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Title: Technology transfer in the integrative projects of the new educational model at the Technological University of Jalisco, digital Creative City headquarters

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Introduction

Within the training of university students of the new educational model of the DGUTYP in the Information Technology Division (DTI) of the Technological University of Jalisco (UTJ) campus City Creative Digital (CCD), the current study plans and programs are the Higher University Technician (TSU) in Virtual Environments and Digital Business and the TSU in Multiplatform Software Development completing their training in the Bachelor of Engineering in Information Technologies and Digital Innovation (UTJ, 2024) and are divided into three training cycles, carrying out the development and evaluation of Integrative Projects (IP) at the end of each cycle, in which a complete innovative technological application is developed.

Introduction

Regarding the first training cycle completed in the third semester, a project belonging to the catalog of projects previously designed as case studies is assigned, allowing students a first approach in the development of these applications that in the company of the institution's teaching staff. They will provide knowledge and experience in achieving the proposed objective.

Project-Based Learning (PBL) is a learning methodology in which students are guided to look for possible solutions to a certain problem, based on projects (Pimentel, 2021).

Introduction

For the second training cycle at the end of the fifth semester, the project to be developed is developed in a real company, documenting the project by formulating research questions, reviewing literature, collecting and analyzing data, and presenting results. and at the same time finishing his training as a TSU.

The third cycle of training of the curricular model allows that after obtaining the TSU degree, students can choose to study Technical Engineering which is taken in three semesters plus a stay, it is highly professional practice for direct insertion into the labor market, developing your integrative project in the ninth semester where you will strengthen presentation and communication skills to transmit innovative results.

. Common Training Core • Three four-month period • Integrator Project First Training · Project catalog case Cycle studies · Specialized Training • Two four-month period • Integrator Project · Real project · Four-month period Second **Business Stay** Training Cycle · Higher University Technician Finishes Common Training Core · Two four-month period • Integrator Project · Four-month period **Third Training Business Stay** Cycle Technology Transfer · Finishes degree in Engineering

General objective, to determine the guidelines to follow in the planning of integrative projects and allowing the activities of the CCD academic unit to be carried out in a harmonious and disciplined manner, being functional, efficient and productive in the development of the integrative.

Note:

At the end of each training cycle in the DTI of UTJ-CCD and derived from the accreditation process through which the study plans and programs go through in the National Council for Accreditation in Informatics and Computing (CONAIC), it determines in its evaluation criteria the implementation of integrative projects that allow students to demonstrate the skills acquired throughout their university life.

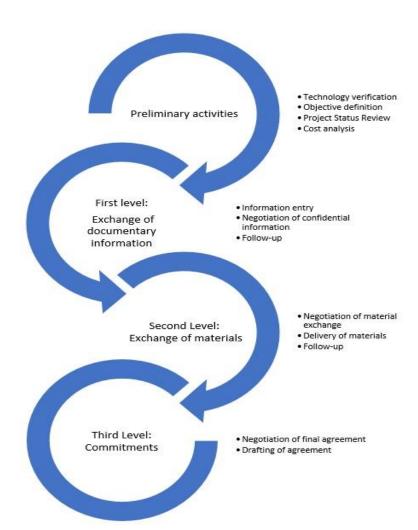
Methodology

The research methodology used was qualitative with multiple instrumental case studies, observation and experimentation of an Integrative Project allowing technological transfer. In this way, a well-defined and documented operations strategy was obtained with the pedagogical, technological and design elements to work collaboratively.

Process Pictogram

Figure 3 Levels of technological transfer.

Source: Self Made



Results

The result is the work methodology for the new educational model in carrying out integrative projects of the UTJ at its CCD headquarters, having a well-defined and documented operations strategy that makes us affirm that we are better prepared to work more efficiently. and effective, aligning internal resources to create agile and profitable processes, since applying a successful strategy adds added value to our services.



Assistance of Professors in the evaluation of integrative projects

Source: Self Made

Results

It is evident that with the application of everything explained, a more agile, more flexible university is obtained, more adaptable to market variations.

And, if you want to be successful in any activity you must have human capital, trained, involved and committed.

Conclusions

In today's world and particularly that of productive universities, change is increasingly rapid and forceful. The environment becomes more competitive every day and more and more universities are entering this competition to be more attractive and better located in a more demanding market.

We always want to get the most out of resources of any kind, whether material or human, as well as the skills of the staff who work, seeking for each one to magnify their task.

Conclusions

The main goal is to help understand operations as a competitive weapon in the global market through good management of the systematic design, direction and control of the processes that transform inputs into products and services to satisfy the needs of students and power, generate a competitive advantage.

References

Assembler (2023) ¿Que es la tecnología y para qué sirve? Recuperado el 28/05/2024 de:

https://assemblerinstitute.com/blog/que-es-la-tecnologia-para-que-sirve/

DGUTyP (2024) Dirección General de Universidades Tecnológicas y Politécnicas. Recuperado el 03/06/2024 de:

https://dgutyp.sep.gob.mx/

Pimentel, A.(2021) El Aprendizaje Basado en Proyectos como oportunidad para transformar la escuela.

Recuperado el 05/06/224 de:

https://www.gob.mx/aprendemx/articulos/el-aprendizaje-basado-en-proyectos-como-oportunidad-para-transformar-la-escuela?idiom=es

Aulaplaneta(2024) Cómo aplicar el aprendizaje basado en proyectos. Recuperado el 11/06/2024 de:

https://www.aulaplaneta.com/2015/02/04/recursos-tic/como-aplicar-el-aprendizaje-basado-en-proyectos-en-diez-paso

IPN(2024) Transferencia de Tecnología. Recuperado el 12/06/2024 de:

https://www.cvdrcampeche.ipn.mx/servicios-a-empresas/transferencia-detecnologia.html

UTJ(2024) Oferta Académica. recuperado el 20/06/2024 de:

https://www.utj.edu.mx/oferta-academica/programa-educativo/tecnologias-de-la-informacion-innovacion-digital/

Indautor(2024) ¿Qué es una reserva de derechos al uso exclusivo? Recuperado el 20/06/2024 de:

https://www.indautor.gob.mx/preguntas-frecuentes-reservas.php

Ibáñez J. Autobiografía. (Los años de aprendizaje de Jesús Ibáñez). Anthropos 1990; núm 113:9-25.

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