Implementation of teaching-learning strategies that support the Learning to Be (pillar in education) applied in the Socio-cultural education subject

Implementación de estrategias de enseñanza-aprendizaje que apoyen a las competencias del ser, relacionadas a la asignatura de formación sociocultural

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Abstract

In order to guarantee the requirements and needs of the productive sector, each Technological University conduct a Situational Analysis of employment (by its Spanish acronym AST) aiming to identify the current needs of the graduated students of each educational program. One of the room of improvement area identified is related to the deficient performance of the Learning to Be or soft skills: social skills, team work, creativity, ethics and leadership, all specific contents of the subject of Socio-cultural Education (by its Spanish acronym FSC). The main goal of this research is to apply teaching-learning strategies in FSC with the students of the certified technician level of education (by its Spanish acronym TSU) of the Technological University of León in order to improve the execution of the soft skills in the productive sector. The methodology was three fold: 1. Opinion analysis from business owners, teachers, graduated students, and students in the final stage of their technical education, through focus groups, surveys and interviews about the importance of the soft skills and how they are acquired; 2. Training sessions to teachers to design teaching-learning strategies; 3. The implementation of these strategies in test groups and the evaluation of the outcomes. The goal is to replicate the strategies in the rest of the subjects.

Productive sector, Soft skills, Teaching-learning

Resumen

Para garantizar los requerimientos y necesidades que tiene el sector productivo, cada Universidad Tecnológica realiza el Análisis Situacional del Trabajo (AST) con el objetivo de identificar las necesidades actuales de los egresados de cada Programa Educativo. Una de las áreas de oportunidad identificadas se refiere al bajo desempeño en las competencias del Ser: habilidades sociales, trabajo en equipo, creatividad, ética y liderazgo, que son contenidos específicos de la asignatura de Formación Sociocultural (FSC). El objetivo de la presente investigación es implementar estrategias de enseñanza-aprendizaje en la asignatura de FSC con los alumnos del nivel de Técnico Superior Universitario (TSU) de la Universidad Tecnológica de León (UTL) para favorecer el desempeño de las competencias del ser en el contexto productivo. La metodología consistió en tres fases: 1. Análisis de la opinión de empresarios, docentes, egresados y alumnos en estadía, a través de grupos focales, encuestas y entrevistas, respecto a la pertinencia de las competencias del ser y su forma de adquisición; 2. Capacitación a docentes en el diseño de estrategias de enseñanza-aprendizaje; 3. Implementación en grupos piloto y evaluación de los resultados. La intención es replicar las estrategias en las demás materias.

Sector productivo, Competencias del ser, Enseñanza-aprendizaje

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Background

Technological Universities were created to meet the needs of the productive sector of the region. To guarantee the requirements and needs of the productive sector, each Technological University performs the Situational Work Analysis (AST) (SEP, 2017), which consists of a workshop where teaching, administrative, student and business personnel participate; The objective is to identify the current needs of the graduates of each Educational Program (PE) regarding the relevance and validity of knowledge (KNOW), the functions, tasks and skills that must dominate in the work area where they develop professionally, as well such as the management of equipment, tools and machinery that they will use in their professional performance (CGUT, 2017) (DO), as well as the generic skills necessary to be professionals with an integral education (SER).

Problem and objective

The subject of Sociocultural Training is a transversal subject that is taught in all the careers that belong to the Technological Universities. In the curricula it is located in the area of knowledge as Management skills. It requires a total of 150 hours distributed, according to the different races, between three to four four-month periods. Its contents are broken down into four themes: Module I: Sustainability and life plan; Module II: Teamwork and interpersonal skills; Module III: Leadership and decision making; Module IV: Creativity and values. The specific competence that students seek to develop is to act with proactive values and attitudes of excellence in their personal, social and organizational development, in harmony with their environment to develop their personal, social and organizational potential (CGUT, 2015). It should be clarified that, at the Technological University of León (UTL), as in many technological universities, two levels are studied, the Higher University Technician (TSU) and Engineering, now also undergraduate.

According to the AST, the performances that need to be reinforced in the students are those that refer to the mastery of social skills, ability to work in teams, leadership and professional ethics; and, although they are the generic competences of any subject, they are the specific competences of the subject of Sociocultural Formation.

For this reason, the teachers that constituted the Academy of Sociocultural Training gave us the task of knowing the perception of students, teachers and businessmen, regarding the effectiveness of the teaching-learning strategies that have been implemented in the classroom, with The purpose of developing and testing new teaching strategies.

Methodology

In order to carry out the research, the analysis of the opinion of businessmen, teachers, engineering students and TSU was carried out, through focus groups, surveys and interviews.

The opinion of the businessmen was obtained from the AST, with the aforementioned results. The teachers were selected from the Careers of Business Development, Administration, Information Technology, Chemistry and the French subject, and they sought to have a level of empathy towards the contents of the subject of sociocultural training to talk to us, in focus group, how they promote generic skills from their own subjects. It was sought that students, both engineering and TSU, were in professional stay, but the opinion of the former was obtained by interview and those of TSU in focus group.

In the focus group with teachers, the main finding was to realize that many of the competences that are worked specifically in Sociocultural Training, they integrate it as part of their teaching strategies. In the specific case of French, one aspect that they take with great interest is the elaboration of the Life and Career Plan, as it is a defining element in the interviews that some students carry out to be approved for the MEXPROTEC scholarship (Mobility Program to France for obtain a professional license).

The individual interviews were conducted with six students of the level of engineering in stays, of the Environmental Technology career, and who were already working in the productive sector related to their career, because what we were interested in knowing about them was their opinion regarding the most significant contents of the Sociocultural Training course.

Regarding module I (Life plan), they discovered from personal experience that, in companies, at the time of conducting the interviews, it was common for them to be asked about their life plan, and that they did not know exactly what to answer. As for module II (Teamwork), in addition to stating that collaboration is essential, they recognized that communication processes were difficult for them. Five of the six interviewees expressed that they have staff in their charge, so the contents seen in the subject, referring to module III (Leadership), were very useful.

Finally, the six members agreed that values are important for professional and personal life, referring to module IV (Creativity and values). Two of the interviewees commented that they had to leave the company where they work because they were asked to do illegal acts, so it would have been useful to learn to negotiate without compromising their professional ethics.

The focus group with students of the sixth semester of TSU were asked to assess whether what they learned in each of the modules of the subject of Socio-Cultural Training had been significant for their performance in the stay they were doing at that time. Regarding the first module, what stood out most about making a life and career plan is to have clarity in the goals and how to carry them out, for this they suggested that it be done consciously and with sufficient time and that care be taken into account environment. Regarding module II, the most significant recommendation was that they need to work more interpersonal skills to resolve conflicts that arise when working as a team.

Regarding module III, in addition to recognizing the importance and need to become leaders, they highlighted the fact that a key element that they are requested in companies is the ability to make good decisions in the face of conflicts, and this aspect has not been sufficiently worked in the classroom. Finally, with respect to module IV, the comment was unanimous, since they expressed, although the theory seemed very interesting, it is required that real ethical cases of the working world be worked on in class.

In addition to taking advantage of the information obtained from the focus groups and interviews, a course on teaching-learning strategies was given to all subject teachers who make up the Academy of Sociocultural Training. Derived from that, an integrating project was designed and implemented, which was tested with representative groups from each of the academic areas of the UTL, at the TSU level.

Results

In order to test the teaching-learning strategies of the student integration project, groups from the Higher University Technician (TSU) level were chosen, specifically from the Networks and Telecommunications, Multimedia and Electronic Commerce, Computer Systems, Logistics and Transportation, Industrial Processes and Footwear. The module chosen was the II, whose theme is Teamwork and interpersonal skills, from the four-month period January-April 2019.

The strategy consisted of adapting the learning methodology by projects to carry out an integrative activity. The concept of integration is because collaboration with other subjects was promoted to carry out a joint project, so that, in the same activity, the conceptual (knowledge), procedural (doing) and attitudinal (of Being) contents were reflected), and also understand that in the real working world collaboration with different areas is required.

For the project, work teams were formed whose first task was to find a company or institution to detect a real need that could be solved with the knowledge learned up to that point in the career. Contact was established with various micro businesses such as grocery stores, shoe shops, computer companies and even charitable or nonprofit institutions.

The second task was to convince the microenterprise or institution to offer its services, to allow them to make a diagnosis and to propose an improvement to their processes; The third task was to coordinate the work agenda that involved the three actors involved in the process: the students, the head of the institution and the beneficiaries or workers. This phase was the most significant, since it required the development of social skills, negotiation, conflict management and, mainly, leadership.

To evaluate the project a survey was applied to 350 students, via virtual classroom, in which one of the questions was "What was the most relevant thing you learned from this project?"; The students had to select all possible options from a list of 19 alternatives that integrated both theoretical and job skills. The intention was to identify what they gave more importance. 259 people chose the Strategies for teamwork, followed by identifying roles for teamwork, with 192.

The third and fourth aspects referred to identifying and developing social skills, with 170 and 171 respectively; Assertive communication was chosen by 168 people and Conflict Management had 157 elections. All these options correspond to the generic skills for the job; on the other hand, those that referred to specific theoretical contents such as Typology of collaborators, Development of the life and career plan, Development of sustainable projects, were among the least chosen, with 45, 49 and 50 people, respectively.

Conclusions

Topics such as life and career plan, teamwork, interpersonal skills, leadership, creativity and ethics, only make sense when working in real contexts and involve different areas of knowledge and various skills. To achieve this, a paradigm shift is required, not only in one subject, but in the university as a whole, regarding how to work integrating projects.

The Sociocultural Training Academy began this investigation with the intention of having a more significant impact on the training of university students and found that only isolated practices had some effect on graduates. It was for that reason that we set out to document what has been done well, to obtain information from those directly involved in the training process and to establish networks of collaboration with other subjects. We still have to design more integrating projects for each of the modules of the subject and measure the impact that these projects will have on the graduate in the world of work.

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