piece of the system without positions or ideas or goals; that he is

just a well behaved person which agree on everything because if not his job development is jeopardized. We need that our degree holders be leaders, men and women of vision, with their own ideas and convictions, with social responsibilities, men and women who will be satisfied and fulfilled when the people around them produce creative ideas, when they guide their energies in what they consider should be done, even though it could be something different of what they should be doing according to their job description manual.

We need that our students have a practical exposition to the world of business by themselves. That they experience what really is production, marketing, finance, personnel, etc. That they get to know people working in different activities, not only managers or staff people or bureaucrats.

- j We have to orient the people toward a long range perspective not only their organizational decisions but on their personal activities, but especially in terms of the country and their people.

People culturally informed with a responsible participation in society, aware and worried about the problems of their country and of their people. People with care and love for their profession.

k. We have to change the reverence for the big and the optimum. Several studies have shown, even for underdeveloped countries, that:

- The small and young business produce more employment than the big and old business.

- The small and young business produce more technological advance than the big ones.

- The small business are interesting for university degree holders, and in many cases the challenges in a small business are higher than in a big business.

We have to change the concept that the University degree holder should look for a stable, durable and riskless position. We have to train our students in taking educated and measured risks, especially risks associated with the development of the country.

But all of these changes could be synthesized in a very simple but difficult thought:

We have to train our students to become a positive factor in terms of social and economical development, and they should be trained as Entrepreneurs, as the creative people able to surpass the country limitations and make a positive contribution to our development; we

need to train the visionaries, the innovators, the independents, the leaders, the risk takers, the willingfull to fight, search and achieve their personnal and professional goals.

4. THE BASIC MODELS

At the CDEE we are working basicly under Shapiro's models and all our activities are oriented to attend each one of the basic four variables of the process of formation of a new enterprise.

Situational variables: In which a displacement process occurs due tu the combination of positive, neutral or negative pulls either externally imposed or internally perceived.

We are trying to improve the role of the positive pulls and of the internal conviction by our educational programs.

2. *Psicological Variables:* In which the displaced people react by undertaking an action to form a company or by taking any major initiative with regard to their own future. This decision requires that the person feels that it is possible for him to affect events. This fact requires internal locus of control, self reliance, autonomy, and independence which are values which can be taught.

3. *Socio and Cultural Variables:* this is the conviction required for the nascent entrepreneur that he has the abilities and the knowledges required to start and to succeed in a new business. This means to bringing credibility to the act in order that the nascent entrepreneurs see himself starting and operating a company. He must be able to perceive himself in the entrepreneur role.

This requires to get immerse in an entrepreneurial culture which could work as a role model for the potential entrepreneur.

4. *Resource Variable:* The rising entrepreneur should be able to evaluate the need of resource and to find them in the amount and instant of time that they will be required.

This involves a planning step and a knowledge of the availability of resources in the community.

It is clear that by educational process it is possible to alter all of these four variables and this is what we have been doing.

In terms of socioeconomical development we are working under the following concepts:

- a. Socioeconomical development doesn't happen in general or by a law, or by a planning program; it happens to specific people, in specific places and in specific times.
- b. The goals of socioeconomical development at the local level must go beyond the increase of jobs and income.
- c. The socioeconomical development process should be a continuing process, in which the people have the material opportunities for using their talents, of living a full and happy life and steadily improving their lot.
- d. The socioeconomical development process should produce for the community the following characteristics:
 - Resilience: The ability to respond to changes in the environment effectively.
 - Creativity and innovativeness: The ability and willingness to experiment and innovate.
 - Initiative taking: The ability, desire and power to begin and carry through useful projects.

Diversity: The variety of activities which provides some measure of invulnerability to the effects of many unforeseen events and decisions.

All of this four characteristics are easily obtained through entrepreneurship, because it is able to produce new organizations, it is an operational expression of resilience, it provides answers to the environmental changes, it is a creative act which implies innovation, it requires taking of action, and mainly it provides diversity to the economical activities of the community.

5. THE EDUCATIONAL APPROACH

There are many studies which had demonstrated that the Entrepreneurs can be developed and this development can be done through an educational program in terms of improving its values and characteristics, and providing the knowledges required to conceptualize, design, develop, install and start successfully an entrepreneurial career.

If we analyze who are the entrepreneurs in our countries, we find that they are very normal people, without any extraordinary gifts; they are not

genius nor inventor. They live in the same environment that we usually use as explanation for our lack of entrepreneurship: Recession, inflation, high interest rates, changing laws, lack of money, insecurity, etc. Even in many cases they are people without academic training or administrative knowledge as we and our students have.

Then, what are the differences between the entrepreneurs and the students we train? Firstable they have the decision to act, to modify the environment, to change their life path, and second they have the capacity to identify an option, an opportunity in which they detect a comparative advantage.

The Entrepreneur then, has two basic perceptions for his development: Convenience and Feasibility. The first one, convenience, is a expression of individual values, of convictions and faiths. The second, feasibility, is a measure of the project obtained through the detailed analysis of the characteristics of the project. These two perceptions can be developed through education because one of the purposes of the educational process is to create, to reinforce, or to marke void some values and attitudes, and the other purpose is to train in the development of an activity and perhaps Business Administration has to do with business: its analysis, its creation, its management, and so forth.

What are some of the actions we should immediately start to produce the changes?

a. To make Void some myths, which had not allowed the development of an Entrepreneurial Spirit, and which after so many times we present them as reasons, we had became to believed that they are real and truthfull. They are:

- The political and economical situation doesn't allow the creation of new business.
- To be an entrepreneur you have to be millionaire.
- My profession is to manage, not to create business.
- Jobs are secure positions, business are not.
- My profession is to work in big organizations and not to work with small business.
- My professional and social status will decrease if I become an entrepreneur.

studied to be an executive person, not to be a businessman
neither an entrepreneurs.

- To become an entrepreneur you must be a genius or an inventor.

- I am not lucky enough to stablish a business.

- b. To make the students and the professors carry out research about the advantages and disadvantages of the entrepreneurial event in personal, professional, social and economic terms.
- c. To spend some time considering the possible businesses to be stablished in our regions or community and to dedicate the required time to formulate and evaluate those new ventures.
- d. To review our teaching procedures, our problems, cases, texts, exercises, etc. and to figure out new ways to help the learning process, providing some space to the students for the development of qualities as innovation, leadership, identification of new opportunities, creativity, etc.
- e. To develop some extracurricular activities in which the students have

the opportunity to learn from other students and entrepreneurs the know how and the know-who required to establish new businesses. Hopefully these activities could include the access to financial resources through special credit lines.

- f. To promote in the students research about the economic and social contribution of the small and medium size companies and to use their information to rejuvenate our imported cases of bigger companies and more sophisticated than any one we have.
- g. To orient all the papers and final projects of the courses, and very specially the degree granting projects toward the new business goal.
- h. To present to the students the multiple roles they could play to develop his professional abilities, not only as employee, but as an entrepreneur, as a civic or political leader, as a teacher, etc.
- i. To reinforce all the positive values and virtues: achievement, independence, self realization, honesty, pragmatism, dynamic thinking, competition, future orientation, work and action orientation, efficiency, productivity, internal locus of control, sense of mission, confidence in his abilities, etc.

j. To research the activities and professional achievements of entrepreneurs of the community and to present them as mentors or role models to the students, not only to show the students that the entrepreneurial event is feasible, but also that it is desirable.

k. To help the students to make a very serious analysis of their goals and professional perspectives and to avoid the predetermined idea that he will be (or has to be) an employee.

To make aware our students that our problem can only be solved by multiplication and not by division, and that we need to increase our productive sources if we want to increase our economic output and improve our social conditions.

m. To promote in the student the desire for continuous learning and very specially in science and technology, and to search in that learning for new ideas.

n. To invest time and effort during the educational process in order to train the students in identification of opportunities, development of operational alternatives, searching of new ways of solving a problem. Thus innovation, creativity, opportunity search should be basic elements in all the process.

- ñ. To imbue the students of the need to study all the situation with a open mind and a global perspective. To train our students more in the development of their thinking capacity than in their calculating capacity.

6. THE CENTER FOR ENTREPRENEURSHIP DEVELOPMENT'S ACTIVITIES

The Center has defined four areas of action: Teaching, Research, Outreach and Services, because we believe that only working in all the areas of activity of the University we will be able to produce the atmosphere for entrepreneurship we are searching for, and to produce the synergetic effect in the whole institution. The objectives for each we of the areas are:

- a. In teaching, to provide ICESI's undergraduate and graduate students with an integral knowledge about the entrepreneurial event and all its relationships with socioeconomical development, career path, training in entrepreneurship, etc. Also to provide motivation, credibility and disposition to become entrepreneurs.

- b. In research, to identify and characterize all the variable of the entrepreneurial event in our region and in our country in order to be able to teach our realities and not foreign realities.
- c. In outreach to spread out the basic ideas of a strategy of development based in entrepreneurship in order to build a culture which will be prone to entrepreneurial activities, and also to motivate to the educational sector to integrate these ideals to their educational processes. Finally, to become a driving force in improving the social and academic recognition to entrepreneurs.
- d. In services, to help potential entrepreneurs in making reality their ideas.

6.1 Teaching Activities

At the Undergraduate level, the CDEE has done through the period January 1985 to June 1988 the following programs:

1. *Seminar for Freshman*: During the induction week of our freshman the CDEE has a four hour program of activities with the student which

main objectives are:

- To present the entrepreneurial philosophy of ICESI.
- To show them that entrepreneurship is a career path they can follow.
- To start the process of making void some of the myths and the bias the student could have received from the cultural environment about entrepreneurship.
- To inform them about all the entrepreneurial activities the CDEE has and very specially to invite them to join the 'CLUB EMPRESARIAL DEL ICESI(ENTREPRENEURIAL CLUB)

The seminar starts with a questionnaire about their present and future expectation in term of their personal and professional life and about some aspects of Colombian Development.

Then around their answers the questionnaire, the seminar leader starts to interact with the students messages we want to deliver are provided. This activity gets the student, for the first time in their ICESI stay, to think about their own set of goals and objectives in all

the aspect.

It is necessary to mention that eventhough the SEMINAR FRESHMANS is not by itself a formation process because it is more a orientation process, however every semester several of students get through the CDEE to look for more information or to discuss some entrepreneurial ideas. Unfortunately our staff doesn't have the time to follow-up those students after they take the seminar. Annex No. present one of the usual contents of the Seminar and of the questionnaire but as it was mentioned it changes a little bit every time depending upon the questions and interest of the students. The seminar has been offered as indicated in Table No.

TABLE No.1

SEMINAR FOR FRESHMEN

<u>DATE</u>	<u>PROGRAM</u>	<u>No. STUDENTS</u>
July 1985-January 1988	18	1.007

2. *Entrepreneurship (Creatividad Empresarial):* Undergraduate Level. This is a 4 hour /week course, which really takes about 8 hours/week, required to all ICESI'S tudents. It takes a full semester

and it is attended by the Business Administration students (daily program) during the 8th Semester, the Business Administration students (Night program) during the 10th semester, and by the System Engineering students during the 10th Semester.(All undergraduate program at ICESI take 10 semesters, except the night program which takes 11 semesters). All the participants in this program are full time undergraduate students, which ages are between 21-26 years old, with no practical experience, from Mid high and high income levels.

This course is the main teaching activity in the entrepreneurship area and it is taken by the students after they have taken all their course in Accounting Finance, Marketing, Production, Quantitative Methods, Law, and most of the Economics and Management courses.

The main objectives of the course are that the student became able:

To understand the economic, political, social, historical, psychological and professional relations and implications of entrepreneurship.

To formulate a set of goals and objectives about their personal and professional lives.

- To get involved with the Colombian problems in terms of development and to get them to understand their social responsibility with that development.
- To understand the entrepreneurial event, its components, its requirements and the procedure which could be followed at the regional and personal level in order to drive entrepreneurship.
- To learn the different theories about the entrepreneur motivations and about the process of starting a business.
- To visualize all the analytical stages about a new idea, and to evaluate Qualitative and Quantitatively all the aspects of the idea in order to be able to take decisions about the orientation of the business plan.
- To develop and to explain a business plan.
- To consider entrepreneurship as one of their alternative in their professional path and to compare it with the employee path, considering all the advantage and disadvantage that they have.
- To develop and to run new business .

Additionally and due to some of the activities done in the course, the students:

- Get in contact with a real business
- Get to know some entrepreneurs and how they became entrepreneurs.
- Get some training in interviewing people.
- Get training in preparing and making written reports and oral presentations.
- Get training in creative thinking.
- Improve their ability to read magazine articles (most of them in English) and to prepare presentation of those papers.
- Improve their ability to search for information and to work in groups.

Methodology: This course because its special characteristics and widerange of objectives, uses a whole set of activities through the semester.

- Magistral Conference: The professor presents some of the basic concepts of entrepreneurship, or required concepts for the business plan which could be locking in the student formation.

- Presentation by Students: About 30 papers through which most of the conceptual ideas and objectives of the course are presented by the students. After the students presentations an exchange of opinions is started among the students and finally the professor wrap-up the central ideas of the paper or complement the student presentations.

- Entrepreneurs Presentation: As are element of rising credibility in the act, three or four entrepreneurs are invited to the class to present their entrepreneurial lives and very specially how they became entrepreneurs and how they have been solving the difficulties that the Colombian environment presents.

- Entrepreneurs Interview: Each student is asked to identify an entrepreneur and to interview him or her in order that in the one to one exchange the student get a better appreciation of the entrepreneurs in terms of characteristics, motivation, identification of ideas, development of the venture, financial alternatives, new opportunities and all the personality factors. It is also an opportunity for the student to visit the business and look from inside how the business is working.

- Entrepreneurial Club: The students are also required to attend all the Entrepreneurial Club meetings in order to get them in contact with other students interested in entrepreneurship and to learn some other aspects which are usually presented at the club. It is also an opportunity to see how a business plan is presented, questioned and defended.

- Real Business: All the students of the course became an economic unit which has the responsibility of doing real business. Through the semester the group has the responsibility of defining, organizing, financing and doing the business. All the profits or losses in the business are for the students and everyone of the students should work. This is a short term business which allow to students to become in real contact with all the aspects of a business and to feel directly all the anxieties that doing business has.

- Business Plan: With the procedure described later every team should develop a complete business plan this. Activity is done completely in parallel form with the course as it is shown in figure #1. At the end of the semester all the students should attend all the business plan presentatives and each team should defered all their figure, goals, milestones, strategies, etc. This business plan take a very

important part of the work done by the students and forces them to search for information in many places of town and to learn about all the regulations for establishing a new business. The professor is available on request to help the teams in development of their business plan.

General Content: The course is developed in accordance with the following sequences:

Class Self-evaluation questionnaire oriented to find out the goals and objectives of the student. (Annex 2)

2nd. Class Analysis of a case about Entrepreneurship and formal presentation of the objectives, methodology, content, evaluation and stages of the course.

3rd. Class Myths about Entrepreneurship.

4th. Class Historic, economic and social visio of the entrepreneur. Written presentation by each student about its 10 ideas for new businesses.

5th. Class A five minutes presentation to the group to show the main reason to consider his (her) idea as a valid and useful one. All the presented ideas are evaluated by all the students and their results are tabulated. The ideas with the better evaluation are selected as the ideas to be work out in the business plan. The students who presented the selected ideas have the right to choose the members of the team (maximum 3). The students which ideas were not selected have to find a team to work to gether. From here on, all the development of the business plan is done outside of the classes except the classes that are oriented to present the basis topics of the business plan.

Classes 6-7 Presentation of the first group of papers. In these classes each group of the students (usually the traditional study group they have had through all their semesters) present the main ideas of articles like:

- How overcome the handicapp of a College Education.
- Work opportunities are not just jobs.

Needed new iniciatives by the industry to create employment in

- manufacturing and service industries.
- Fostering small scale Entrepreneurship
 - "Los Nuevos Empresarios".
 - Breaking the American Mold.
 - "Fracaso Económico en Latinoamérica y auge en Asia".
 - Entrepreneurial Britain.
 - Modernization in China, URSS, and East Europe.
 - Entrepreneurship in Economic Development (Shapiro).
 - Entrepreneurship in Economic Development (Kent).
 - The theory of entrepreneurship in economic growth.
 - Entrepreneurship in the less developed countries.
 - Freedom and Power.
 - The environment for Entrepreneurship.
 - Entrepreneurship Education in the Nineties.
 - "Espíritu Empresarial : Futuro Nacional".
 - "El Ingeniero Químico : Empresario".
 - "Gerentes o Empresarios".
 - The modernization of China and its implications.
 - Capitalism still thrives in a Chinese Village.
 - Formación de Ingenieros como empresarios?
 - Who creates jobs?
 - Peter Drucker habla de empresarios.
 - La creación de pequeñas empresas y la generación de empleo.

The educated entrepreneurs: A new era of Entrepreneurial Education is beginning.

All of these papers are oriented to motivate entrepreneurship, to show the need of an entrepreneurial culture, to understand what the educational system should do, to show new ways and conception about work, to present development concepts and the role of entrepreneurship in the development to present the status of entrepreneurship in several areas of the world and under different political orientations, to discuss the Colombian and Latin American development, to start to establish a new set of values and beliefs to try to abolish some wrong ideas about Entrepreneurship and development, to bring to class the political ideology of the free enterprise system and other ideologies, trying to show the advantage of the free enterprise system, to get the students to understand their social responsibility with the development of the country, to review some new managerial concepts and to get acquainted with the new educational schemes about entrepreneurship.

Class 8-13 The business Plan. Here a magistral presentation is by the professor to cover the following

considerations:

The general process of decision to establish a new business, the evaluation procedure, the analytical stages.

Internal and External reasons for the business plan, mistakes and pitfalls when somebody makes a business plan.

Consideration about the business plan.

- Content of one of the parts of the business plan.
- Guidelines for writing, presenting and defending the business plan.

Classes 14-16 Presentation of the Second Group of papers.

The main papers are:

- The entrepreneurial event.
- Some social dimensions of Entrepreneurship.
- Business Drive and National Achievement.
- As we see it: Entrepreneurs are made not born
- The entrepreneurs as rebels against traditional society.
- The psychology of the entrepreneurs.
- The sociology of entrepreneurship.
- Characteristics of successful entrepreneurs.

- The nature of the entrepreneurs.
- "Características del Empresario Caleño"
- "Características de la Empresa Caleña".
- Managers and leaders: Are they different?
- Locus of control and Risk taking propensity as Entrepreneurial Characteristics
- What makes entrepreneurs entrepreneurial?
- Entrepreneurship : What - Why- Who?
- The entrepreneurial Mystique.
- The role of Business in Political Economic development abroad.
- The future for democracy in an age of changing communications
- Can Capitalism survive ?

Here the ideas of these papers are: To learn about the process of entrepreneurship: motivation schemes, models, cultural conditions, driving forces, theories about the formation process. To review all the psychological and sociological ideas about entrepreneurship, to learn about the special characteristics of the entrepreneurs in general and very special in Colombia, and to review the relationships among democracy and free enterprise.

Classes 17-19 GUEST ENTREPRENEURS

The usual format is that the guest entrepreneur present a biographical sketch, stressing all the circumstance and aspects he believes were important positively or negatively in terms of their entrepreneurial career. A strong emphasis is done by the professor to the entrepreneurs, obviously several days before the presentation, to describe the difficulties he had and how he solved them. Also the guest speaker should present a brief review of how he is doing his business today. After the guest entrepreneurs presentation, the students start asking him about entrepreneurship.

Classes 20-22 PRESENTATION OF THE THIRD GROUP OF PAPERS.

The mains papers are:

- Leadership.
- Creativity
- No money: know how, know who?
- Motivation, Leadership and Organization: Do American theories apply abroad?

The values Americans Live by.

- Initial Venture: Goals, Age and the decision to start an entrepreneurial career.
- Innovation.

- Analysis of new firm survival and growth
- Networking for success: know who- know how.
- New ventures and small business innovations for economic growth.
- Corporate innovation and entrepreneurship in Canada.
- Achieving motivation can be developed.
- Numbers that lie.
- Are business schools teaching business?

Here the ideas behind these papers are: to understand the values and beliefs that are important to entrepreneurship, to develop some knowledge in the subjects of creativity, innovation and leadership which are usually lacking at the university level, to show them the results of some researchs which allow them to understand better the odds and the requirements of the entrepreneurial process, to learn about some of the need that the entrepreneurs always have, to continue the motivation process in terms of development.

Clases 23-25 PRESENTATION OF THE FOURTH GROUP OF PAPERS.

The mains papers are:

- Como generar ideas de negocio.

The ideas behind these papers are to improve their searching procedure for ideas and team members, to get them involved with the concept of family business, to provide them some financial considerations required for the management of new business, to provide them with some of the difficulties of women in and with the jobs and to consider the ethical aspects of entrepreneurship.

Classes 26-3 PRESENTATION OF BUSINESS PLAN

Each team is allowed between 30 and 45 minute to present their business plan. All the other students and the professor act as interested investors willing to know everything about their possible venture. The presenting team will allow about 40 minutes of questioning by the interested investors and finally the professor will pinpoint some of the mistakes or oversights either the presenting or the audience had and will explain those aspects which are weak or academically weak.

Class 32 EVALUATION OF THE COURSE

Each student should fill an open evaluation format (Annex 3) in which he evaluates his work, the work of his teammates, the course, the business plans and the potential of his business to become reality. In Annex 3 are some of the comment of the student about the course.

Results:

Since January 1985 to June 1988. We have taught the course ten (10) times for a total of 246 students, and a total of 73 business plans in all sectors of the economy. It is necessary to point out that even though the development of the business plan is oriented to the analysis of real business, it is still an academic work. Which means that some of the students do not get to the point of really stablishing the business immediatly; firstable, because many of them had to continue their studies, secondly because some of them have to go to the internship program that our school has as a degree requirement and thirdly because our purpose is an educational one oriented to long range effects and not to immediate results.

In terms of the real business done through the semester a total of 15

ventures had been realized by the students. As explained before these are short life business.

Even though up to date we have not made a detailed follow-up to every one of our students in terms of Real Entrepreneurial activities, we know that, in general, about 20 of our students are already established as entrepreneurs with roughly a total of 65 employees.

Next year we are going to do a research project which will allow us to get hard figures and a better description of the economical effects of those new business.

3. *Entrepreneurship: (Graduate Level)*. This course with only forty hours of class takes very much the general orientation of the undergraduate level course, but obviously some of the goals, objectives and activities are not realized here: They don't have to run a real business through the course, they don't have to attend the entrepreneurial club, they don't have to interview entrepreneurs, neither there are guest entrepreneurs in class. In terms of methodology about 16 hours are professor exposition of theories concept, tools about entrepreneurship and the business plan, and about 24 hours are the presentation of papers by the students. The papers

are chosen from the same set of readings. They have to prepare the business plan, and they have to present the written business plan, but not to defend it.

We have taught these course three (3) times at the graduate level for a total of 84 students. All of them had professional experience at least of 5 years, their ages are between 28 and 40 years old, and all them occupied executive positions.

A total of 26 business plans had been prepared and about 6 business had been established with about 38 employees.

4. *Teaching Related Activities.* The Center has been involved in the following activities to improve their teaching activities.

- Actualization of the "Project investment Course".
- Development of software for "Project Investment Course".
- Design, development and execution of the Seminar for the Autonomous Corporation of Development of the Cauca River about "Management of Development Projects".
- Design development and execution of the Seminar "Investment Project". For 18 Medium and small size owners.

Design and execution of the seminar "Creativity" for the undergraduate students of entrepreneurship .

- Development of academic materials in Spanish.
- Execution of several conference for ICESI's undergraduate professors about Entrepreneurship Education.
- Training of professors for the night program and for the High School program.

5. *Assistancy for Other Universities.* The Center has provided information, orientation and help to the following universities which had shown interest on entrepreneurship:

UNIVERSIDAD DEL VALLE (Cali)

UNIVERSIDAD INDUSTRIAL DE SANTANDER (Bucaramanga, Santander)

CORPORACION UNIVERSIDAD AUTONOMA DE OCCIDENTE (Cali)

UNIVERSIDAD EAFIT (Medellin, Antioquia)

UNIVERSIDAD DE HONDURAS (Honduras)

ESCUELA POLITECNICA DEL LITORAL (Guayaquil, Ecuador)

UNIVERSIDAD CATOLICA DE CORDOBA (Córdoba, Argentina)

UNIVERSIDAD DEL CAUCA (Popayán, Cauca)

UNIVERSIDAD NACIONAL DE COLOMBIA (Manizales)

FUNDEMA (Manizales)

UNIVERSIDAD DE LA SABANA (Bogotá, D.E.)

UNIVERSIDAD NACIONAL PEDRO HENRIQUE UREÑA (Santo Domingo)

INSTITUTO TECNOLOGICO DE MONTERREY (Monterrey, México)

UNIVERSIDAD TECNOLOGICA DEL CENTRO (Valencia, Venezuela)

6. *High School Program:* This is a 30 hour seminar we have been offering to some groups of Junior and Senior High School students. It has been done in different schedules two hours /week for 15 weeks, 6 hour/day for 1 week, 3 hour /day for 2 weeks, 6 hour /week for 5 weeks, depending upon the possibilities that the High School has. It has been in a voluntary basis in some high school, and in other it has been a required seminar for all the students.

The main objective of the seminar are:

- To create concience about Entrepreneurship, the possibilities it had for a career path, the needs of the country in terms of new entrepreneurs.
- To explain the free enterprise economy system, its relations with democracy, the role of the private sector and the concept of social responsibility.

- To make them aware of the difficulties of the Colombian Development and of the problems of the country.

To provide them with a basic language and understanding about economy, business and development.

To give them the basic ideas about starting and managing a business.

This seminar is started with a pre evaluation test (Annex 4) in order to realize how much clear ideas and confussions they had about some of the subjects. Then a discussion about Colombian development perspective is held looking for a strong participation of the students in order to explain different terms and ideas because they brought them and not because we were willing to teach them. After that, a general presentation about the free enterprise system, its advantages and disadvantages is presented showing there the role of the private sector and of the entrepreneurs. Immediately its time to talk about entrepreneurship, the process and the stages to build an enterprise and the helping agencies that we have in the country for that purpose.

Using the material developed by the U.S. Chamber of Commerce 'EMPRESA' and material developed by ourselves we explain the main term about building and managing a business and through examples and exercises we get them involved in some of the ideas and concepts that we are trying to explain.

Groups:

AUGUST 1986 - JUNE 1987

LICEO BENALCAZAR	(28 students)
COL. SAGRADO CORAZON VALLE DEL LILI	(16 students)
COLEGIO BENNETT	(24 students)
COLEGIO COLOMBO BRITANICO	(32 students)
COLEGIO JEFFERSON	(26 students)
COLEGIO DE LA PRESENTACION	(14 students)

AUGUST 1987 - JUNE 1988

LICEO BENALCAZAR 1st. Group	(22 students)
COLEGIO BENNETT	(20 students)

COLEGIO SANTA LIBRADA	(25 students)
COLEGIO PIO XII- 1st. Group	(29 students)
LICEO BENALCAZAR 2nd. Group	(10 students)
COLEGIO EUSTAQUIO PALACIOS	(32 students)
COLEGIO COLOMBO BRITANICO 1st. Group	(25 students)
COLEGIO PIO XII 2nd Group	(32 students)
COLEGIO COLOMBO BRITANICO 2nd. Group	(27 students)
COLEGIO JEFFERSON	(16 students)

Results:

Eventhough we are not able to know how many students are already in business, we know that the seminar has been very well accepted by the students and by the directives of the high schools, firstable because many have asked for the seminar in the second year, and several had during the last year two groups and are asking for continued support for the next year. One subproduct of this activity has been that many of the student who had some business orientation had decided to come to ICESI, as leader in Entrepreneurship, to realize their undergraduate studies.

In order to promote better the entrepreneurial activity at the high

school level we develop a contest in order to select the best Entrepreneurs at the High School level. We received about 162 inscription and after a detailed selection process we honored four enterprise in the Second Latin American Congress For Entrepreneurship held in Cali last April. The winner received a \$50.000 (US\$200) prize and the other three were presentend with a plaque.

From this contest there is a tremendous subproduct, and it is that a group of High School students had decided to stablish a Center for Entrepreneurship Development, and the CDEE-ICESI is helping them to grow and will be assistting them next year in order to make a reality the difussion of our idea in several high schools of Cali.

7. *Elementary School Teachers Program.* This is a 24 hour program that will be held July 7, 8 and 9 with about 40 elementary school teachers. This will be the first execution of the program and our purpose is to extend our influence all the way to the elementary school in order to try to change some of the values and attitudes that the child get in their first years of education.(See Annex V)

Our objectives in the seminar are:

To make teachers aware of entrepreneurship, its values, and its importance for the Colombian development.

- To teach them the main characteristics, beliefs and values of entrepreneurs and to discuss with them what could be done in their classes to produce the cultural changes that will be required.
- To explore with them the opportunities and limitations that the new curricula formulated by the government in 1986, will provide for some of the ideas that we had about entrepreneurial education.

To give them some training in creativity and in the use of some of their classes to promote creativity.

- To discuss with them some of the written materials that they are using in their class and show them how those materials could be detrimental to the free enterprise system, to development, to entrepreneurship. And to show them how they could use in a positive way all of those materials.

6.2 Research Activity

The Center has been involved in several research activities, all of

them oriented to produce knowledge which could improve our teaching activities.

The titles of the research done are:

- Characteristics of Cali's entrepreneurs.
- Characteristics of Cali women's entrepreneurs
- Comparison among men and women entrepreneurs
- Perception of risk among entrepreneurs with university degrees and university students.
- Procedures to establish an enterprise in Cali
- Helping entities for entrepreneurship
- Innovation in Colombian enterprise (in proposal)

6.3 Publications

The Center has been very active in preparing presenting and publishing papers in several magazines and congress in order to grow a material movement toward the introduction of entrepreneurship in the educational community, either at the formal university system or at the professional societies or at different social, religious or civil group.

The following is a list of papers:

The Economic and Managerial area in the formation of Chemical Engineers. X Congreso Interamericano de Ingeniería Química, Santiago de Chile, November, 1983.

Revista ION. Universidad Industrial de Santander, December 1984, pag. 94-96.

The Professional as Entrepreneur. Sociedad Colombiana de Ingenieros Industriales y Administradores, Medellín, August, 1984.

The Chemical Engineer: Entrepreneur? XIV Congreso Colombiano de Ingeniería Química, Bogotá 16-18, 1985.

Revista Universidad Eafit, No.6 , Marzo 1986.

- Entrepreneurship: Colombian's Future. XII Congreso Nacional de Desarrollo Humano, Medellín, October 9-1 1985.
- Characteristics of Entrepreneurs in Cali. 1986 Entrepreneurial Research Conference, Boston, April, 1986.
- Publicaciones ICESI, No.18, pag.10-16, March 1986.
- Frontiers of Entrepreneurship Research, Babson College, Boston, 1986, pag.82-90.

- The University Professor. Transferencia, No.1, December 1986, Pag.4.
- Proposal to provide Industrial Experiences to the students of the Industrial Engineering Program at the Universidad del Valle. December 1985.
- Entrepreneurial Spirit as an strategy for the development of Colombia. Revista Arco. No. 295, September 1986, Pag.8-15.
- Entrepreneurial Education: The future for Latin America. 1987 Balas Conference. Phoenix Arizona, February 1987.
- Educational activities to promote Entrepreneurial Spirit the Experiences at the Center for Entrepreneurship Development of ICESI. Primer Congreso Latinoamericano sobre Espiritu Empresarial, ICESI, Cali, March, 1987.
- Primeras Jornadas Latinoamericanas sobre Pequeña y Mediana Empresa, Universidad Católica de Córdoba, April, 1987.
- The Center for Entrepreneurial Development at ICESI. ICESI, May, 1987.

Presentations had also been made to:

- Participants at the CLADEA Meeting (Caracas)
- Participants at the seminars of the Chamber of Commerce of Cali
- Directive Board of FUNDAEMPRESA
- Professor of the Universidad del Valle
- Member of the Colombian Society of Industrial Engineers.
- Member of the Colombian Society of Chemical Engineers
- Member of the Colombian Society for Human Development
- Directive Board of Coomeva
- Centro Universitario Cañaverales
- Members of Ecopetrol-Barranca
- Directive Board of the Chamber of Commerce of Buga
- Director of Fundaempresa (Cali)
- Director of Fundaempresa (Popayán)

6.4 Outreach Activities

Some of our outreach activities, are shortly mentioned here because they are part of our educational program. They complement our idea of building and environment which will, in the future, nurture and favor entrepreneurship as a whole.

The main outreach activities are:

- Entrepreneurial club: Its is a time and a place to allow networking among students, entrepreneurs, investors, people of the community etc.
- Documentation Center: It is a collection of papers, books and informations unique in Colombia about entrepreneurship. It holds all the business plans elaborated by our students.
- Bank of Ideas: It is going to be a computer based data-base which will hold the several hundreds of ideas that the student keep providing in the courses.
- Latin American Congress on Entrepreneurship: It has been the main system we had use to get Deans, Professor researchers and Students motivated to learn about entrepreneurship in general and entrepreneurial education in particular. About 580 people had been through the two Congresses we have held in Cali and the memories had been distributed to about 3000 educators, researchers and entrepreneurs.
- Fundaempresa: We were one of the founding institutions of these

financing institution for new university entrepreneurs. We are in the Directive Board.

- ACE: We are trying to get ICESI students involved in the constitution of an ACE'S chapter in Colombia.

7. ANALYSIS OF THE ACTIVITIES OF THE CDEE

After three and a half years of operation we consider that the CDEE at ICESI has been extremely successful because:

- a. It has created a new academic field in the university.
- b. It has provided to all ICESI'S students a new perspective for their professional carrer.
- c. It has trained ICESI students in a new activity fully related to the goals and missions of the institution and to the business management profession.
- d. It has produced curricula changes in the undergraduate

and graduate programs, and it is providing a continuous action which were going to produce new changes in curricula and changes in several other courses which were thought in the traditional way.

- e. It has motivated many ICESI students to become entrepreneurs and several as were mentioned, are already in businesses and many which are now employees are still considering some of their entrepreneurial ideas and perspectives.
- f. It has allowed ICESI students to get a better understanding of their social responsibility with the development of the country and it has provided an scheme to be participants in that development.
- g. It has complemented the traditional business administration education with, real knowledges and experiences about business, knowledge about the formation and management of new business, and with an integrative process, the business plan activity, which has allowed them to use all their theoretically isolated knowledges in a practical integrated and related action.
- h. It has provided ICESI students with a knowledge about successful local entrepreneurs and very specially with a respect and admiration for the entrepreneurial career and the contributions of

the entrepreneurs to the socio-economical development.

- i. It has produced changes in many professors of other subjects which have started to spend some part of their courses in providing to the students with knowledges they will require to work in the entrepreneurial field. For example Market research for new products of a new company, competitive strategies for a new company coming in a market where there are already many organizations, cash flow analysis for new companies, etc.
- j. It has produced academic materials in Spanish for entrepreneurship education.
- k. It has produced knowledge (through their research program), about Colombian entrepreneurship related aspect. It was the first Colombian institution to research characteristics, risk perception, etc.
- l. It has brought to Colombia university's community knowledge and experience of several countries and organization around the world through the realization of two Latin American Congress. Specifically conferences about experiences in the following countries have been presented: India, Great Britain, Canada, United

States, Brazil, Chile, Peru, Venezuela, Ecuador, Puerto Rico, Mexico. This activity has brought a deep and wide positive reaction of the community about entrepreneurship.

- m. It has developed a net working scheme for ICESI students and entrepreneurs, the entrepreneurial club, which has about 250 members that usually meet every two weeks to talk about entrepreneurship and related areas.
- n. It had brought to the University the sense of reality about business, due to the practical activities that the students should do.
- ñ. It had become a focal point of dissemination of information about entrepreneurship for the academic community, because as it was mentioned many universities and high school are following the CDEE path and are starting their own development in entrepreneurship.
- o. Its action have had a tremendous effect on the community, now the term entrepreneurial spirit, is a normal expression and several institution are using it to present their activities and ideals. We sincerely hope that a Centers for Entrepreneurship Development are going to come in several universities, High Schools, social and

civic entities.

- p. Its action at the high school and elementary school levels is a very innovative way of ICESI to alter the status quo of our educational system and we believe that our activity is producing a sensible effect in the career selection decision and in the orientation of the academic programs that the students are following after our seminar. We foresee a tremendous change in the future of those students in terms of their entrepreneurial skills.
- q. The results of the Best Entrepreneur Contest and the very special ceremony we had to give the distinction brought the young entrepreneurs to the highest level of figuration in the community, which in conjunction with all the other activities, is helping to create a culture which respects, honors and distinguishes the entrepreneurs, and will give birth to an entrepreneurial culture and to many entrepreneurs.
- r. Its action has helped the FUNDAEMPRESA growth, which is going to mean in the future financial support for many young entrepreneurs. FUNDAEMPRESA is now in four cities of the country and actually the Director of the CDEE is in the board of directors.

- s. It has been able to produce not only an accumulation of information about entrepreneurship but also it has produced a lot of papers and reports which has been presented in several meetings, conferences, seminars, providing a perspective of the subject for many persons and institutions.

The main circumstances and factors for the success of the center for entrepreneurship development are:

- a. The agreement between the institutions as a whole and the center for entrepreneurship development in terms of goals, missions, ideology and philosophy, which did allow to the center the freedom and the support for all the activities.
- b. The situation among the organization. Because being under the direct supervision of the president of the university and not under any dean, did allow that the center has an institutional perspective, which could not be affected or limited by deans, or professors. Also it allowed to get in all the field of the academic activity inside and outside of the university.
- c. The fact that we were able to get financial support of ICESI and of two other institutions, first stable the center for international private

enterprise (CIPE) which has provided us two grants one for the period 1986-1988 and the second for 1980-1990, and secondly the fund for academic activities of FES-Union Carbide S.A., which has provided funds for the period 1985 to 1988. This budget has allowed us to do activities which are out of the university budget possibilities, and has avoided that the CDEE has to start worrying about their resources and it had to start doing activities not for their academic or social value but for the money they could produce.

- d. The orientation of the CDEE as an academic Unit and not an assistance office which had allowed to work in all the phases of the academic life: teaching, research, and outreach we had plans to work in services but up to now we have not involved.
- e. The personnel involved in the center has main activity the center. In other terms is not a sideline activity neither in terms of time or of academic interest.
- f. The socio-economical level of our students, which are in the medium-medium, medium high and high economical level and in many cases their families are involved in businesses. This fact provides also the opportunity to get some resources to do the real business activity.

In terms of the limitations of the program we should mention:

- a. We were the first one to start talking about entrepreneurship either in ICESI or in the country. Thus the students didn't have previous basis when they took the course.
- b. Still we have to do in one course the process of changing the values beliefs that many years of educations, and about four year of University had brought to the students. We should change the employee orientation to a wider perspective which includes entrepreneurships.
- c. Our institution has one semester of practice as employees. This activity is done the semester that follows the entrepreneurship course. So it breaks the entrepreneurial formation process.
- d. The center only has two persons, the director and the assistant to the director. It is very difficult to expand our activities to follow up students and for to provide close assistance to the students who are interested in establishing a new business. Last two semesters we have a part time research assistant which really helped us a lot.
- e. The incentive structure of ICESI is not a good one for the academic

activities. It is better for the services activities. Thus it is difficult to get other professors involved with the center or trying to help students because ICESI will not provide financial resources for that activity.

In order to improve our program, we should:

Increase our faculty at least to three full time professors and two research assistants in order to be able to introduce new courses, to do counseling and assistance to the students, to increase the research activity and to cover some new activities in terms of teaching and outreach.

2. To find financial support to establish a chair in entrepreneurship which will allow so that he will be able to concentrate fully on entrepreneurship.
3. To find financial support to continue expand our research and outreach-activities.
4. To find financial support to be able to keep the people of the CDEE actualized in academic and practical terms. It is a basic requirement

to learn of the Pacific rim and the socialist-communist countries experiences of entrepreneurship and of economical development. Also a better understanding of the European and Canadian experience.

5. To expand our best business contest to the university level.
6. To develop a joint program with an university which have had experience in incubator order to find the scheme to establish one in ICESI in order to start a service activity oriented toward businesses of our community.
7. To develop books in spanish for the entrepreneurial area in order to make easy for other universities the teaching of entrepreneurship. Idem has to be done for the high school level.
8. To start our continuing education programs to be able to train more people on entrepreneurship very specially at intermediate cities.
9. To establish an information systems about new business and all kind of entrepreneurship information.

8. CONCLUSION

We believe that a program, like the one done by the CDEE-ICESI is a very cost effective way to develop an educational program about entrepreneurship and to develop a culture of entrepreneurs.

There are other ways to better results, but we believe that the only way, in the long range, to produce successful entrepreneurs is an educational program which will produce the changes that in values and beliefs are required. The ideas of convenience, desirability, feasibility and the decision to become entrepreneurs require a long time educational development, especially in Latin American countries where many of the values for entrepreneurship are not taught.

EXPENSES OF THE CENTER

	1985		1986		1987	
	<u>\$(000)</u>	<u>US\$</u>	<u>\$(000)</u>	<u>US\$</u>	<u>\$(000)</u>	<u>US\$</u>
PERSONNEL	1.460	10.428	2.980	16.555	3.218	13.991
OTHER EXPENSES	699	4.993	2.721	15.117	3.661	15.917
TOTAL	2.159	15.421	5.701	31.672	6.879	29.908