

# Professional training preferences, demands and expectatives in distance learning

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## Abstract

Distance education, specifically online or virtual, has been viewed as a solution to the growing demand for higher education of young people working in different geographically dispersed social sectors, which demand training adapted to the needs of the new millennium. In this context, the purpose of the study was to explore the preferences, demands and expectations that students have about distance education programs.

The research involved students of the College of Bachelors of Chiapas, Mexico. Information on socio demographic profiles was obtained, a feature that is considered relevant to a plan and program of study. The use of computer resources and training and employment expectations with students was obtained.

The results indicate that students use the information and communication technologies widely and demanded a curriculum plan that is offered online. However, the educational offer in distance learning programs is not an option that have considered to continue their professional development, and they consider the traditional in person degrees a better option.

*Keywords: virtual education, online education, ICT*

## Introduction

In Mexico there is a high number of young people that are at the age to enter higher education. An analysis of the challenges of higher education in the twenty-first century states that compulsory basic education, which currently includes study through high school in Mexico, would increase the proportion of young people continuing their studies at the university level over the short term. The increase in enrollment brings challenges for educational institution, in the imagination and innovation capacity because traditional ways of conceiving education are not sufficient and also in the design of educational systems that make more efficient use of resources, times, modes and academic spaces (ANUIES, 2000). A change was also observed in the age of the population, which observed a considerable growth in demand for higher education for the traditional applicant population (group of 18 to 24 years of age) until 2013 (Hernández, 2005). Additionally there is a population of older applicants who are generally working, who demands higher or continuing education to meet the dynamic requirements of society or to improve their employment status.

Without any doubt, diversification of the programs and extinction of coverage under different modalities in universities is a challenge and a reality, and that public policies need to be strengthened.

Distance education, specifically online or virtual education, has been viewed as a solution to this growing demand for higher education. Silvio (1998) mentions that it can be a hope or promise if properly conducted and with a clear vision of the possibilities and limitations. The possibilities mentioned the reduction of operating costs of the programs, greater control of learning by the student, greater interactivity between students and between students and teachers, an individualized learning pace for each student, and the teacher's change in role from transmitter to facilitator. The author mentions the limitations that have disparities in the degree of incorporation of the Internet, appropriation of information and telematics, inequalities between countries, between regions and localities within a country, between social groups and classes within the same country and between organizations of different institutional sectors of society; resistance to change by social groups who fear innovation for fear of labor and social displacement and by members of different generations; still relatively high technology and access to telematics connectivity in developing countries cost; low purchasing power of large segments of the population to access new technologies, especially in developing countries; complexity of learning technology by many sectors of the population.

Online education is seen as the solution to absorb the increasing demand for higher education, it should be considered that it may not be in the short term as there has to be met certain conditions for this to happen. Silvio (1998) mentions that a very important factor and that has a decisive influence is the emergence of a new generation of young people growing into a world steeped in technology and electronic media, showing a knack for learning and versatility of this technology, they will demand that interactivity, dynamism, a new role for the teacher, and the greater relevance of the content of education in relation to their real world.

Distance education has particular characteristics that need to be considered. Garrison and Shale (1987) mention three of these: a) the majority of educational communication between teacher and student is not contiguous, b) there is bidirectional communication between teacher and students in order to facilitate and support the educational process and, c) distance education uses technology to mediate the necessary two-way communication.

Nipper (1989), describes current distance education as the third generation, which is also called "virtual education" or "online education",

whose characteristics are: a) the use of more sophisticated technologies and direct interaction between teacher and students of the course; b) through a computer connected to a data network, e-mail, discussion groups and other tools offered by these networks, with the teacher personally interacting with students to resolve concerns and guide the learning process.

Meanwhile Holmberg (2003) mentions that: a) distance education provides almost permanent separation of teacher and learner throughout the learning process, b) there is an influence of an educational organization both in the planning and preparation of learning materials and the provision of support services to students, c) the use of technical media (text, audio, video or computer) to unite the teacher and learner and carry out course content, d) the provision of two-way communication so that the student will benefit from the dialogue or even start it and, e) the quasi-permanent absence of the learning group so that people are taught individually, although there's the possibility of occasional meetings for teaching purposes or socialization.

By characteristics that are presented, distance education remains an option to create flexible plans and educational programs tailored to the needs of the professional training of the new millennium, but it is up to universities to study and fully understand the system and its implications for an appropriate response to the increasingly diversified and geographically dispersed social sectors.

In this process of the construction and opening of education we face many challenges and problems that have to do with the (real-virtual) spaces, traditional knowledge against innovative proposals, resistance, lack of educational training, technological infrastructure, the dilemma between form and inform, the appropriate profile of the students, the articulation between theory and practice, and finally you cannot fail to mention the myths that accompany distance education on their path towards the future. In this context, the purpose of the study was to explore the preferences, demands and expectations that students have about distance education programs.

## Methodology:

The research involved 159 students aged between 17 and 19 years old of both sexes (59 men and 100 women) of the morning shift of the sixth semester of the College of Bachelors of Chiapas (COBACH),

a Public Institution of Higher Secondary Education in Tuxtla Gutierrez Chiapas, Mexico. The information was obtained through a questionnaire divided into four sections: 1) demographic profile, to know the family context and the prevailing economic situation of the students in order to continue studying; 2) scale of importance, where students expressed the importance of having a plan and program of study with certain characteristics; 3) use of information technology and resources; and 4) training and employment expectations.

A student population was considered with access to new information technologies and communication either personally or provided by the school, as it was believed that they had more information regarding online education. The questionnaires were applied in the classrooms of the institution, and student participation was voluntary and anonymous.

Data were analyzed using the statistical package SPSS, obtaining descriptive statistics as frequencies and contingency tables. The results are described in the following sections.

## Results and discussion

### Socio-economic characteristics of students

The students surveyed are mostly single and devoted exclusively to study, only 12.6% mentioned that he was working at the time of the application and 1.9% had a marital status as married or in free union. There was still an economic dependence on parents. 93% lived with both parents or one of them and 95.5% dependent on the parent or both to study.

The schooling of both parents is high, compared to the state average of 6.07 years, 6.55 in men and 5.62 in women. In the case of the father, 51.6% had a bachelor's degree or even higher, 22.9% completed high school, technical postsecondary degree or have incomplete undergraduate studies, 17.8% have completed some level of education but did not study high school and 4.5 % did not have any studies. In the case of mothers of these youth, 40.5% have a bachelor's degree or higher, 30.4% completed high school or technical postsecondary degree or have incomplete undergraduate studies, 26.6% have completed some level of studies but not high school and 1.3% have no education.

Civil engineering, the education sector, public accounting, commerce, and federal employees are some of the (main) occupations of parents. Mothers are employed as secretaries, teachers, merchants, nurses, educators or engage in household activities, among others. Their economic situation is stable, as 85.6% students consider that the monthly income of the people of whom they are economically dependent are good enough for them to continue studying. This is strengthened by the number of dependents of the household, which ranges from mainly two (35.8%) and three (34.6%) people.

Additionally it should be mentioned that 90.1% of students live in an urban population and only 1.9% speak an indigenous language. Socioeconomic conditions described by students have easy access, either personally or through the school, to current technological resources such as the Internet, cell phones, digital cameras, copiers, scanners, among others.

## Characteristics that are considered important to choose a plan and program of study

In choosing a plan or educational program, students highlighted in order of importance the features that are shown in Table 1's

It is important to mention that characteristics such as self-study and self-learning, support of advisors electronically, adjustment to the students schedule, texts and materials available on virtual platforms and the elimination of physical and geographical barriers were also considered very important, but less than those described in the first block.

Characterized by high percentage activities that students consider unimportant are: the reduction of mandatory in person classes (17.0%), classes via satellite (18.9%) and that they can study without attending classes (22.0 %), allowing them to see the projection of the student in a classroom if he continued his studies.

	MMI	MI	I	PI	NI	NR
That combines theory and practice	60.4	27.7	7.5	2.5	0.6	1.3
That the professor has a role as the facilitator of learning and not only as a lecturer	59.1	25.2	13.8	0.0	1.3	0.6
That the teaching and learning course contents are constantly updated	54.1	28.3	14.5	1.9	0.6	0.6
That offers personalized help for students	52.2	27.7	15.7	1.9	1.3	1.2
That proposes new educational situations where the students are trained to use new technologies	51.6	30.2	15.1	1.9	0.6	0.6
That are economically accessible ( no travel expenses, no rent, no copies, etc)	51.6	23.9	13.8	6.9	3.1	0.6
That facilitates the incorporation of new technologies	51.6	23.3	18.2	4.4	0.6	1.9
That responds to actual needs of the community	49.7	24.5	20.1	3.8	0.6	1.3
That the material for the academic units can be consulted at any time	48.4	30.2	17.6	1.9	1.3	0.6
That the student has an active role in his or her learning	47.2	38.4	11.9	0.6	1.3	0.6
That the professor and the student are present in the same physical space	45.9	27.7	16.4	8.2	0.6	1.3
That deals with current real problems	45.3	32.7	14.5	6.3	0.6	0.6
That permits each student to plan and organize their time	45.3	25.8	23.9	3.8	0.6	0.6

*Table 1. important for the student to choose a plan and educational program (in percent)  
Features. MMI. Much Very Important, MI. Very Important,  
Important I, PI. Not Important, NI. Not Important, NR. Not answered  
Source: Compiled using data from the survey.*

## Use of computer resources

As already mentioned, the socioeconomic conditions of the surveyed students gave them access to diverse technology and information resources that they generally used. The most frequently used computing resources are presented in Table 2.

Other resources also frequently used in order of importance are: DVD movies, burn to DVD or CD, format paragraphs, send e-mail attachments and use the processor for writing texts. These are less important than those described in Table 2. It is worth mentioning that 56.0% said it was "uncommon" to get help or pay to get help with the tools described.

Other actions noted in the questionnaire included scanning documents, make presentations slides or compressing files.

	MMF	MF	RF	PF	NF	NR
Search for information for homework/online work	69.2	22.0	5.7	2.5	0.0	0.6
Use Messenger as a means of communication	66.0	24.5	4.4	3.8	0.6	0.6
Create folders to store information	61.0	24.5	3.8	7.5	1.9	1.3
Download music from the internet	53.5	14.5	10.7	13.2	7.5	0.6
Cut and paste images in a wordprocessing program	52.8	21.4	15.1	5.0	3.8	1.9
Download photos from a digital camera	49.7	20.1	12.6	8.2	8.8	0.6
Use email	47.8	26.4	15.7	6.9	0.6	0.6
Use Spell check and Grammar check	44.7	18.2	17.6	10.7	6.9	1.9

*Table 2 Computer resources used by students (in percentages).  
MMI. Much Very common, MF. Very common, RF. Frequent Regularly,  
PF. Infrequent, NF. Nothing Frequent, NR. Not answered*

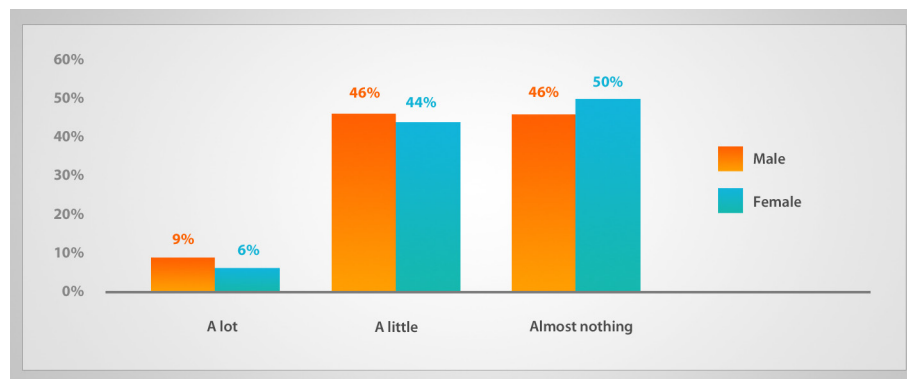
*Source: Compiled using data from the survey*

## Profession and employment expectations

The data obtained in relation to the profession and employment expectations of students show that 98.7% want to continue their studies immediately after completing high school. Public university stands as the best option to continue studying for 79.9% of respondents either due to affordability or they have no other option.

When questioning whether they knew what a distance undergraduate degree implied, 48.4% said they knew almost nothing and 44.5% said they knew little (Figure 1). Overall, only 7.1% reported having sufficient knowledge of distance education, describing how this system was related to the use of virtual media, internet and digital cameras.

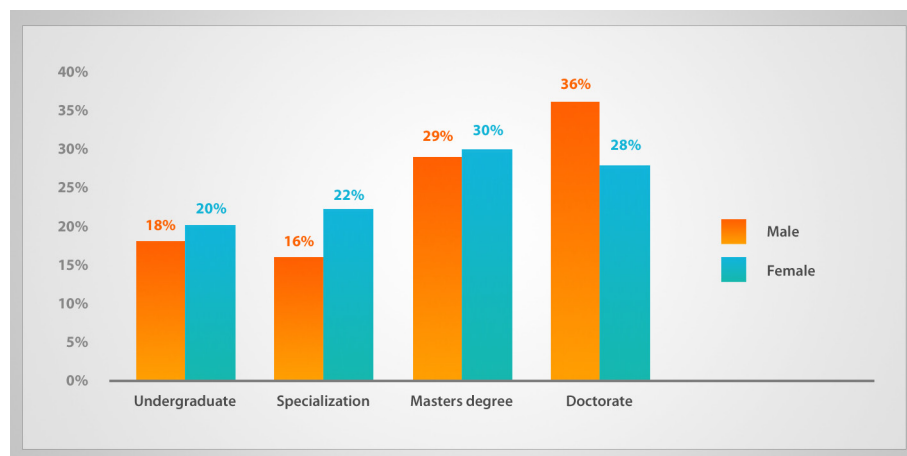




Graph 1: Distribution by sex, the knowledge they have on a undergraduate distance. Source: Compiled using data from the survey

The little knowledge that students have about distance education also impacts on expectations of further study under this system. Of the total respondents, 78.2% did not consider it an option in order to continue his university studies. Among the reasons given for not choosing it are mainly: it is not interesting, they consider that it is not the same, they will learn less and they will be left with doubts.

Considering their current economic conditions and that of their families, students believe they are likely to achieve higher levels of study, 31.0% a doctoral degree, 29.0%, a master's degree 20.0% a specialization and 19.4% an undergraduate degree. It is noteworthy that there are differences by gender in the study expectations, especially at the doctoral level (see Graph 2).



Graph 2: Distribution by sex, degree of studies that consider reaching  
Source: Compiled using data from the survey

Within the expectations that students noted are maintaining their current socioeconomic status devoted exclusively to continue their studies. However, prospects for a future employment are high for 77.6% of these young people. 30.1% would like to develop professionally in business, 27.6% in private companies and 18.6% in the public sector, among others.

## Conclusions

These results indicate that at least for the study population, distance learning programs are not an option that they have considered for continuing professional training, and consider the traditional in person degrees the best option.

If it is true that new technologies have invaded and transformed daily practices, knowledge, and how to interact and communicate, in formal education they have not been able to incorporate efficiently as they are used more as a hobby than as a tool that will strengthen teaching and learning. In this sense, it is necessary to implement educational policies that progressively incorporate the use of new technologies in education and not jumping to generate aversion to them, wasting with it the advantages that are presented.

It is essential to make a correct diffusion of distance learning systems to raise awareness of the advantages and disadvantages of the traditional models and that they continue to be an option for access to higher education, particularly for people who cannot physically attend, for economic, family, health, territorial, and gender reasons, among others. The lack of knowledge about distance education limits students that select this option of professional training that offers the most of the characteristics that an education program demands.

Based on the previous discussion, there is a need for further research in different contexts considering working conditions, age, geographical location, among others, to know the opinion of people who have not had the opportunity and ability to access university or who have left school for various reasons.

## References

1. **ANUIES** (2000), Higher education in the twenty-first century. Strategic lines of development, proposal ANUIES, Mexico, DF National Association of Universities and Institutions of Higher Education (ANUIES) <<http://www.anuies.mx/index1024.html>> [Accessed January 2011]
2. **Garrison**, David R. and **Shale**, Douglas G. (1987), "Mapping the boundaries of distance education: Problems in defining the field", *The American Journal of Distance Education* Vol 1, No. 1, pp. 7-13.
3. **Hernández Pérez**, Victor. (2005). Perspective of higher education in Mexico for the century XXI. Centre for Social Studies and Public Opinion (CESOP), Chamber of Deputies. <<http://www.diputados.gob.mx/cesop/doctos/PERSPECTIVA%20DE%20LA%20EDUCACION%20SUPERIOR%20EN%20MEXICO%20PARA%20EL%20SIGLO.pdf>> [Accessed: February 2011]
4. **Holmberg**, B. (2003), A theory of distance education based on empathy, in Michael G. Moore and William G. Anderson (eds.), *Handbook of distance education*, New Jersey, Lawrence Erlbaum Associates, Inc., Publishers.
5. **Martínez Rizo**, Felipe (2000), Nine challenges for higher education, functions, actors and structures, Mexico, National Association of Universities and Institutions of Higher Education (ANUIES).
6. **Nipper**, S. (1989). Third generation distance learning and computer conferencing. In R. D. Mason and R. A. Kaye (Eds.). *Mindweave: communication, computers and distance education*. Oxford, Pergamon Press.
7. **Silvio**, Joseph (1998). "Virtualization of higher education: scope, opportunities and limitations." In *Higher Education and Society*, vol. 9 No. 1, pp.. 27-50.