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COMPARATIVE ANALYSIS BETWEEN THE EDUCATIONAL MODEL FOR THE XXI CENTURY AND THE NEW EDUCATIONAL MODEL OF THE TECNOLÓGICO NACIONAL DE MÉXICO

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Abstract: An analysis of the three dimensions of the Educational Model for the XXI Century of the National System of Technological Institutes is presented: philosophical dimension, academic dimension and organizational dimension, as well as an analysis of the four dimensions of the Educational Model of the National Technological Institute of Mexico Humanism for Social Justice: philosophical dimension, academic dimension, organizational dimension and linkage dimension.

Keywords: Educational Model, XXI Century, Tecnológico Nacional de México.

INTRODUCTION

In December 2012, the General Directorate of Higher Technological Education (DGEST), now Tecnológico Nacional de México (TecNM), released the Educational Model for the 21st Century: Training and development of professional competencies (DGEST, 2012); which orients the central educational process to the training of professionals that promote productive activity in each region of the country, scientific research, technological innovation, technology transfer, creativity and entrepreneurship to achieve greater social, economic, cultural and human development.

The Educational Model that the National System of Technological Institutes (SNIT) was developed with a focus on the training and development of professional competencies, governed by the premise of training high-level human capital, with the understanding that it is and will be a strategic institutional reference that will encourage the academic work agreed upon in the Technological Institutes and Centers of the SNIT, in order to consolidate its development. It explains and represents the educational process based on the philosophical, academic and organizational foundations of the System. It is also an essential purpose of this exhibition to show the mechanisms to organize, guide and evaluate these processes and

the relationships between the different actors. Mutual respect, trust, honesty, responsibility, cordiality and empathy are privileged as the basis for creating the necessary environment in the learning process, during which the ideal conditions for tutoring and student counseling are generated.

In 2024, the Tecnológico Nacional de México published the Educational Model of the Tecnológico Nacional de México Humanism with Social Justice, which promotes the training of people capable of addressing, from different perspectives, in a preventive and active way, the accelerated changes and problems that arise in the social, technological, productive, commercial and financial systems at regional and national level. To achieve this, it develops training processes that, at an early stage, encourage the involvement of students in real situations or scenarios through technological or scientific projects led by teachers and researchers, thus promoting the development of skills such as analytical observation, problematization and modeling, all of which are used in different fields of application.

SNIT'S EDUCATIONAL MODEL FOR THE 21ST CENTURY

This Educational Model is built on three dimensions: philosophical dimension, academic dimension and organizational dimension and was designed so that the graduates of the programs offered by the National System of Technological Institutes are leaders for the transformation of their environment, being protagonists of change, participating in the innovation of processes and in the optimization of resources, with ethical values and seeking the preservation of the environment. Below is a summary of each dimension of the Educational Model for the 21st Century: Training and development of professional competencies (DGEST, 2012).

PHILOSOPHICAL DIMENSION

The philosophical dimension focuses on the human being and all its educational strategies are centered on learning. In addition to training competent professionals, the Model encourages the orientation of life projects towards the search for self-realization, in a scenario of permanent cultivation of humanism. Within the philosophical principles of the Educational Model for the 21st Century, integral education is established as a continuous process of development of all the potentialities of human beings, guiding them towards the search for their fullness, in learning to be, learning to do, learning to learn, learning to undertake and learning to live together, and turning them into conscious, responsible and solidary citizens. The human being is the fundamental actor of the Educational Process. In their formation, meaningful learning is promoted through the work of the facilitator, through reflection and participation, supported by cutting-edge technology and ensuring the quality, timeliness and relevance of learning.

ACADEMIC DIMENSION

The academic dimension of the Educational Model for the 21st Century integrates the reference parameters for professional training, the conception of learning and its conditions, as well as the standards of educational practice in the TecNM. The Educational Process is based on and updated according to the state of the art theories of the construction of knowledge, the evolution and development of the forms of intelligence and meaningful learning. From this perspective, the Model privileges learning experiences over traditional forms of teaching. That is, experiences that are born from the need for knowledge itself, which in turn, is generated by previous knowledge, which ensures the interested and active participation of the learner and at the same time, defines the role of

the facilitator and generates the construction of meaningful knowledge for both.

The Model recognizes and promotes collaboration and communication among peers as strategies that contribute to the construction of meaningful learning; therefore, it encourages collaborative work and the development of communicative competencies, so that the situations that generate learning are the articulating axis of the Educational Process, thus strengthening the factors involved, promoting their dynamism, innovation and flexibility. The Model seeks, then, the construction of learning environments, both inside and outside the institutions, around which the resources of the System and its environment, from the physical infrastructure to the new information technologies, and is supported by a flexible, efficient and integrated administration in its objectives and goals to achieve the educational project of the TecNM.

ORGANIZATIONAL DIMENSION

The organizational dimension of the Educational Model for the 21st Century contributes to the fulfillment of the Model's goals and guarantees that the system's resources are substantially dedicated to the Educational Process to ensure its success. This dimension is also supported by the practice of high performance derived from the state of the art of organizational theories of quality and modern social approaches of humanism that consider the human being as the origin and destination of all efforts and resources of the institutions, so that they justify their existence to the extent that they contribute to the improvement of the quality of life of people. In the TecNM, educational management is carried out with a focus on processes based on the philosophy of high performance, which has as a permanent purpose to exceed the highest indicators and improve work results, with the impulse and motivation of the values and convictions

of the human being. The educational administration for high performance orients and focuses the human being towards the achievement of the institutional vision and mission, through the application of methods, techniques and instruments of efficiency and quality that contribute to the full flowering of human potentialities and raise their competitiveness and increase their quality of life.

EDUCATIONAL MODEL OF THE TECNOLÓGICO NACIONAL DE MÉXICO HUMANISM FOR SOCIAL JUSTICE

In 2024, the Tecnológico Nacional de México published the Educational Model of the Tecnológico Nacional de México Humanism for Social Justice, which promotes the formation of people capable of attending, from different perspectives, in a preventive and active way, the accelerated changes and problems that arise in the social, technological, productive, commercial and financial systems at regional and national level. To achieve this, it develops training processes that, at an early stage, encourage the involvement of students in real situations or scenarios through technological or scientific projects led by teachers and researchers, thus promoting the development of skills such as analytical observation, problematization and modeling, all of which are used in different fields of application.

This Educational Model is built on four dimensions: philosophical dimension, academic dimension, organizational dimension and linkage dimension. The following is a summary of each dimension of the Educational Model of the Tecnológico Nacional de México Humanism for Social Justice (TecNM, 2024).

PHILOSOPHICAL DIMENSION

The philosophical dimension raises the need to orient the formative processes towards the achievement of community welfare, as a condition for achieving human dignity. Community welfare is understood both in the sense of what concerns the members of the institution (directors, administrators, academics, students), as well as in relation to the groups and social sectors with which it interacts.

ACADEMIC DIMENSION

The academic dimension establishes that teachers may have two roles: collaborator in the process of designing instructional scripts for knowledge construction zones, and on the other hand, mediator of the learning and training processes of their students.

ORGANIZATIONAL DIMENSION

The organizational dimension defines the identity of the governing body, which is responsible for executing the guidelines for the operation of the Educational Model within each Technological Institute or Center. Therefore, it is essential that they have continuous training in critical thinking so that they can build the transformation of TecNM through the understanding of the various determinations of the educational service, as well as use dialogue as a means of organizing collaborative work between teachers and administrative staff.

LINKAGE DIMENSION

The dimension of linkage is essential for the realization of this Educational Model, because it is through it that the TecNM shows its social relevance, the excellence achieved through the continuous improvement of its services and its commitment to the actions that lead Mexico towards technological independence and sovereignty. This is only possible through

the continuous strengthening of the talents of the student body so that, at the end of their training, they will be integrated into society as professionals whose scientific and technological knowledge and skills are combined with the social and environmental awareness that our country requires.

CONCLUSION

An analysis of the three dimensions of the Educational Model for the XXI Century of the National System of Technological Institutes has been presented: philosophical dimension, academic dimension and organizational dimension, as well as an analysis of the four dimensions of the Educational Model of the National Technological Institute of Mexico Humanism for Social Justice: philosophical dimension, academic dimension, organizational dimension and linkage dimension.

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