Seguimiento de egresados de la Carrera de Ingeniería en Computación

Computer Engineering Graduates follow-up

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Resumen

Los estudios de seguimiento de egresados buscan dos objetivos muy claros: conocer las características del mercado de trabajo en el que se insertan los estudiantes, e identificar las fortalezas y las debilidades de la formación universitaria. Los resultados de la investigación que aquí se presentan fueron obtenidos de las fuentes principales: los alumnos, mediante entrevistas abiertas que se les aplicó a la totalidad de los egresados, salvo a quienes no fue posible localizar o que, por alguna razón, se negaron a dar información. Los entrevistados representan a la gran mayoría y ofrecieron información de gran importancia para que las instituciones de educación superior cambien el rumbo en las actividades en las que no han sido del todo eficientes. Los estudiantes también se ven beneficiados porque obtienen datos de primera mano sobre los espacios en los que se quieren emplear.

Palabras clave: empleo profesional, formación universitaria, origen social.

Abstract

Follow-up of graduates studies look for two very clear objectives: knowing the characteristics of the labour market in which students are inserted, and identify the strengths and weaknesses of university education. The results of the research presented here were obtained from the main sources: the students, through open interviews that was applied to all of the graduates, except that it was not possible to locate or who, for some reason, refused to give information. The interviewees represent the vast majority and offered information of great importance for institutions of higher education to change the course of activities which have not been entirely efficient. Students also receive a benefit since they get data at first hand about the spaces that they expect to find a job.

Key words: professional employment, University education, social origin.

Introduction

The Bachelor in Computer Engineer of Los Altos University Centre is more than 10 years old. It was not the first to be offered because the origin of the unit is of the year 1993, however, the University of Guadalajara, the institution to which it belongs, was founded in the distant 1792 when Spain administered politically to the Nueva Galicia, whose capital was Guadalajara. The beginning of the University was characterized initially by its educational offering to meet the needs of the most sought after careers and that do not represent large amounts of investment in laboratories, facilities, or special equipment; the Computer Engineering was not initials because if it required sophisticated tools. Once consolidated the demand student and to the requirements of the labour market in the region, was set up this new University option. This and other races of the University need firsthand information to improve its performance, as the follow-up studies of graduates.

The presentation of the results consists of four parts in addition to the introduction; the first is to describe the characteristics of the students who were interviewed; in the second refers to the location of graduates on the market work; the third mention is made of one of the most favoured theories in research by such exposure: the known as the cultural capital; and at the end are the conclusions.

Characteristics of students

The results of this study correspond to the generation of students who enrolled in 2008 and finished his studies in 2012. The corresponding information is not contemplated who graduated in 2012, but whose incorporation was prior to 2008; that is, this is a generation of so-called "uncontaminated". Another outstanding feature is that it was based on a census and not a sample. He looked for all the graduates, who were 37, of which 21 agreed to be interviewed (57% of total). Traditionally tracer studies of graduates are based on quantitative research that involve the closed questions already established and boxing responses, in this case it is a qualitative job where you inquire openly about three topics that are essential in searches this genre, namely the opinion held regarding university training received, job characteristics or difficulties to find it, and the social background of students to confront the educational theories that concern the duo university education and market labor. The interview includes a number of closed questions, but the most important are open. Earlier this year 2015, the amounts were determined to interview graduates of all disciplines offered by the University Center of Los Altos and it was determined that the graduation rate for students in Computer Engineering is 54%, a proportion that You may increase because there are always students who have their receptional examination after 3 years after graduate, as this is the case. For its part, the terminal efficiency rate may seem high, 72%, and is located between the mean scores of the university center in which there are races like the Administration, which reaches 90% as shown in Table I. number

Table number I

Terminal efficiency of the academic offerings of the University Center of Los Altos
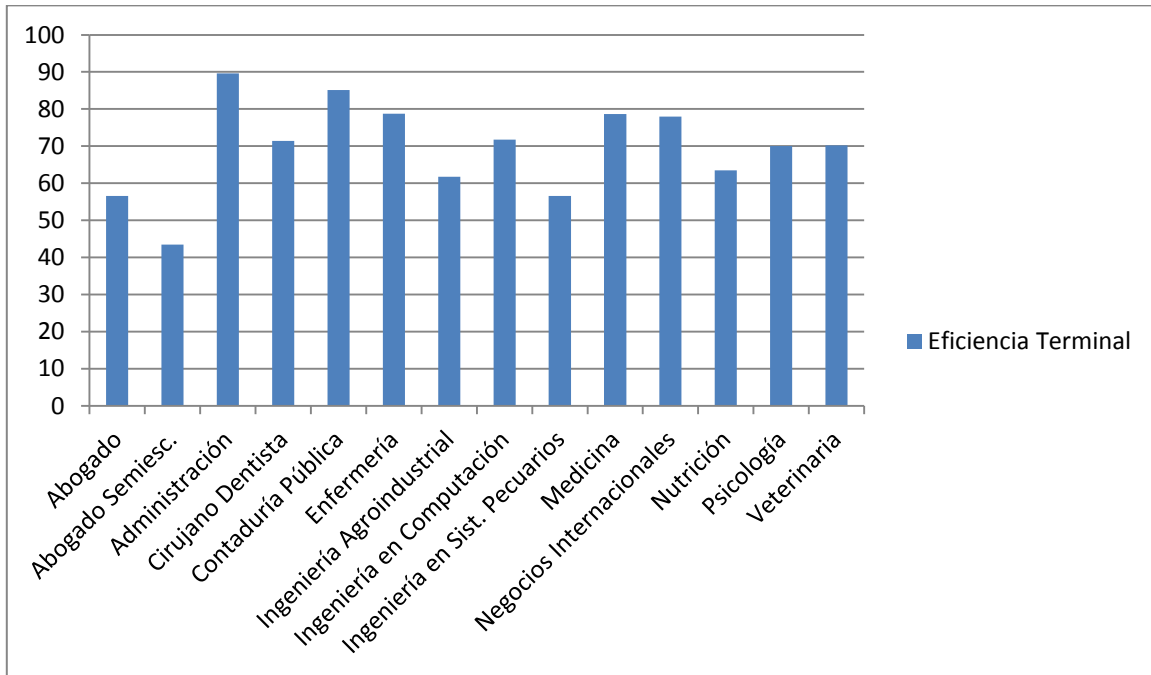
The average age of graduates is 26 years, despite having completed his studies three years (Table II) ago. It is a young group where celibacy remains widespread feature, as only 14% are married. Despite his young age, his experience in the workplace is important.

Table number II

Age of graduates
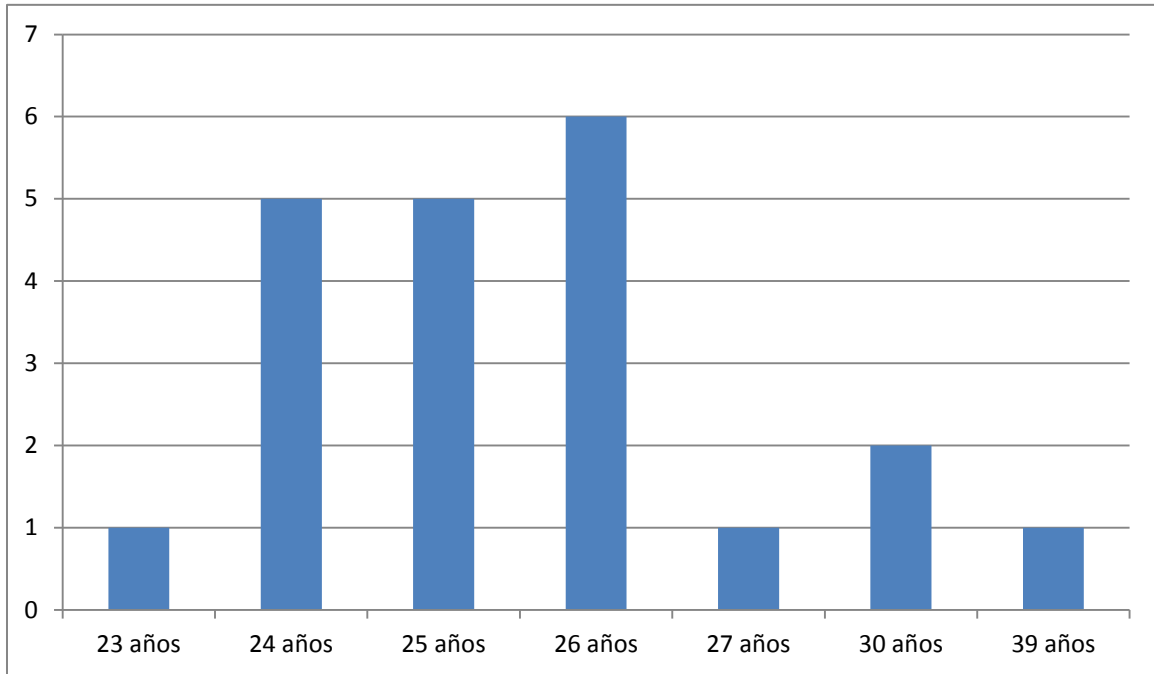
The main reasons we chose to enter the race Computer Engineering are varied and absent explanations that might have come from a genuine vocational guidance. So, because he likes the technology, by the attraction of communications, simply Tepatitlán not leave his hometown, or honestly to not know the reasons, are the main reasons. It is noteworthy that a considerably high proportion: 23% had opted for applying to distant races of computing, such as Psychology, Agribusiness, Accounting and Nutrition (only one case had opted for a related field: Computers).

Table number III

Requested reasons for entering the race
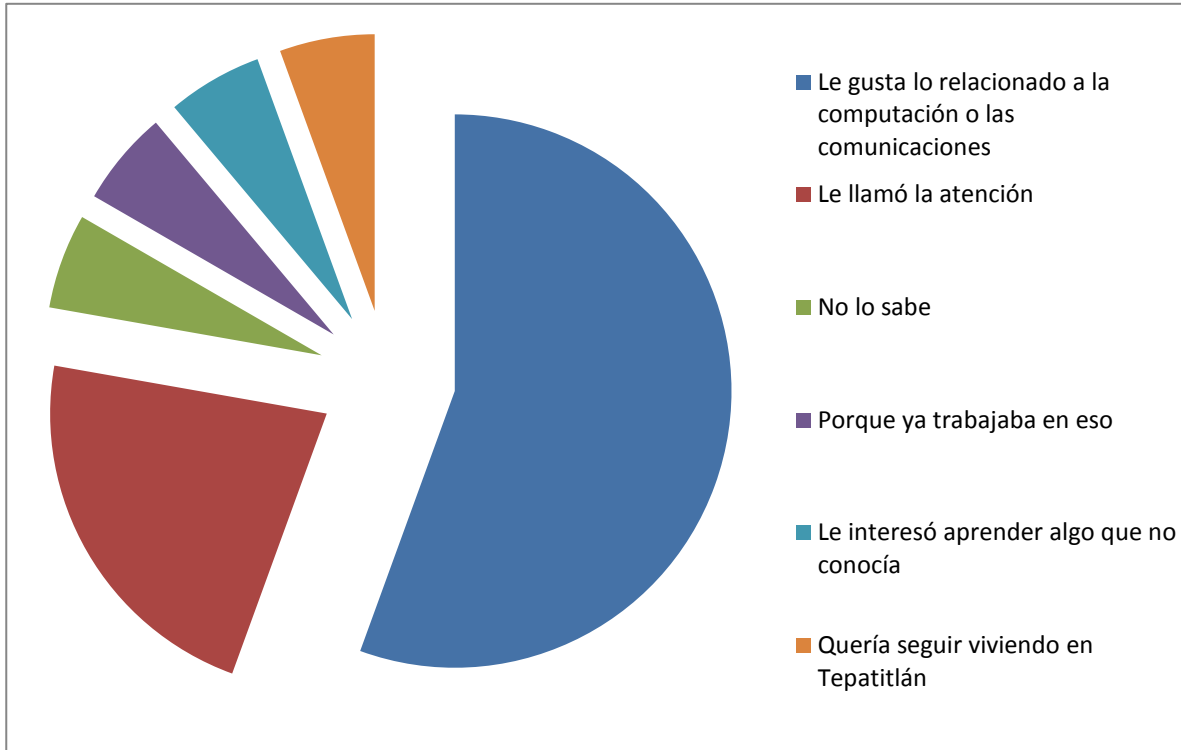
As mentioned before, the social background of the graduates is of great importance for this study, so one of the factors that confirm is that the vast majority had to work to support their studies. In some cases they relied on scholarships offered by the federal government, food support, or directly from the revenue generated by them. Table IV can watch number 71% are financially supported himself, 19% with their income combined with the support of their parents, and 10% only with financial resources provided by their parents. To this must be added that 65% plan to continue their studies at a graduate and a third of them actually already is enrolled, only 35% have between their expectations to continue their training. The theory of the devaluation of the certificates stated that when there is a large number of professionals, the official document loses value, so it is necessary to pursue a graduate to get a higher education (Juárez, Eugenio Fernández & Pérez, 2009, p. 6).

Table number IV

Source of financial support for students during the course of their university education

- Por sí mismos 71%
- Por sí mismos y sus padres 19%
- Por medio de sus padres 10%
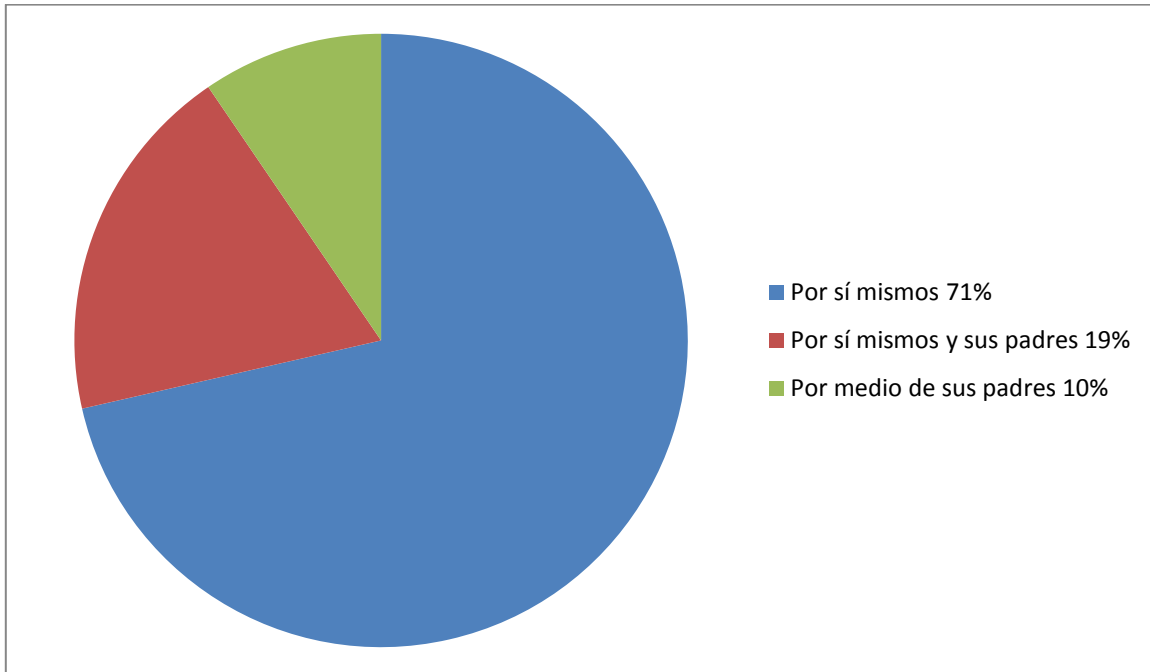
Occupation and educational level of parents were compared with the data of theories. Then we will present the results of the grades obtained by the parents, but separated into two groups. On the one hand students who obtained higher academic success are measured by their qualifications, and on the other are those who were evaluated with lower rating. 6 students who were best evaluated during the course of the whole race are children mostly professionals, as shown in Table V, which contrasts with the grade of parents of students with lower school evaluation (Table VI) . Importantly, another similar to this job, one where the results of monitoring graduates of the career of Public Accountant of the same university are set, no difference was seen between the grade of the parents of the graduates, and with either high or low evaluations. We dare to hypothesize that in the case of graduates of the career of Computing, must have been overwhelming that the differences in cultural capital favored the children of professionals, who certainly had the financial capacity to provide with computers or digital equipment to young people from an early age, meaning an advantage over students who came from a more adverse social environment.

Table V

Grade of parents of children with the highest academic assessment
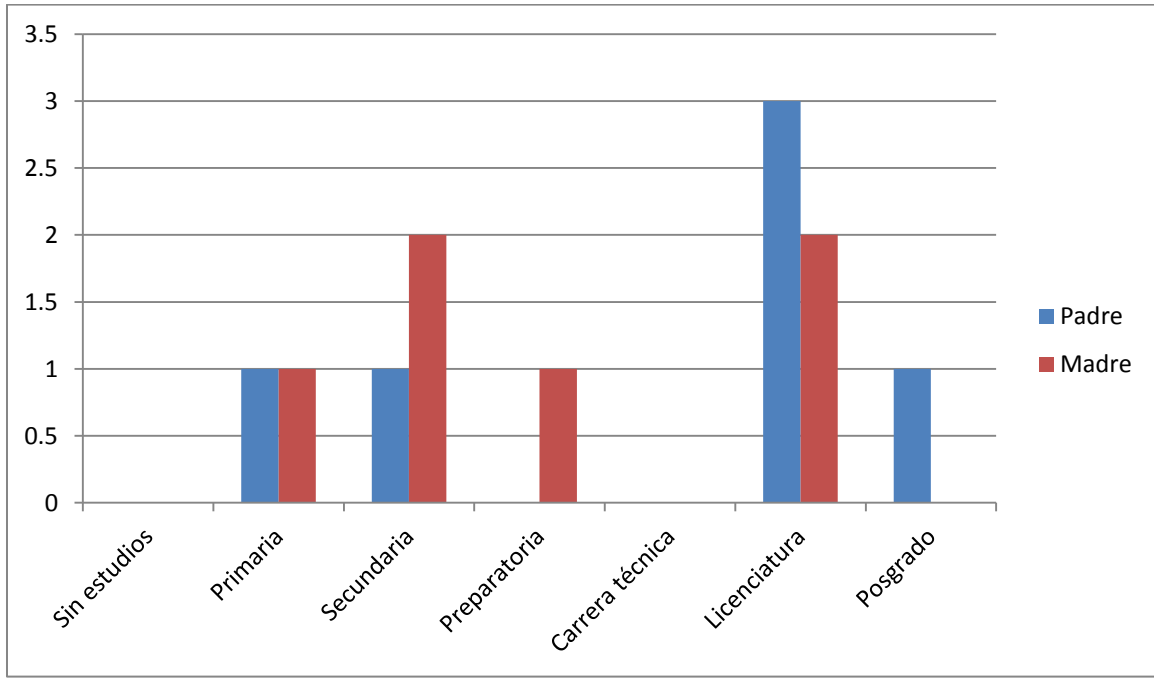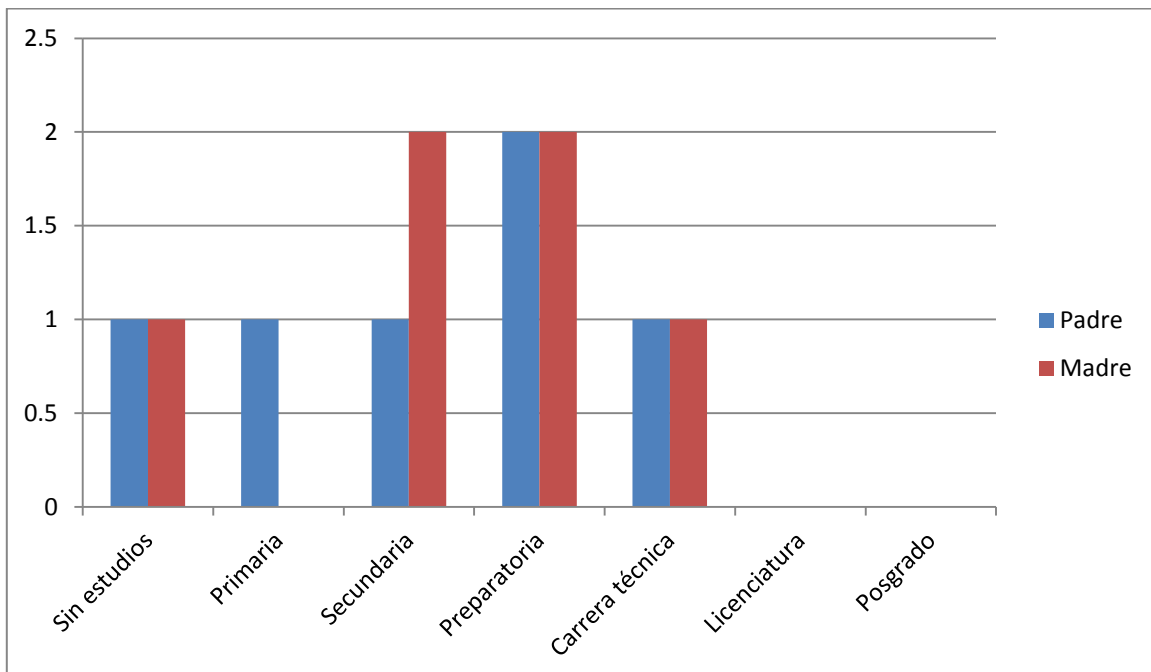

Table VI

Grade of parents of children with low academic assessment

By observing what the work spaces where parents are unfold, is adamant the difference: the children of professionals are located in more conducive to intellectual development areas. The credentialist theory states that the school, in this case the university, is an irreplaceable means of social mobility (Juárez, Eugenio Fernández & Pérez, 2009, p. 7). In the tables below you can see what the work spaces of parents whose children reached high academic evaluation are:

Table VII

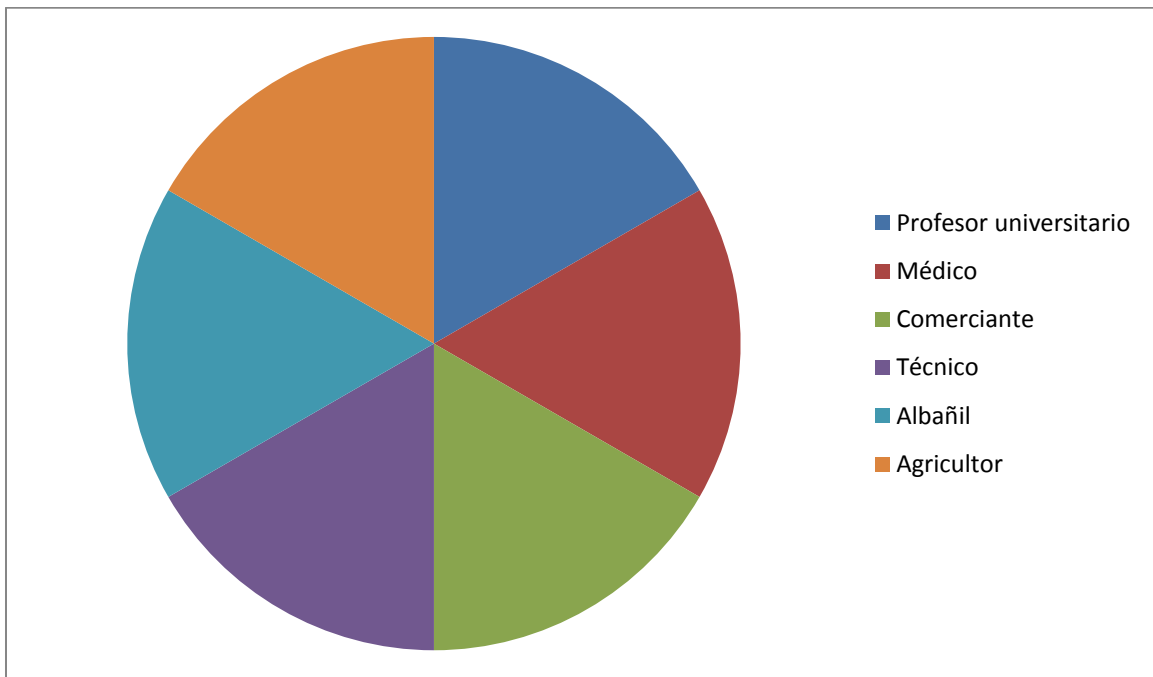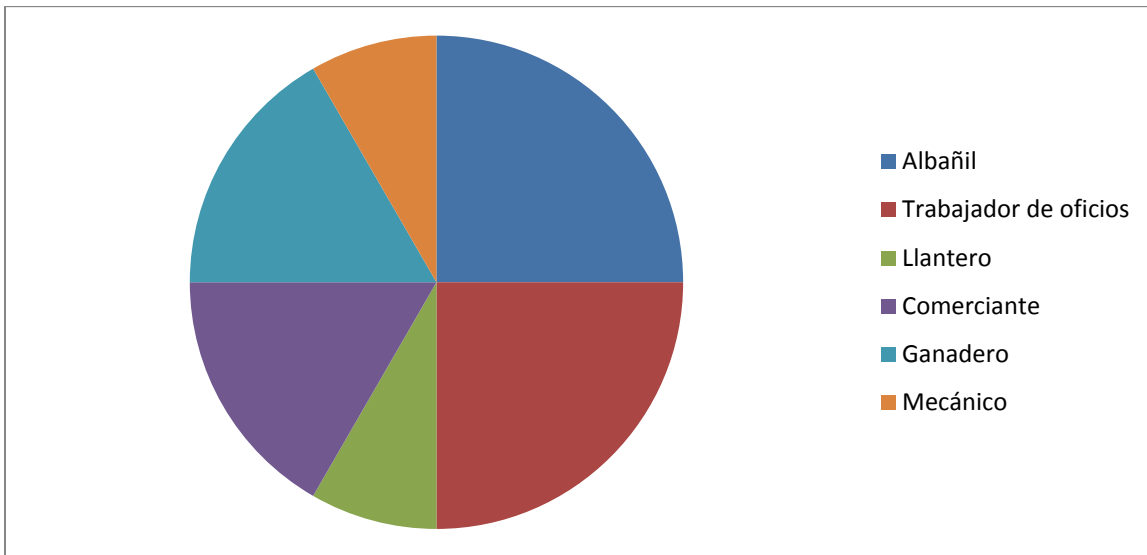Workplaces of parents of children with high academic assessment

Table VIII

Workplaces of parents of children with low academic assessment

In general, most students evaluate their education with 8th grade. Considered as the fundamental subjects Networks, Software Engineering, Programming Languages, Organizational Systems, Electromagnetics and Graphic Design. Of the matters that some think should be eliminated, they are Administration and differential equations, the latter because there was no practical use. The view was expressed that the subject of Terminal Project was eliminated because he considered an obstacle to complete their training more of a challenge to produce their final work.

The lack of practice was a deficiency in the training because there were laboratories were poorly planned and some teachers assigned them different subjects but were not experts in all and not made the most knowledge. Especially lacking a laboratory networks and considered wise to periodically evaluate the teachers because knowledge in the area of computing are continually renewed, faster than in other areas of knowledge.

Some argue that for a consolidated training definitely has to be self-taught. However, in contrast to other opinions that say for example that the teaching of English was very popular and was very useful, especially since computer languages require.

Other isolated opinions, even necessary to expose because they can lead the way for change on the part of school authorities, report that in addition to teaching the brand Mysql Database, SQLServer software, the Oracle and NoSQL is acquired . And in this same vein, consider very important for students to acquire a specific certification for their training, for example, in a database because they claim that in the labor market prefer someone with such specific knowledge that a student to graduate.

The location of the graduates at work

Similar to the above manner, separated into two groups for graduates and exposure to academic assessment obtained during the course of his career. The team of six most successful work has the following characteristics. The first one got a job one year after having graduated from the race by a family recommendation; have you received their university education was a very important they have been given the job factor; He is responsible for the support and networks in a large company.

It has risen in relation to the post that had proposed him at first; He considers that it lacked a bit of experience in the beginning, which has discussed with his colleagues, who agree with him that made them need to practice before facing the labor market. The second got his first work experience since the age of fifteen years has had a very large amount of temporary jobs and currently serves on a medium sized company in the sales area; states that have had a university degree was instrumental in agreeing employment.

The third of the members went to work for a year before leaving the race because he could promote their social service there; He has had two jobs and the last was promoted, he believes it was very easy to enter the labor market, which greatly influenced his profession for employment and now is responsible for maintaining the structures in a large company. The fourth started working when he was 20 years old, has had three jobs and amounted in all, I got through family recommendations; states that there is much competition in your workplace, your title was determined to work because she works in an educational institution which is indispensable requirement to have a university degree. The institution where he works is large and besides teaching, develops projects for students and are trained constantly.

The fifth entered the labor market a year after graduation, she went directly to the company that had requested professional staff through a newspaper ad. She just had a job, it is programmer in a big company, it has not had difficulty coping with their profession and their university degree was key to enter the labor office.

The last group got his first job at the age of 16, he has agreed to a considerably large amount of work, a recommendation, others through advertisements in newspapers and has been fortunate to climb most of them. It has not been entitled and that has been an obstacle to obtaining a better job option. Considered to have the necessary knowledge, however, he has suffered setbacks due to lack of academic degree. Their job is to maintain computer programs and providing the service to the classroom for teaching; if there are faults, repairs.

The role of family recommendations for obtaining employment has been widely reflected in academic circles and the so-called radical theory is that the good relations of parents have great influence on the incorporation of children into the labor market despite their training university has not been optimal (Ávila Carreon, Galeana Figueroa & Aguilasocho Montoya, 2014, p. 64).

The remaining group, evaluated with the lowest scores, consists of 15 graduates and have the following characteristics: two thirds perform activities related to their training and only 34% work in jobs outside their university life. It should be noted that all graduates have a work space and that is an achievement; is not common to find groups of graduates have been used 100%. In a recent study of the same origin as this, it was found that 81.20% had obtained a work space (González Herrera, González & Bustamante Figueroa Curiel, 2013, p. 66). When considering all graduates, regardless of the ways in which they were evaluated generally successful in obtaining employment is observed, although in some cases correspond to the knowledge acquired in higher education.

Table IX

When they obtained employment and training agreement with
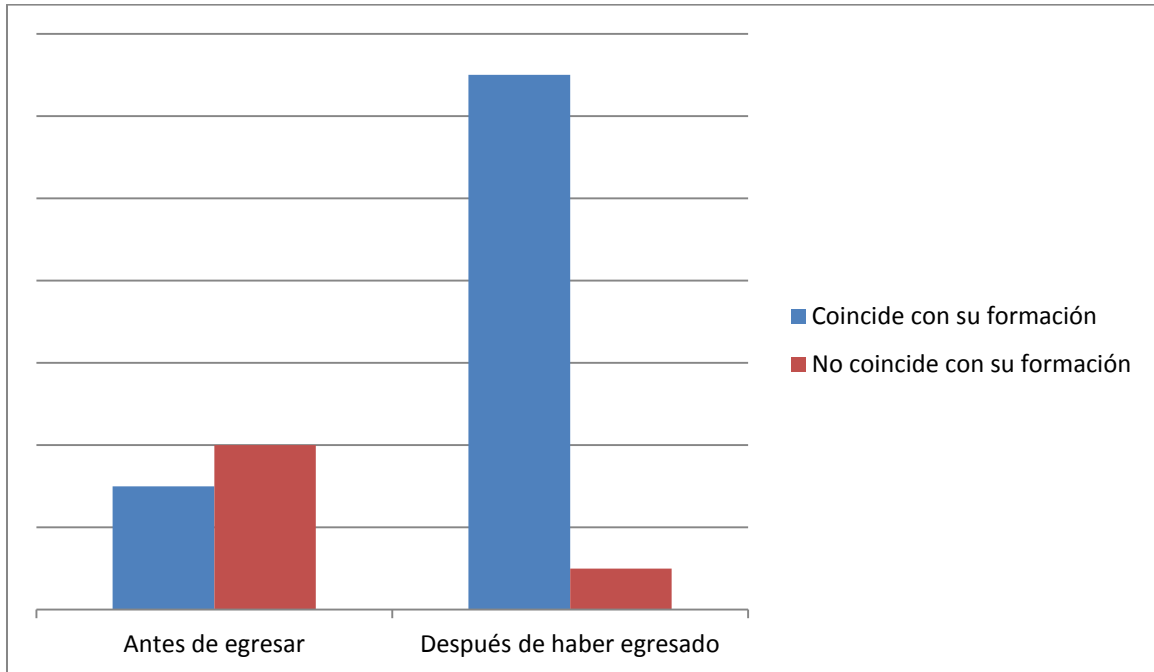
In short, the graduates were better evaluated and whose parents had the highest grade professional success achieved significantly higher compared with that of other members of his generation. According to the results of another study conducted graduate follow-up on the northern border state of Tamaulipas, only 39.2% of students in the career of Graphic Design work in their area of training (Garcia Barcenas, 2013, p. 7). This percentage is very low compared with that of graduates of Computer Engineering of the University Center of Los Altos.

The theory of cultural capital

The author Pierre Bourdieu from the sixties theorizes about family influence on students and their link to the labor market; He speaks of the influence of cultural capital to gain access to academic success, first, and then to work. It argues that people who come from a higher cultural environment obtain advantages in the acquisition of school knowledge. How

the cultural environment is measured? Through the knowledge that manifest themselves in two ways: in its physical form, represented by the books, encyclopedias, educational videos, newspapers and computer equipment, among key; and its non-physical form, ie, in the information transmitted daily in the family, consisting of music, dialogue, visits to historical centers, clubs, non-university language courses, computer and other such nature that make the difference between families whose work is related more with the workplace than with the survival.

Language is one of the main features that distinguish the families of high cultural capital of the low cultural capital. In the region of Los Altos de Jalisco, for its economic vocation, a very high proportion of its population is linked to the production of the field or urban services, where few have climbed in the social structure.

Here it is worth noting the great difference between what is known as financial capital and what is known as cultural capital, as it is key to understanding the theory of cultural capital. In general, social classes with greater purchasing power have greater access to higher education; however, there is no way relationship between those who hold economic power and cultural knowledge. The difference is that there is a social stratum where people have acquired qualitative knowledge (mainly from universities, not the working environment) that place them at high cultural spaces and not necessarily the same people who represent social classes high (Bourdieu, 2002). (Bourdieu, Passeron & Shattock, 1981).

Pierre Bourdieu argues that people have accumulated a lot of cultural baggage, enable younger members are acquiring it naturally, with simple and family relationships through imitation; also it says that although money can be inherited, does not provide knowledge. Note again that the role of the language used in everyday life is a factor that also identifies and differentiates the social strata. Radical theory points to this particular sense in saying that students can earn higher wages if they are children of professionals who accumulate more human capital (Ávila Carreon, Galeana Figueroa & Aguilasocho Montoya, 2014, p. 64).

In short, the group of six students who obtained the highest academic success through their ratings largely belong to families where parents reached the highest grades and whose

economic activity has more cultural capital than the rest of the parents of the group. Row theory states that high school favors the acquisition of better working posts and noticing the family influence (Mungarro Matus & Monge Urquijo, 2013, p. 3).

In no way try to disqualify people because of their social origin, for example, those who engage in production-related field offices or urban economic activities. These statements are a simple comparison with the mentioned theory. In any case, it should be noted that all graduates have a source of income mostly related with the knowledge acquired at university; his undergraduate degree enabled them to occupy a new place in the social ladder. Now they are in the position to provide more cultural capital to their children, a situation that they did not have.

Conclusions

Through the results of this follow-up study graduates, we can establish that the theory of cultural capital clarifies the relationship between the social background of students and their subsequent educational and occupational achievement. It was possible to determine that families have greater qualitative satisfactions represented by their cultural capital, enabled their children to have advantages over other students to assimilate knowledge more easily. By accessing home to more technological tools, they could acquire knowledge through practice early.

In general, a remarkable success in the incorporation of the graduates of the study group observed the labor market. Without much difficulty, they managed to position themselves in workplaces and social advancement. The proportion of students who joined the work is considerably high compared with the results of similar investigations. Moreover, the vast majority use the knowledge acquired in the classroom in their workplaces, another of the great achievements that this study could detect.

As for his university education, most graduates think that is acceptable and that the curriculum should not be changed, noting some only the content of some subjects should be modified. On the other hand, they consider that certification would be beneficial for them in the future, which have several options.

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