

IDENTIFICATION AND ANALYSIS OF STUDENT'S TALENTS AT THE SCHOOL OF PUBLIC ACCOUNTING AT THE BENEMERITA UNIVERSIDAD AUTONOMA DE PUEBLA

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ABSTRACT

This research identifies and analyzes the talents School of Public Accounting students at the Benemérita Universidad Autónoma de Puebla (BUAP). Specifically, we examine students studying the subject of innovation and entrepreneurial talent. The study is exploratory, descriptive and explanatory. The design of the research work is non-experimental. This is cross-section research. In order to carry out the data collection, 50 talent-recognition tests were applied. These tests consist of 180 items of a non-probabilistic intentional type sample. The study also presents an impact analysis of the subject of Innovation and Entrepreneurial Talent as a strategic tool to demonstrate creativity and innovation. Finally, we note that developing the competence of Learning to Undertake is a challenge for teachers, such that entrepreneurship becomes a pillar in modern education.

JEL: L26, M13, M53

KEY WORDS: Strategy, Innovation, Talents, Foresight and Analysis

INTRODUCTION

As part of the restructuring and innovation of educational processes, we examine the essential task of identifying and strengthening talent in our students. This research seeks to identify and analyze student talents at the School of Public Accounting (FCP) at the Benemérita Universidad Autónoma de Puebla (BUAP). Specifically, we examine students who are studying the subject of Innovation and Entrepreneurial Talent (ITE). In the 2015-2016 edition of the Global Competitiveness Index (IGC) of the World Economic Forum (WEF), Mexico advanced four positions to move from place 61 to 57. This was mainly due to improvements in the efficiency of financial markets, the sophistication of business and the impulse of innovation. The labor market continues to be scarcely flexible. Public and private institutions are weakened and deteriorated, which reflects the perception of high levels of corruption and the obstacle that this represents for the implementation of business. This index analyzes the 140 countries that comprise 98.3% of the Global Gross Domestic Product and the policies that these governments have deployed to promote the competitive development of their economies. Launching of the report comes at a crucial time for the global economy. On the one side are the high rates of unemployment, low growth of productivity and retracted economic growth. On the other side is the so-called Fourth Industrial Revolution and the new types of consumption that could produce a wave of innovation and growth (Mexican Institute of Competitiveness [IMCO], 2016).

The aforementioned report underscores the fact that Latin American and Caribbean regions must develop greater resilience against external economic crises and develop the infrastructure, skills and innovation (areas in which relatively negative results are recorded), which require strengthening.

Chile (position 35) remains the most competitive country in the region. Mexico (57) and Colombia (61) have risen four and five positions, respectively (WEF, 2015-2016). The salient findings of the WEF (2015-2016) are: (a) the need to promote more long-term structural reforms to boost productivity and release entrepreneurial talent. This affects the ability of the world economy to raise living standards, to resolve the persistence of high unemployment and generate adequate resilience against future economic recessions and (b) there is a close link between competitiveness and an economy's capacity to generate, attract, leverage and support talent. The countries in higher places on the index obtain better results in these aspects. But, in many countries there are very few who have access to high quality education and training, and labor markets have insufficient flexibility.

As a result of the global competitiveness report by the WEF (2015-2016), Mexico was in 57th place in the overall ranking. Mexico's position in higher education and training, public institutions and capacity for innovation is 87th, 115th and 66th respectively. Therefore, it is urgent to implement actions to achieve greater competitiveness at all levels. Hence, education must be an engine to increase the efficiency of collaborators and foster the development of new ideas. These efficiencies and ideas will become creative, useful products and services in the future which will be useful to compete economically at national and international levels. This research is organized in the following way: in the literary review section talent is conceptualized, a model is chosen that addresses the components of talent as a referent in this research and its relationship with education. Finally, an analysis of the talents identified in students who are studying the subject of Innovation of Entrepreneurial Talent is shown, and results and conclusions are presented.

LITERATURE REVIEW

Conceptualization of Talent

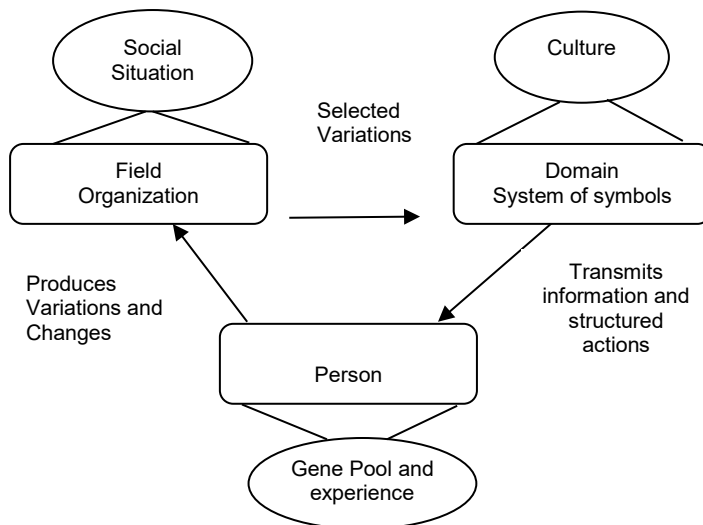
The word talent comes from the Latin "talentum" which was the name of an ancient Greek coin. In the figurative and familial sense, it means a natural aptitude for doing something, understanding or intelligence. At present, many words are used as synonyms for this word, among them: excellence, exceptional, gifted, rapid learning, superior, bright, talented, exceptional, most gifted, superiorly gifted (Lorenzo, 2006). On the other hand Sandra Berger (1997) noted that many authors use the term general talent or general intellectual skill to refer to individuals who have high scores on intelligence tests. These skills or talents are due to information provided by teachers and parents, in response to the high level of vocabulary, memory, knowledge of words and abstract reasoning. Specific talents or specific academic aptitude refers to those who stand out in performance or have high performance on the aptitude test in a specific area such as math or art. An example of specific talent is the talent or ability for leadership which is defined as the ability to direct individuals or groups toward a decision or common action. These subjects use a group of skills, negotiate in difficult situations, have a high level of self-confidence, responsibility, cooperation, tendency to dominate, and ability to adapt to new situations (Sisk, 1993).

Lorenzo (2006) states that there are various models that incorporate multiple complex ingredients. These multiple models are evidence of little consensus in the field. But the various models do coincide on the presence of a cognitive component they generally call "skills". Additionally, non-cognitive components are included, but in this case there is no unification of criteria as they are different denominations. Having examined the literature, we agreed to address this research based on the model proposed by Csikszentmihalyi, which considers the interaction of three components: the domain, the person and the field.

M. Cslkzentmlhalyi's Model

The Cslkzentmlhalyi theory poses that creativity cannot be studied at the individual level, without analyzing them in relation to their work in the social context in which their actions occur (Cslkzentmlhalyi, 1984), Therefore, the author holds that creativity results from the interaction of three main forces: the domain, the person and the field. In the words of Lorenzo (2006), the arrows point from the domain to the person, then to the field and then back to describe an upward spiral. This occurs from the epistemological point of view, because any new piece of information added to the domain becomes an "input" for the new generations.

Figure 1: M. Cslkzentmlhalyi's Model



In Figure 1 the author shows the interrelationship of three systems that contribute to the idea, action or creative object. The individual takes information that provides culture and transforms it. If the change is accepted by society, it will be included in the domain and will be transmitted to the new generations. The actions of the three systems are important for creativity. Source: Cslkzentmlhalyi, 1988.

Cslkzentmlhalyi's (1984) theory of creativity points to a stable cultural domain that preserves and transmits new ideas or manners that have been selected for new generations by the people who integrate the field. The term "domain" refers to a discipline or area of knowledge and culture in which innovation is possible. Cslkzentmlhalyi's model (1986) is a pattern of cultural opportunities for action that requires a set of sensory-motor and cognitive skills. In summary, it is a symbolic system much like music, mathematics and athletics. The domain is shaped by cultural system symbols and language, and the specific notation for that area. A person who does not have access to information on the domain will not be able to make creative contributions. According to the domain structure, it can be easier or more difficult for a person to innovate because there are two basic issues involved. First, the different manners in which the information can be chronicled and transmitted to other generations, and second, the way in which the structuring of the data of a domain can affect creativity. In other words, it is how past creativity, which had been accumulated in the domain, or accumulated knowledge is available to most people in order to facilitate creativity in the future.

The manner of transmission of information should motivate people to get involved in a particular domain. The development of intrinsic motivation is based on the inherent attraction of the manner in which the information is presented. If this is boring, the domain will not be interesting and will not provide creative contributions. The person is the source of changes in the domain for which the change must be considered creative. The individual produces the variation in information. The source of that variation may be in inherited or acquired cognitive flexibility and may occur in a tenacious motivation or a rare event in the life of the individual. With regard to the field, talented people are immune to the social pressures that the positions and social roles are not important in their case. However, the change in expectations makes them

different. States of progress within a field can result in some talented people who are not held as such and others who flourish that condition (Cslkzentmlhalyi, 1986). However, changes in expectation makes can cause some talented people not be maintained and others to prosper that condition (Cslkzentmlhalyi, 1986).

This theory is a reference to sensitize teachers and the responsibility that they assume as facilitators to develop student talents. Many texts talk about talent management. Some authors comment on the talent war and the emergence of the headhunter companies (Crainer and Des, 2000). Perez, Gonzalez and Diaz (2005), argue that conceptualization of talent or exceptional intellectual in the education field is possible. They recognize and refer to two concepts: First, the idea of talent based on models of cognitive components and those based on performance. "Talent" is translated into "Academic Talent", perceived as superior academic performance of a student group with regard to their academic peers (García-Cepero et al., 2012).

The other meaning is supported on the sociocultural models and those based on capabilities. This refers to the idea of "multiplicity of areas of intellectual exceptionality" in which an individual may be skilled and competent, proposing the integration of cognitive abilities in these other domains of performance. For example consider: skills for action in the social space (Lopéz 2007), emotional inter and intrapersonal interaction (Fernández and Extremera, 2005; Gardner, 2001;2005), body-kinesthetic, musical, spatial and naturalists skills (Gardner, 2001;2005; Hernández-Torrano, Ferrándiz, Ferrando, Prieto and Fernández, 2014).

Following this order of ideas, the School of Public Accounting at the BUAP, through the course of ITE has a goal to "develop in the student the proactive and self-esteem attitudes to overcome the obstacles presented to him, through the possibility of being a generator of employment through the implementation of innovative and productive projects" (FCP BUAP, 2013). The construction of the program contributes to the graduate profile as shown in Table 1.

Table 1: Graduate Profile

Unit	Knowledge	Skills	Attitudes and values
1. Developing entrepreneurial talents	Talent, innovation, entrepreneurship	To be aware of their own talents	Moderation, optimism, initiative
2. Innovation and teamwork	Forming teams, working on teams, projects to be undertaken	Tolerance for work, stress and performance under pressure	Assertiveness, innovation, productivity
3. Undertaking of an innovative project	Undertake, innovative project, business project	Ability to translate innovative ideas into a project	Entrepreneurship, human responsibility, at work, ecological.

Table 1 shows, that the ITE course's program seeks to develop talents and entrepreneurial attitudes and to permeate knowledge in professional practice. Source: FCP BUAP, 2013.

METHODOLOGY

To carry out this research, we compiled information from books, scientific articles and specialized journals. The study is exploratory, descriptive and explanatory. The design of the research is non-experimental. This research is cross-sectional. To carry out the collection of data, 50 tests for the identification of talent were applied. These tests consist of 180 items prepared by the Electoral Institute of the State of Puebla We developed an intentional non-probabilistic sample consisting of 50 students enrolled in the undergraduate program in Public Accounting at BUAP who studied the ITE course. The general average of the group is 9.5. The sample was collected on 5 July 2015 during the Summer Course that took place from May 18 to July 10, 2015, at the School of Public Accounting of BUAP. The sample represents 50 per cent of the students enrolled in the ITE course during that period. The applicable variables of the present investigation are described shown in Table 2.

Table 2: Operational Definition of Research Variables

Variables	Definition	Item	Unit of Measurement
Dependent	Identification of talents in students of the School of Public Accounting at BUAP	Number of predominant variables in the students.	Instrument designed on the basis of 180 items
Independent	Low creativity and innovation rates in students of the School of Public Accounting at BUAP	Analysis and identification of talents.	

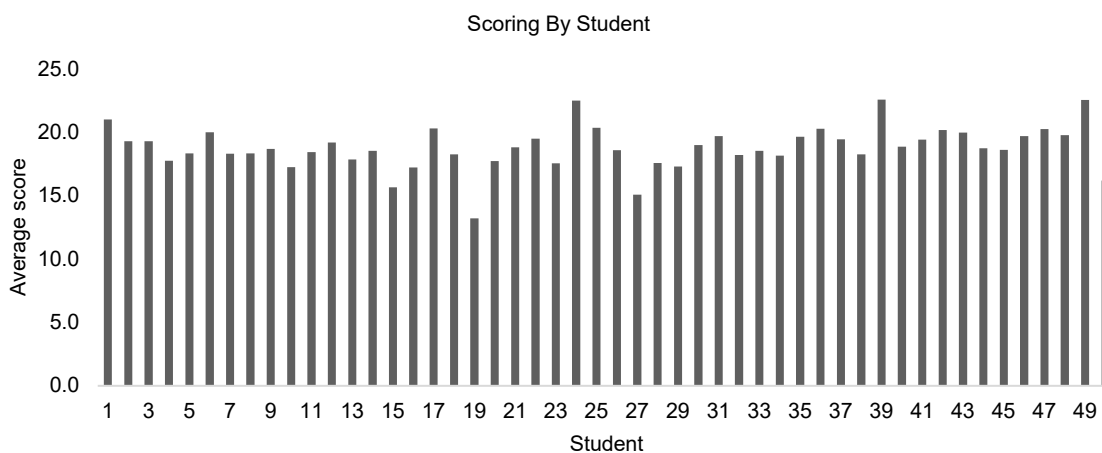
Talent, without a doubt, can be approached from different perspectives. In education it is becoming increasingly important how talent is conceptualized, understood, materialized and enhanced in the different areas of knowledge. We believe that identification of talent is important as a cross-cutting factor in the vocational training of student of public accounting at the Benemerita Universidad Autónoma de Puebla. We consider the impact the course on Innovation of Entrepreneurial Talent can have in the face of social academic and professional innovation, considering the talents identified in the students and the work carried out by the academy to support these talents. Source: Own study

RESULTS

According to Sternberg (1997), to succeed in a certain area of life, it is not necessary to have a high IQ, above a certain limit (there is still no agreement about what it is and probably differs from one job to another). At some point, other issues begin to be important. To have informal knowledge and to use it creatively are two of those issues. Therefore, the results of the identification of talent in students are described as follows.

As shown in Figure 2, no students reached 21 points average score. This figure is considered appropriate in the model for the development of entrepreneurial talent. Only 4 of 50 students have developed the skill to be an entrepreneur representing only 8 per cent of the total studied. This is a worrying situation. A report from the World Economic Forum that recommends countries such as Mexico stimulate productivity and release entrepreneurial talent. Doing so influences the capability of the economy. Entrepreneurship seeks to raise the standards of life, resolve the persistence of high unemployment and generate adequate resilience against future economic recessions (WEF, 2016).

Figure 2: Predominant Talents in Students of the ITE Course



The results show weak development of talents. A level of 21 indicates a developed rating. Source: Own study.

Figure 3 shows the lack talent development related to entrepreneurship. In this country, the development of entrepreneurship is incipient and its results have an impact on the social environment of the country. However, the University has tried to implement the development of entrepreneurial talent as an integral part of its programs to assist the development of the society where students live. According to a report by

the WEF "... there is a close link between competitiveness and the capacity of an economy to generate, attract, leverage and support talent (WEF, 2016). In general terms, countries that occupy the first places on the competitiveness index, have access to high quality education and training, including the development of entrepreneurial talent. They have labor markets with sufficient flexibility to recover from economic crisis, which as we can see is not the case of Mexico. Therefore, it is important to contribute to the development of talent within the classroom, even more so than obtaining skills.

Figure 3: Results Identified by Talent

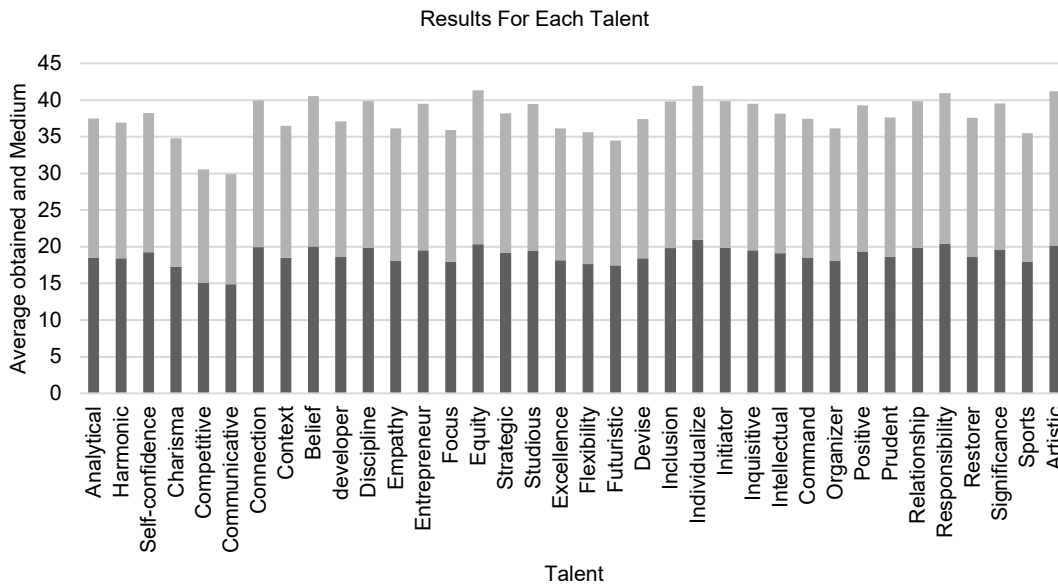


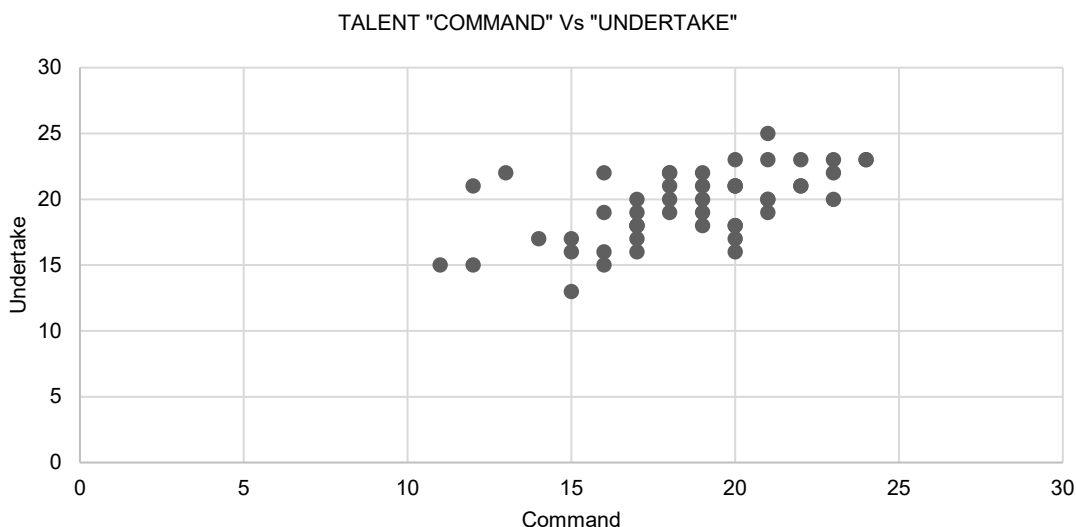
Figure 3 shows that only the equity, individualization and sports talents are within the average to be considered developed talents. However, they represent 8.1% of the talent that the test seeks to identify .Source: Own study.

The results in Figure 4 suggest that a relatively low development of talent. On average, significantly higher skills are not identified in relation to their peers. So the majority of the group is in the "developing phase", which requires more work by the students, more work by the academy, as well as more work by the educational institution itself. The Csikszentmihalyi model argues that creativity is the result of the interaction of three major forces: ownership, person and field. The relationship is relevant due to the fact that it shows more "leadership" and more "entrepreneurship". The general average qualification of the group is 9.5 points. In the general point average (GPA) of the Mexican system 10 points corresponds to excellent. In other words, it is an outstanding average. However, the results show that dominating talents "studious and disciplined" are to be developed. This result is due to the motivation of the group during the course. Motivation must be an essential feature in the class to arouse the interest of the group and become involved in the topic. However, it may also be inferred that an outstanding average does not imply that a group of students have developed entrepreneurial talents.

The Csikszentmihalyi model states that a student may or may not generate creative ideas, depending on the manner in which the information is transmitted. It occurs in such a way that would motivate the student to engage in proficiency of the topic. A person who does not have access to the information on the topic will not be able to make creative contributions. Therefore, a student of the undergraduate program in Public Accounting enrolled at BUAP, may finalize the program with an outstanding average, but at the same time might not be able to innovate in his area of work. This occurs despite possessing the knowledge and being proficient in the field.

The foregoing suggests that the work of teachers represents an even more important role going beyond transmitting technical information. It also consists of motivating students to discover, create and reinvent within their area of work. It emphasizes that a course seeking to develop innovative talent within the curricular program is not enough. It is necessary for the institution to design and implement a holistic strategy that will allow the student to have comprehensive training and promote the development of entrepreneurial, social and research skills. Figure 5 shows that talents with higher scores were "Individualize" and "Responsibility." This reflect circumstances of the cultural situation of the students themselves both in the social environment and in students who are normally considered excellent. This is likely due to the rigorous selection carried out by the institution during the admission process.

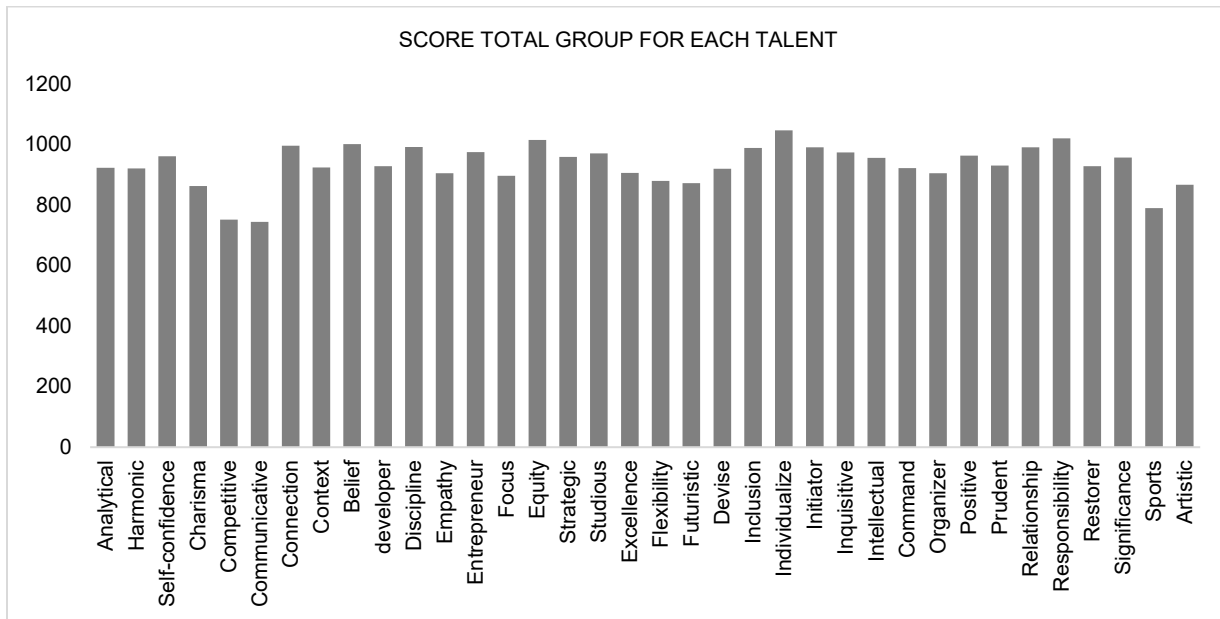
Figure 4: Leadership Talent vs. Entrepreneurial Talent



In Figure 4, the positive relationship between leadership and entrepreneurship, is perceived. In other words, the development of leadership positively affects entrepreneurship. Source: Own study.

We note that "Individualizing" has a high and slightly greater mean average. The way in which the students are locked in their own ideas is deeply rooted, and work that can provide synergy on a team is difficult to take advantage of for the benefit of the team. The characteristics detected can set the stage for construction of a model that can be applied in the FCP to optimize the student exploitation of the course. Talents with lower scores were "communicative" and "competitive." This implies that these talents must be worked on to obtain the necessary skills to be an entrepreneur. The results are presented in Figure 5. The results allow us to infer that an outstanding average does not mean the student has developed innovative features. It is necessary to work on a comprehensive education that will allow us to deepen the educational content and to promote the development of talent. Similarly, "positive" and "prudent" are talents necessary to cope successfully with failures that may occur. They must experience failure without fear of falling into depression due to the fact that the process of entrepreneurship has frustrations that must be overcome. This research is important even though talent has been studied along with ways of strengthening it. Its development can respond to different factors, for example from one place to another, from one context to another, even from one institution to another. From the statement above, it is clear that this research is only the first approach to the study of talent at the School of Public Accounting of the BUAP. Therefore, it opens a new line of research to suggest actions to strengthen educational programs, mainly in the ITE field. This research should generate a positive impact on the development of talent.

Figure 5: Scores Per Talent in the Group



The scores obtained are mostly of a personal nature. Source: Own study.

CONCLUSIONS

Innovation is an essential aspect of the subsistence of organizations. Educational institutions are not the exception. Innovation must be an engine for growth and development. Hence, the importance of beginning an action plan to identify and enhance talent in educational institutions. Recognizing student talent and undertaking the corresponding analyses, allows you to apply better tools in the teaching and learning process. The purpose of the students is to truly permeate talents in the four substantive areas of accounting. The purpose is to make entrepreneurship a natural process of student training in public accounting and to integrate it as an ongoing process. It is contemplated in the "Minerva" University Model of the institution itself (BUAP, 2009). Professors who teach the subject should be aware, so that they can teach the subject on the basis of student talents.

In general the results show weak development of entrepreneurial talents and therefore it is also necessary to recognize and analyze the talents of the teachers who teach entrepreneurship. It is also important for other subjects. Teachers are the other part of the teaching and learning process. So there needs to be a tie-in to optimize the results. The performance of professors at the BUAP School of Accounting plays a crucial role in student motivation and their knowledge of the thematic areas. This occurs not only in the case of the field of ITE, but in a general manner in the curricular mapping that allows them to achieve graduate profile. "Graduates will be competent and capable of designing, evaluating and following-up on the processes that support decision-making in any organization through teamwork that generates an entrepreneurial spirit, always acting with ethics sense, critical, creative, creative, aesthetic, multicultural and humanist in a continuous process of self-improvement" (BUAP, Admissions 2016). Students identify their talents and at the same time motivate and implement teaching strategies that help to empower them.

The way in which the objectives of the ITE subject can be achieved, have to do with student processes and products which may have an impact on society. It is part of the graduation profile of students which considers that the graduates will have "... a professional exercise with multipurpose skills, with a reflective, critical, scientific and creative thinking, which will enable them to adapt to the changing working and living conditions, with an entrepreneurial, innovative and enterprising spirit..." (BUAP, 2009). There is still much

to be done in this regard. Finally, the model considered for this paper poses that creativity is linked to the social context in which the actions occur (Cslkzentmlhalyi, 1984). Structured actions occur based on the recognition of talent during the teaching and learning process and their subsequent development throughout the different basic subjects in accounting.

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