

## Stay through the Mexico - Shanghai student mobility project at Universidad Tecnológica Fidel Velázquez

### Estadía a través del proyecto de movilidad estudiantil México – Shanghái en la Universidad Tecnológica Fidel Velázquez

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#### Abstract

The aim of this paper is to show the protocol used by the UTFV operation for the selection of students who were part of the proposed student mobility Mexico - Shanghai for their internship process. This consisted on the creation of a multidisciplinary committee to determine a profile of desirable competencies in students, from follow-up to the culmination of their internship program. Students were selected by transnational corporations as WTA, Cityhomesh and Trepantech, in which they developed projects oriented to digital marketing implementation and establishment of trade relationships Asia - Latin America

**Internships, Students exchange, Professional competence**

#### Resumen

El objetivo de este trabajo es mostrar el protocolo de operación usado por la UTFV, para la selección de alumnos que formaron parte del proyecto de movilidad estudiantil México – Shanghái para la realización de la estadía. Este proceso consistió desde la conformación de un comité multidisciplinario para la determinación de un perfil de competencias profesionales deseable en los alumnos, hasta el seguimiento y terminación de la estadía. Los alumnos que fueron seleccionados se integraron a empresas transnacionales con WTA, Cityhomesh y Trepantech, donde desarrollaron proyectos dirigidos a la implementación de digital marketing y establecimiento de relaciones comerciales Asia – America Latina

**Estadía, Movilidad estudiantil, Competencias profesionales**

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## Introduction

Since the emergence of the Technological Universities in the nineties, their objective has been to train professionals who respond to the needs of human capital required by Mexican industry. In order to reach this goal, the study plan contemplates the realization of a cycle of internships, which is the process that includes activities in the sixth and eleventh semesters of the study plans of Higher Technical University (TSU) and Engineering respectively, in which the student will stay in a company or in a public or private organization, under the supervision of one of its members and with the advice of the UTFV.

During this period, students develop a technological research project that translates into a contribution by the student to the public or private organization where he/she is inserted, and its purpose is that the student puts into practice the theoretical and practical knowledge acquired during the first five semesters of TSU and the ten semesters of the engineering plan (Gaceta UTFV Year X, No. 16, 2005), so that upon completion, he/she is qualified for the successful exercise of his/her profession.

The personnel of the public or private organization that assumes the tutelage of the student is called industrial advisor, whose function is to tutor and evaluate the student's performance in situ, as well as the project so that the student can apply and obtain knowledge, discipline, personal presentation, initiative and interpersonal relations. His function is closely linked to that of the academic advisor who is a full time professor of the university and whose efforts will be directed to evaluate the progress of the project by reviewing objectives, strategies, actions and proposed goals. The internship is an obligatory process and a requirement to obtain the degree of Técnico Superior Universitario and later the degree of Engineering.

The need to innovate in the internship cycle derives from the notorious changes in the economic and socio-cultural panorama of the country, but also to the institutional strengthening of the UTFV, which after twenty years of existence, has achieved that the academic development directs the efforts and goals that favor the achievement of professional competencies in the students.

This international mobility project had precedents, such as the regional and national mobility internships. In the globalized world, knowledge has become a constitutive factor of any organization and, of course, of the production of scientific knowledge that has to be translated into technological improvements in all fields; highly qualified human resources, according to Reich (1993) are a very valuable part in the construction of competitive and dynamic advantages and the basis for this is undergraduate and graduate university education.

Currently, one way to achieve this is to combine academic training with student mobility, a concept that according to Pablo and Pittelli (2009) essentially refers to a process designed to facilitate the stay of students in other institutions of higher education in Mexico and abroad in order to cover a certain number of credits, either by taking individual subjects, a full semester or to carry out professional or laboratory internships, or even to participate in research projects; It is in this last category where the internship can be categorized since the academic guide is provided by UTFV, while the host organization provides a natural scenario where the student must put into practice their professional skills, from the diagnosis or understanding of the problem, intervention design, implementation and evaluation of the results.

The UTFV students' stay in Shanghai, China, was part of a project sponsored by ANUIES, whose objective was to promote international mobility during the stay, since it was an invaluable experience for the student in terms of professional development, application of the knowledge obtained during their university education in a cultural and technological context completely different from that which exists in Mexico, and collaterally would allow the evaluation of the professional competencies of a UTFV graduate.

- The professional and socio-cultural competencies that the student has, have allowed him/her to reach the category of autonomous in learning.
- The student has the theoretical and practical knowledge necessary to carry out the technical activities of his or her field of training,

- The student has an intermediate level B1 or higher in the English language.
- Their personality profile, social and emotional skills will allow them to adapt to the cultural conditions and professional demands required.

In order to develop this process, a protocol was created for the selection of students to be incorporated into this project, multinational companies based in Shanghai, China were contacted, and academic follow-up during this cycle. In itself, it constituted a challenge of innovation for the processes usually used for the assignment and follow-up of internships.

### **Methodology to be developed**

The protocol used for the project:

Creation of the multidisciplinary committee of the Universidad Tecnológica Fidel Velázquez for the Mexico - Shanghai Student Mobility project.

This stage consisted of convening a group of professionals in different disciplines, mostly managers, professors or administrative staff of the UTFV, who by their professional training or experience in the processes and procedures related to the cycle of stay that provided the necessary standards and professional skills with which a student should have to be selected for this project, derived from the work of this committee it was determined that:

### **Planning phase of the selection process**

In this phase, the UTFV's multidisciplinary committee conducted a detailed analysis of the activities that students carry out on a daily basis during their stay and those that, due to the nature of the project, should be considered, resulting in standards on which the selection of students should be based:

In the academic competencies, the student had to be a regular student with a general average of excellence of at least 9.5 and that professors of the area in which he/she was trained, after an evaluation, endorsed his/her autonomy in the professional competencies of the TSU or Engineering level.

English language proficiency at intermediate level B1 or higher, as determined by the TOIC exam, as well as proof of communication skills through interviews conducted by the language department.

In the sociocultural competencies, a desirable personality profile was proposed in which the student would socialize with ease and with high levels of adaptability, but would be considerate of institutional and social rules and norms; proactive, as well as logical judgment and analytical skills.

### **Selection Phase (Evaluation)**

This phase included from the publication of the call for applications and registration of applicants, to the determination of the pre-selected candidates. The first evaluation filter was the English language proficiency test, followed by the academic and psychological evaluation, which concluded with the preparation of the applicants' files and their purging based on the standards determined by the Multidisciplinary Committee, where 30 applicants were selected 30 applicants were selected and after a thorough evaluation of their academic competencies, 12 applicants were pre-selected to move on to the next phase.

### **Selection Phase (Preparatory)**

This phase consisted of preparing them integrally for the successful development of their stay abroad, including a series of activities, such as a workshop on "Identidad mexicana" to strengthen their global knowledge about the geographical entity where they live; personal coaching workshop that included training in social skills, self-esteem and emotional management strategies; and technical English classes and conversational practice. After these preparation activities, the pre-selected candidates had a video conference interview with representatives of the companies WTA, Cityhomes and Trepantech, this was the last selection filter.

Meetings were organized with the professor who acted as academic advisor to generate the analysis of possible industrial scenarios and develop a strategic work agenda during their stay in Shanghai.

**Cycle of stay**

It lasted 12 weeks between the months of June and August 2014, being inserted in the following companies: WTA, Cityhomesh and Trepantech, where they developed projects aimed at establishing trade relations between Asia and Latin America and the implementation of digital marketing (Annex 1), which is described in detail in the reports of the stay, which although not an institutional requirement, are written in Spanish and English.

**Results**

Continuous evaluation of the students, video conference sessions were held between the industrial and academic advisor and the student to guide their project. They received one psychological coaching session per week and permanent counseling on technical English through video conference.

**Thanks**

To the UTFV employees, directors, teachers and administrative staff, whose joint work was fundamental for the development and successful conclusion of the project.

To ANUIES for funding the project, always seeking excellence in higher education.

**Conclusions**

The project was considered highly successful, since institutionally it added the work and talent of UTFV personnel for the design and evaluation of the effectiveness of a protocol for the selection of students that can be used for subsequent projects. In the professional development of the students who were in the engineering cycle, it showed effectiveness since they are currently working for transnational companies such as FedEx and Chanel; those who were in the TSU cycle have developed related projects inside and outside this house of studies.

**References**

Reglamento de Estadias. Gaceta UTFV Año X, Núm 16, Marzo, 2005.

Coloquio internacional sobre gestao universitaria ua america do sul. (IX, 2009, Brasil) LA CRECIENTE IMPORTANCIA DE LA MOVILIDAD ESTUDIANTIL TRANSNACIONAL: AMÉRICA LATINA Y LA OCDE EN VISIÓN COMPARADA. PABLO y Pittelli, 2009.

REICH, Robert (1993). El trabajo de las naciones. Barcelona, España: Editorial Vergara. (Orig. en ingles: The work of nations, 1992).