

Desarrollo de competencias emprendedoras, una iniciativa para mejorar la enseñanza de TIC'S en el nivel superior

Development of entrepreneurial skills, an initiative to improve the teaching of ICT at the top level

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Resumen

Se trata de una propuesta, que incide en la mejora de la práctica docente, a través de la adecuación del programa sintético de la Unidad de Aprendizaje (UA), de Tecnologías de la Información y Comunicación (TIC'S), que se imparte en el Nivel de Formación Básica, Disciplinaria e Integral (Nivel FBDI), en las licenciaturas de la Escuela Superior de Comercio y Administración (ESCA), Unidad Santo Tomás (UST) del Instituto Politécnico Nacional (IPN).

La propuesta se desarrolla, al integrar al programa sintético de la UA, estrategias didácticas que promueven el desarrollo de competencias de trabajo por proyectos, y de trabajo colaborativo, así como actitudes emprendedoras, a través de la aplicación de una metodología para elaboración de planes de negocios, asistida por el uso y aplicación de las competencias TIC'S, que se instruyen en la UA. El proyecto se concreta, en un plan de negocios innovador y viable, que se pretende comercializar a través del e-commerce.

Palabras clave: Competencias emprendedoras, PYMES, e-commerce

Abstract

It is a proposal that affects the improvement of teaching practice, through the matching program Synthetic Learning United (UA), Technologies of Information and Communication Technologies (ICT's), which is taught in Basic Training Level, Discipline and Integral (Level FBDI), in degrees from the School of Commerce and Administration (ESCA), Unit St. Thomas (UST) of the National Polytechnic Institute (IPN). The proposal is developed by integrating the synthetic program of the AU, teaching strategies that promote the development of competencies of project work, and collaborative working and entrepreneurial attitudes, through the application of a methodology for developing plans business, assisted by the use and application of ICT's skills, which are taught at UA. The project focuses on innovative business plan and viable, to be marketed through e-commerce.

Key words: Entrepreneurial skills, SMEs, e-commerce

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Introduction

Undoubtedly, the global financial crisis of 2008, the unemployment rate shot largely on countries of the world, becoming a problem of great magnitude, must resolve, through the institution of government policies, incurred in the design and implementation of strategies to blunt expeditiously resolve this problem, this, due mainly to the economic and social impacts associated with this situation.

High rates of unemployment, transform this seemingly simple situation to fix, in a cyclical and highly complex problem, for the simple reason, that because of this consumption impoverishes the low household income, again causing companies they can not afford to hire new employees, or even in extreme conditions, they can not even pay salaries and contractors' employees, and therefore depressed economies.

Approximately 12 million young people are unemployed, according to data reported by the Organization for Economic Cooperation and Development (OECD), Mexico as a member of that organization, which is the country that concerns us in this paper, is the fifth with lower unemployment, a position that even under this classification is not heartening. (OECD, 2012).

If unemployment figures are analyzed, it is observed that the most vulnerable demographic group is the youth (youth unemployment is considered 15 to 24 years old). In Mexico the rate of youth unemployment in the month April this year (2012), suffered a 0.4% increase, reporting in this 9.9% (in March reached 9.5%) (OECD, 2012).

Another fact that is of great importance, is the unemployment rate in Mexico in 2011, reflecting 5.4% compared to the PEA (INEGI, 2012), and this percentage may be higher, since the process that gives rise to this number is made including all those who worked at least one hour a week, considering them as "individuals who work" and for obvious reasons, should not be seen as "employment", working only one hour a week.

Because of the enormous risk posed by the above, it is essential that the Mexican government believes, institute and coordinate specific strategies, they get to increase the number of jobs in general and emphatically youth employment, under this scenario Education Institutions superior (IES), will be working in educational proposals to include in their plans and curricula, cutting edge educational practices designed to develop skills and abilities that affect the training of young entrepreneurs who are in a position to establish small and medium enterprises (SMEs), which undoubtedly will contribute to the self-generation of jobs.

As a viable and expeditious alternative, a reformed teaching practice, which is based on some of the international education trends, specifically in the formation of entrepreneurial skills through the inclusion of this type of competition, the synthetic program is built Learning Unit (AU), Technologies of Information and Communication) TIC'S), which is taught in the first year of undergraduate programs: CPA, Foreign Trade and International Business in the School of Business and Management , Unit St. Thomas, the IPN

The proposal is formalized through the inclusion of entrepreneurial skills competition and cross-program, and application of a methodology for the development of implementing business plans, accessing SMB business creation, using tools that are instructed in the AU TIC'S, concluding with the marketing of products and / or services of the company created by e-commerce.

CONTENT DEVELOPMENT ISSUES

Background

As already noted, youth unemployment include young people between 15 and 24, from two different socioeconomic groups, with different circumstances:

The first group is usually located in the lower-income families, where a lot of young people need to work to help and / or support the essential expenses of their families. Many of these young people, they can not pursue studies at higher level, and even, in many cases, do not even have chance to study high school. Despite this situation, it is known that in order to prosper in careers employment, one of the requirements is to have work experience, obviously it will never be possible to obtain, by education level and previous work experience.

In Mexico, and most likely in many countries of the world, for a time, the social-economic phenomenon of "ni-nis" called (or study or work), a name that has been given is presented to a group youth, depending on how you act or to run their lives. This phenomenon is widespread, causing a high social and economic impact, and its origins probably come from the lack of formal employment opportunities and lack of opportunities and / or inability to study, which often generates the incorporation of a large number of youth criminal groups.

Under this pairing, reduction in household consumption, and the increase in crime, the generation of jobs that do not require special skills, it is an alternative solution to this problem that afflicts categorically the country way, so presumably generating strategies to boost consumption (creating more places for use), is likely to affect the reduction of criminal groups.

On the other hand, there is another situation is highly alarming, the issue of qualified youth labor force, this includes young people who have degrees in higher studies and even graduate for this workforce is even more complex to develop labor markets.

United States, is a typical example of this problem, as they graduate a lot of students in higher and postgraduate levels, they can not pay their student loan debt each year simply because they find them jobs with salaries allow us to fund their debts, it is important to stress that this situation should not be considered as a problem of over-prepared students, but the lack of demand for labor in companies seeking employees with high abilities and skills.

Mexico faces a similar situation, but without the problem of student debt, lack of companies that hire the skilled workforce, the shortage of companies indicates high level of technology innovation, who are generating competitive products that shape the growth of countries.

Germany, for example, has managed to subdue his youth unemployment, and has been held as the strongest economy in Europe by investing in these businesses.

By the deplorable employment contexts in which this generation of young people live and will live, most of the mature workforce of the future, will have little and / or no work experience, making the problem today in tomorrow's tragedy.

THEORETICAL-CONTEXTUAL

Skills training

The competency-based approach in education arises in Mexico in the late sixties to relate to job training for the industry, in its origin, its primary use was in "relate to the productive sector with the school, specifically with the professional and the preparation for employment "(A. Diaz Barriga, 2000) levels.

However, the concept of competence becomes a different move from the workplace to the cognitive level, ie the development of educational skills through linking the knowledge, skills, attitudes and values, concept for the purpose of promoting comprehensive training.

Under this idea, we have generated a series of definitions of learning skills. Tobon defines competence as "the ability or set of abilities that are obtained by the combination and interaction of knowledge, skills, attitudes, values, motivations and skills, the willingness to learn and know" (Tobon, 2006).

While Echevarría (Echevarria, 2001) states that "competition divides the knowledge to cope with certain unavoidable circumstances and be able to cope with them, the first is related to the personal qualities, where the use of these depends on the structural environment which it can develop and institutional spaces training. Professional competence who has directed the knowledge, skills and attitudes to perform their precise job function, since it is able to solve problems with creativity and autonomy and is suitable for work with their work environment and work organization. "

Based on the above, we can conclude that: the competencies are defined as a set of attitudes, skills and knowledge that are expressed by transcendental practices to solve social problems, and needs to build change and transformation, where these practices involve learning to know, know how, know how to live and be; subject to contingencies that may be moved creatively to other labor or productive context, therefore: it is considered that an individual is competent, when it is capable of solving problems or situations, to make the combination of necessary activities in a context or situation concrete.

Competencies as such are not an educational teaching model, because they try not to be an absolute representation of the entire educational process, through the representation of an approach to education, these are directed towards some specific features of teaching, learning and evaluation (Tobon, 2006):

Integration: knowledge, cognitive processes, skills, abilities, values and attitudes in the implementation of activities and problem solving.

Design and development of training programs consistent with the requirements of the disciplines, research, professional, social, environmental and labor needs of the context.

The orientation in its educational processes through standards and quality indicators, as well explained Tobon (2004), "the competencies approach can be performed from any existing pedagogical models, or also from a integration of them. "

Tobon proposes that powers under the approach of teaching strategies should contain certain ideal elements:

Developing critical and creative thinking.

Promote the responsibility of the students in their learning processes.

Mobilize students to: search, organize, create and apply information.

Promote cooperative learning through techniques and activities that consent conducting group activities.

Encourage students in activities geared towards self-reflection of their own learning, regarding: what, why, what, how, where, when and how.

To judge the personal, social and environmental realities, problems and solutions.

Derived from the above, we can say that the foundation of the practice of competency-based training in schools and especially in the Institutions of Higher Education, is that the skills are the primary basis for placing the curriculum, teaching, learning and assessment in the context of quality as these educational approach, more than any other, provides the principles, indicators and tools that foster their implementation.

Entrepreneurship

The concept of emprendurismo has no set definition, which creates confusion, starting with the names that have been assigned emprendurismo, entrepreneurship and / or enterprise, establishing a controversy for those who speak the Spanish language, as some authors consider the terms emprendurismo entrepreneurship are bad translations of the word entrepreneurship, which is used to describe the entrepreneurial spirit or the impetus to start something, in the business sense.

Coupled with the lack of clarity about what is the right term, the emprendurismo although considerably documented topic, has few generalizations that can be discussed on a particular theory, Busenitz et al (Busenitz, 2003) comment that "the inaccuracy in establishing epistemological limits, and lack of communication between the object and its surroundings, as well as among the members, who are dedicated to work and / or study on this subject, are the main causes that have prevented legitimize this field of study. "

Other authors (Fernández, 1999) believe that "this lack of consistency is derived from a shortlist of the terms concept, as it is interchangeably referred to entrepreneurship as entrepreneurial, so it has been assumed that gender is the employer and is the entrepreneurial class. "...

However it is important to count on a framework on the subject, starting from a general idea that considers entrepreneurship, among many of its meanings as "the development of a project which pursues a specific economic, political or social order, between others, and which possesses certain characteristics, mainly has a share of uncertainty and innovation "(Formichella, 2004).

This definition can be complemented with the following ideas related to entrepreneurship, so that we can say that an individual is an entrepreneur when:

Able to ram a project rejected by many others, and distinguishes the actual characteristics of the environment although it may not be seen with the naked eye.

Able to fight for any inconvenience that pierces to its strategy and is not afraid to fail.

Able to create a group with enough motivation that gives the support you need.

Take the information that is available to everyone, to produce something new.

Essentially, the entrepreneur finds a need and then combines all the necessities, structure, strategies, coordinates and manages to satisfy, so it follows that the main features that hold entrepreneurs are:

- Identifying opportunities and initiative
- Persistence
- Compliance
- Require efficiency and quality
- Taking risks calculated

- Setting Goals
- Finding information
- Systematic planning and monitoring
- Persuasion and support networks
- Self-confidence and independence

According to the literature, we can say that the skills and entrepreneurial skills to effectively promote the development of a project, be it economic or social through different ways, such as the establishment of companies, generating self-employment sources the development of existing businesses and the creation of social networks.

SMEs in Mexico

According to John C. Hull (Hull, 2006), "the nations of Western Europe faced high levels of unemployment since World War II, these nations urged local initiatives and the development of SMEs to create jobs today and enjoy high levels of development thanks to this strategy. "

In the early fifties in the United States, business incubators emerge as programs with the purpose of supporting new businesses, through grant support in the initial stage, this aid generally consists of a physical space that is shared with other start-ups, minimizing costs and maximizing the benefits of the exchange of ideas and human resources, which grants a very effective unit development.

The companies then become independent forged as an engine of economic and social development for the region. The first and most famous incubator in America's Silicon Valley.

In Mexico, there are similar programs primarily supported by the Ministry of Economy, which reports that 99% of companies in Mexico are SMEs, which generate 72% of formal employment in Mexico, and they produce 52% of GDP (Ministry of Economy, 2012).

Based on the above it can be stated that SMEs form the backbone of the economy of our country, so Mexico will be competitive when their SMEs are simply so.

Implementing entrepreneurial competition program TIC'S Learning Unit

Undoubtedly be strengthened from an educational perspective, the right to develop entrepreneurial skills oriented entrepreneurship, through the use of the skills such as creativity, the ability to focus personal and group initiative, solving problems, the assessment of the economic risks and the development of business plans and business plans, as well as the appropriate decision making.

Therefore, it is considered essential to include in the curricula of higher education institutions, the development of entrepreneurial skills, and as an alternative solution, prompt and apply immediately, this cross competition includes the synthetic program learning unit TIC'S in the Basic Level, Discipline and Comprehensive Training in the degrees taught at the High School of Commerce and Administration, Unit Thomas IPN (CPA, Trade Relations and International Business).

The adaptation consists simply in the development of entrepreneurial skills that are taught based on project-based learning, and collaborative work, where it is possible to employ a methodology for business plans, which relies on the skills inherent to the program mentioned through the development of a project that is housed in a plan innovative and viable business, which culminate marketed in e-commerce environments.

A description of entrepreneurial competence includes skills such as cross TIC'S program is as follows:

Planning an innovative project for the creation of a SME company to meet a community need and get income for it, based on certain rules of writing, using the criteria established in the area about their components and emphasizing its viability.

Core components of the competition:

<p>competition:</p> <p>Manage productive and innovative projects</p> <p>Competency Unit:</p> <p>Planning an innovative project for the creation of an SME company to meet a community need and get income for it, based on certain rules of writing, using the criteria established in the area about their components and emphasizing its viability .</p>	<p>Elements of competence:</p> <p>1 Determine the business idea product and / or service to market, with their characteristics, and justify their importance.</p> <p>2 Perform the design and development of a work plan (how you are going to provide product and / or service).</p> <p>3 Establish how you will develop the project, with phases, activities, resources and schedule.</p> <p>4 Perform market research to product acceptance and / or service to market and financial analysis, to assess the feasibility of the project.</p>
<p>Problems and uncertainties:</p> <p>1 Offering similar services or products from other people and / or companies (competencies).</p> <p>2. Modifying the need on which the project or inadequate identification of needs is based.</p> <p>3 unexpected price increase of certain resources, so that the financial analysis of the project is affected.</p> <p>4 Difficulty accessing certain budgeted resources</p>	<p>Performance Indicators:</p> <p>(Specific activities to be done to develop proficiency)</p> <p>1 Is the project based on written rules of syntax and spelling?</p> <p>2 Does the project describes the stages, the necessary resources, and financial market analysis, the way is going to get the resources and the work schedule?</p> <p>3 Is the product and / or service offered has one or more competitive advantages (innovations) for quality, price, distribution and customer?</p>

	4. Planning Business Plan is consistent with the resources that are feasible for the project?
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essential knowledge			Evidence:
dimension Motivational Affective: Desire to be an entrepreneur motivation towards I want to share with others and communicate achievements	dimension cognitive: Concept project Concept consumer needs knowledge of the parties project Concept feasibility knowledge Marketplace Knowledge of the development of tools for measuring	dimension do: Evaluation of product / service market Innovation in product / service methodology Project planning methodology financial analysis Computing techniques and application of tools for	<p>Evidence of knowledge: Use and application of information about each of the elements of competition with their respective textual explanation in writing (use and application of Power Point, Project, Word, etc.) tools.</p> <p>Evidence of attitude: Document written record of overcoming these difficulties and (writing, syntax and spelling).</p> <p>Evidence to do: Executive Exhibition (Power Point), executive business plan presentations, and the website of the company (e-commerce).</p> <p>Product Evidence: Written document of the project (business plan, executive summary), and the company website.</p>

	market Computer skills to use you as a tool for project performance	creating web pages.	
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Conclusion

As a result of the experiences and the discussion in this paper, it follows that the need to develop initiatives that address the importance of promoting the development of entrepreneurial skills in students studying higher level implies an enormous challenge to challenge yet not so complex, considering that this is possible when directed activities are complementary to program virtually any subject, same as reeditúen in the development of such attitudes and skills that can integrate entrepreneurship as this competition belongs to the classification of the basic and transversal competences.

It is evident in the work that I have developed (particularly in the last four years of teaching of this Learning Unit TIC'S) has been more intense than in other years of my tenure as a teacher, and I've had to learn many concepts techniques and theories that do not correspond to my academic teaching area, or the area of my training, but the results are most encouraging, and highly motivating not only for me, but especially for my students.

During the semester, students enjoy and achieve:

- Develop entrepreneurial skills.
- Develop skills: self-determination, optimism, initiative and tenacity.
- Staying motivated.
- Develop skills for problem solving

- Develop connections between prior knowledge and acquired at school and reality, establish links with other disciplines (interdisciplinary work), through linking academic, life and job skills.
- Cooperate and work in teams.
- Apply positive communication skills and aptitudes.
- Enhance your interest to investigate and thus better reflective competence.
- Clarify values.

Finally, I believe that our society and very specifically educational institutions, should become aware of the importance of this topic, exerting actions that will reshape the image we have of the business environment and understand that companies are not only a center generating productive wages and benefits for rich people, but rather, a driver of innovation and collective wealth generation, which may well be conceived on its own initiative to improve the lives of individual axis.

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