





Good practices in entrepreneurship from universities. Systematization of entrepreneurship in the Multidisciplinary Regional Faculty of Carazo, UNAN - Managua

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ABSTRACT

his document contains a systematization of 23 years of history of the Regional Multidisciplinary Faculty of Carazo (FAREM Carazo), forming young people with creative, innovative vision, through an entrepreneurial culture. The description is based on personal experience as a student participating in the First Entrepreneurship Fair in 1998, as an entrepreneur in 1999, and as a teacher of this faculty since 2020, in addition to considering the experience of five colleagues precursors of the entrepreneurial culture.

Since its inception, this faculty, thanks to the wise vision of directors and teachers, has promoted the entrepreneurial culture in students at the beginning of Economic Sciences and currently in all majors and programs such as University in the Field (UNICAM). University fairs for

entrepreneurs, multidisciplinary research to strengthen the business plans of already established enterprises, and business plan designs with a focus on innovation and entrepreneurship have been carried out for students to consider them as an alternative to generating income.

Through extension, the faculty has transcended in training strategic social groups on entrepreneurship, it has participated in international and national competitions obtaining much recognition by responding to the needs of the contexts at different times. Achieving a significant influence in the political, economic, and social sustainable development of the country.

INTRODUCTION

Considering the contribution of Moreno (2019,) entrepreneurship is conceived as self-recognition, the formation of values, ethical sense, the real empowerment of the person, and the ability of leadership. Therefore, higher education institutions have an objective beyond the lucrative aspect, directing their efforts in the creation or strengthening of those conditions necessary for the formation of an entrepreneurial culture in the individual that allows decision-making from the classroom as the main space for the development of creativity and innovation.

Under this logic, entrepreneurship becomes a fundamental part of the curricula for students to be prosperous, proactive, and empowered individuals capable of achieving the goals they set in their lives, placing this topic as a vital attitude for a professional of the XXI century.

The nature and dynamics of higher education, regardless of level and modality, demand the exploration of experiences as one of the bases to contribute to quality; a demand that invites to continuously assess educational practices. This challenge becomes relevant if it is approached from research projects, especially when the educational experience is assumed as the axis that gives meaning to research (Contreras, Pérez, 2010).

Assessing an educational experience is a complex process that responds to defined strategies, one of them being the Systematization of Experiences (SE); a strategy that allows the understanding of practices as a basis for learning and intervention from and for them (Guiso, 2001). More than the result of theoretical research, this article aims to describe the evolution of 23 years of history promoting entrepreneurship in the students of the different majors that have been offered at FAREM-Carazo.

In 1991, the Regional University Center of Carazo (CURC) of the UNAN-Managua reopened its doors, offering only 3 majors at the higher technical level, Business Administration, Public Accounting, and Computer Science. Its professors were highly qualified people who worked in various companies and institutions, which from the beginning established a culture of training professionals with a business vision. In addition, the directors at that time came

from entrepreneurial families of great recognition at the local level, which contributed to the establishment of a culture of fostering entrepreneurship.

Entrepreneurship is identified when the person can do something new, to give another use to something that already exists and thus participate in the transformation of his own life and that of his environment, can generate ideas, transform them, adapt them, propose various alternatives and see a problem as an opportunity (Duarte and Ruiz, 2009, p.329).

DEVELOPMENT

Bearing in mind, as mentioned above, that all reconstruction requires interpretation, Torres (1996), presents the systematization of experiences as qualitative research with a critical interpretative approach, approached from a qualitative focus that considers reality as a social construction shared by its members. The researcher's commitment in the search for meanings makes him/her actively involved with the group under investigation, and aware of the effects that his/her presence produces in the context. From this perspective:

Educational experiences do not exist as objective facts independent of the set of interpretations made of them by their actors. These are assumed as collective constructions of meaning in which diverse logics coexist and compete, configuring a complex and contradictory scenario, which seeks to be approached through systematization (Torres, 1996: 14).

In addition, the systematization of experiences belongs to the hermeneutic perspective, emphasizing who systematizes, Barnechea and Morgan (2007), explain that hermeneutic currents tend to give greater weight to an external agent who supports the actors of the experience in the process of discovering the meaning of their actions or, in some cases, performs this interpretation directly, returning it later to the participants.

The emphasis is on capturing the meaning of the experience [...] The starting point is its descriptive reconstruction, now approached from the categories and significant axes, both of the actors in the experience and of the researchers; we are facing an explicitly hermeneutic task since the notions of reality of both parties enter into interaction with each other (Torres, 1996: 17).

To respond to the objective of the research, which is to systematize 23 years of history of the Regional Multidisciplinary Faculty of Carazo, forming young people with a creative, innovative vision, through an entrepreneurial culture, the following elements are considered.

MATERIALS

A search was made for information related to the subject in studies through various reports, research and completed projects, graduation modalities, and participation in innovation and entrepreneurship workshops.

Participants

Through a focus group, with the participation of five professors, a semi-structured interview is applied in which, for periods, the experiences and main academic activities carried out by the faculty both internally and externally in favor of the entrepreneurial culture are narrated.

Methods

The teachers participating in the focus group were considered based on the time spent in the faculty and the frequency with which they are involved in the promotion of innovation and entrepreneurship, the details of this research are the result of a profitable sharing of experiences of teachers who have been willing to implement this entrepreneurial culture in the various generations of students of FAREM-Carazo.

The systematization is established in the descriptive research typology according to Hernández, Fernández, and Baptista (2014), since the experience lived in 23 years of participation in academic activities linked to entrepreneurship is described chronologically.

In 1998, thanks to the initiative of the directors, teachers, and above all the enthusiasm of the students of the Business Administration major, the first university fair to support entrepreneurship in the region was developed; this fair had the objective of promoting the commercialization of the different products of micro, small and medium enterprises, in addition to collecting toys to share with the children of the neighborhoods surrounding the CURC. This first experience had the participation of 15 entrepreneurs.

In 1999, the second fair was held with the participation of 22 entrepreneurs, 5 of whom were already graduates of this university center who thanks to this entrepreneurial culture already had their businesses.

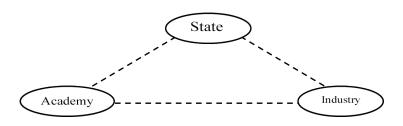
This entrepreneurship fair continued to be developed as an emblematic activity within the framework of the celebration of the reopening of the CURC during the month of November of each year, strengthening the planning and organization system of the same, integrating various majors and expanding the social work through university extension. An average of 50 entrepreneurs are currently participating in the various strategic areas for the development of the family economy (agro-industry, food, leather, footwear, wood furniture, metal mechanics, textile, clothing, and tourism).

Since 2006, thanks to the support and policies to promote micro, small, and medium Enterprises (MSMEs) by the government presided by Commander José Daniel Ortega Saavedra, we have the direct support of the different state institutions for the realization of university entrepreneurship fairs, improving logistics and strategic alliances. In 2010, the University Center became the Regional Multidisciplinary Faculty of Carazo, FAREM-Carazo. From this year on, 80% of the participants in the fairs were entrepreneurs, and active students of the different majors of the faculty, which showed the results of the implementation of the entrepreneurial culture in the faculty.

In 2010, in coordination with the Ministry of Development, Industry and Commerce (MIFIC), the Nicaraguan Institute of Small and Medium Enterprises (INPYME), and Support Centers for micro, small and medium enterprises (CAMIPYMES) in the territories, a strategic alliance was established in which students from the majors of Business Administration, Marketing and Accounting, in multidisciplinary teams, develop diagnoses and proposals to strengthen MSMEs in the region, being FAREM-Carazo the pioneers in the development of this work, which was replicated until 2012 in different regional faculties.

In this sense, it is evident that FAREM-Carazo participates in the model that UNAN-MANAGUA has adopted in entrepreneurship issues "Triple helix model version II of Etzkowitz and Leydesdorff (1995)", where the State-Academia-Industry alliances are a key factor for the development and competitiveness of a nation.

Figure 1Triple helix model version II



Note: Taken from "Relación universidad-empresa-estado. Un análisis desde las instituciones de educación superior de Barranquilla-Colombia, Barrios and Olivero (2020).

As an academy, the FAREM-Carazo (in the southern region of the nation) has contributed technical-scientific knowledge by training professionals who meet the demands of companies and individuals (students undertaking their businesses). Companies provide an opening for students to put their knowledge into practice in the different instances of their organization, research that helps to improve their positioning in the markets where they are present as well as to enter others; The Government of Reconciliation and National Unity (GRUN), since it took

over the functions of governance of the nation, has implemented programs aimed at improving the quality of life of its inhabitants through policies in state institutions.

Bythe year 2011, the multidisciplinary graduation modality was established, which consisted of forming teams of students from different majors of economic sciences designing business, and planning proposals with a focus on innovation and entrepreneurship, this modality was maintained until 2018, it is noteworthy that many of these business plans are now a reality and generate employment for members of society, one of the highlights has established four different entrepreneurship, employing more than 50 employees in the gastronomic and entertainment sector.

In 2012, the faculty formed the movement of entrepreneurial students, made up of students from different majors participating in different activities to promote innovation and entrepreneurship, led by Violeta Gago García, who graduated in 2011 with excellence having a multidisciplinary thesis on innovation and entrepreneurship, Currently, Ms. Gago is Director of University Innovation and Coordinator of the National Innovation Commission of the National Council of Universities (CNU), Technical Liaison of the National Council of Universities (CNU) in the National Commission of Creative Economy, Coordinator of the Master's Degree in Creative Economy and Sustainable Entrepreneurship, We mention Ms. Gago, particularly to highlight the excellent quality management that the directors, teachers and students of FAREM-Carazo have outlined.

This movement of entrepreneurs has its roots in the framework of twinning between the University of Michigan and the Regional Multidisciplinary Faculty of Esteli, who coordinated with Dr. Paul Lane and American students to provide training in innovation and entrepreneurship, developing the design of creative thinking. FAREM Carazo participated until 2015 with students of economic sciences, technology, and humanities.

From this experience, from 2017 to 2022, the movement of students is resumed under the name of Network of Young Innovators and Entrepreneurs where they are involved in various events in the different economic sectors of the region: they participate as competitors in competitions; facilitators of knowledge and experiences sharing them with entrepreneurial protagonists; interactions with entrepreneurs in specific research in agronomic, educational and commercial activities.

In addition, teachers are involved in the National Mentoring Network serving the fourth region (formed by the departments of Carazo, Granada, Rivas, and Masaya) sharing their scientific knowledge and entrepreneurial experiences linked to business, aptitudinal, social, and environmental management to actors associated with state entities.

Education SCIENTIFIC ARTICLES

On its part, UNAN-Managua has been integrating entrepreneurship in its plans, programs, and projects for some time. In this regard, the institutional mission states

To form integral professionals and technicians from and with a scientific and humanistic conception of the world, capable of interpreting social and natural phenomena with a critical, reflective, and proactive sense, to contribute to social development, through an educational model centered on people; a model of scientific research integrating universal paradigms; a permanent human and professional improvement derived from undergraduate and graduate studies from a conception of education for life; projection and social outreach programs that promote the cultural identity of Nicaraguans; all within a framework of genuine cooperation, equity, commitment, and social justice and in harmony with the environment. (Educational Model, 2011, p.19).

According to Sanchez, (2017, p. 460) academic institutions play a role in promoting entrepreneurship, given that:

Entrepreneurial education is, at present, a reality in constant progress. This contributes to the formation of a culture (starting with the youngest and children); promoting these entrepreneurial attitudes and skills benefits society, even beyond the application of these to new business initiatives, this in the European Union and with great force starts in Latin America. In this regard, he proposes that an academic entrepreneurship program should include entrepreneurial attitudes, skills, and competencies, to develop the qualities required to create new demands in university professions.

Entrepreneurship in academic environments requires the application of a series of methodologies that lead individuals to be the protagonists of their changes and those of their environment. In this sense, Fayolle et al. (2006) characterize this entrepreneurial educational process through different types:

- Educate about entrepreneurship: Impart general knowledge about concepts related to entrepreneurship.
- Educate for entrepreneurship: Theoretical and practical approach to providing entrepreneurial knowledge and skills.
- Educate through entrepreneurship (Action-based): Process-based and experiential approach, where potential entrepreneurs learn directly through entrepreneurial experiences.
- In addition to these, Liñán (2004), formulated different types of entrepreneurship education programs:

- Entrepreneurship Awareness Education: Program dedicated to imparting knowledge about entrepreneurship and influencing attitudes toward entrepreneurial intentions.
- Start-Up Education: Program to get people who already have business ideas on track to solve practical problems and propel them to the Start-Up phase.
- Education for entrepreneurial dynamism: Program oriented to promote people who
 are already entrepreneurs and wish to incorporate dynamic plans after the Start-Up
 phase.
- Continuing education for entrepreneurs: Continuous learning programs for entrepreneurs who have successfully set up businesses and have some kind of expertise.

Some of these programs have been developed for some years at UNAN-Managua through innovation and entrepreneurship workshops for professors and students from different faculties.

During the years 2013, 2014, and 2015, emphasis was placed on the multidisciplinary design of business plans in environmentally friendly entrepreneurship, through the concept of reduce, reuse, and recycle, with excellent results. Parallel to these activities, the development of the FAREM Carazo program "Capacitando a su Pueblo" (Empowering its People), whose purpose was to train vulnerable groups of society (women and at-risk youth) in micro-enterprise ideas for the elaboration of piñatas, costume jewelry, cakes, and desserts.

The National Autonomous University of Nicaragua, Managua (UNAN-Managua) carries out every year the University Day of Scientific Development (JUDC) to provide new ideas for solutions to real problems of society from different areas of knowledge. In this sense, the works with a focus on innovation and entrepreneurship have had great prominence achieving at the central level first place during the year 2017 and second place during the year 2020.

In 2014, the Nicaraguan Council for Science and Technology (CONICYT) promoted the participation of young innovators and entrepreneurs in the Latin American Innovation Rally, among the universities attached to the CNU, FAREM Carazo participates in all editions at the national level achieving in the year 2016 and 2021 outstanding places, this type of events contribute to the generation, dissemination and transfer of knowledge, through the articulated work, values and commitment of each of the multidisciplinary teams of students, all this evidences the quality of professional training that UNAN-Managua students have.

During 2018, in Nicaragua we unfortunately lived through a socio-political crisis fomented by the interests of the US government with the complicity of some opponents, businessmen, and members of the Catholic Church, leaving as a result a stagnation in the economic development of the country and increased unemployment. The right response of the authorities of the UNAN-Managua was not long in coming and further strengthened the development of innovative

and entrepreneurial culture in students of all majors and years, achieving through the creative economy to influence the rapid recovery of the national economy and specifically local Carazo headquarters.

Finally, in the years 2020 and 2021 entrepreneurship projects have been developed, implementing methodologies such as CANVAS model, Creative Thinking Design, and Business Plans in the different majors, looking for business alternatives that contribute to reducing the effects of the COVID-19 pandemic. It should be noted that these methodologies have been a fundamental basis for the participation in the creation of two Star Up born from Hackathon and many commercial and technological enterprises in governmental platforms.

It is important to note that the existing entrepreneurship, whether by active students or graduates, has gone through a training process since the incorporation of the axis of innovation and entrepreneurship in the curricula of the majors served by FAREM-Carazo. as well as participation in national and international competitions, provided entrepreneurs with essential tools that broaden and strengthen their entrepreneurial vision.

During these years FAREM-Carazo has incorporated into this entrepreneurial culture students from different majors of the University in the Countryside program (UNICAM), a pioneering project of the National Autonomous University of Nicaragua, Managua (UNAN-Managua), which aims to bring higher education to the most distant communities of the country and make this right effective for young people who for economic reasons are unable to continue their academic education. The initiative also aims to promote socioeconomic and cultural development, as well as to contribute to the reduction of poverty and school dropout rates in the most vulnerable areas of the rural sector.

In its Mission and Vision, UNAN-Managua aims to train integral professionals and leaders in the generation of knowledge, based on the advancement of science and technology. The University contributes to responding to the needs of the population and to offer alternatives that solve national, regional, and international challenges.

CONCLUSIONS

Trying to summarize 23 years of history is a very complex task, full of nostalgia for what has been experienced, but highly satisfactory for the excellent results that have been achieved as an institution of higher education, such as creating an entrepreneurial and innovative culture in students of different generations, in addition to supporting existing MSMEs and above all contributing to the socioeconomic development of the region, representing a good training practice in the different generations of graduates of this faculty.

It is worthy to recognize the teachers who at different times have held management positions, in addition to colleagues who have made their best efforts to promote the culture of entrepreneurship in the training of students, is common today that a large number of them are business owners and are contributing to the local economy by generating jobs. The experiences at the faculty, national, and international level have been many and we know for sure that the best is yet to come.

It is evident that in any process of improvement, there are limitations that must be overcome, be they organizational, logistical, financial, etc., but with the will that has shown 23 years of history, we know that we have complied with good practices in entrepreneurship from the university.

We could not end this writing without mentioning key teachers who contributed their grain of sand in the establishment of this culture of entrepreneurship at FAREM Carazo: Ph.D. Armando Rodríguez Serrano, Ms. María Magdalena Chau, Mr. Juan Carlos Fajardo Valerio, Dr. Pedro Alberto Aburto Jarquín, MSc. Pedro Alberto Aburto Jarquín, MSc. Lic. Bayardo José Herrera Bendaña, MSc. Mario Humberto Sánchez Serrano, MSc. Pio Santiago Guevara Hernández, Dr. Gerardo Raúl Arévalo Cuadra, MSc. Mariano Isidoro Gaitán Chávez, MSc. Petrona Isabel Bonilla Suazo, MBa. Adelaida del Socorro Sanabria Herrera, MSc. Silvia Elena Carranza Narváez, MSc. Harle José Montiel Gómez. At the UNAN-Managua management level; MSc. Elmer Isidro Cisneros Moreira, Dr. Ramona Rodríguez Pérez, PhD. Jilma Romero Arrechavala and MSc. Violeta del Socorro Gago García.

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