NEW CHALLENGES IN HIGHER EDUCATION AND THE CETYS MULTI EXPERIENTIAL MODEL

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Abstract

This paper examines CETYS University's response to a changing and challenging educational landscape by implementing its Multi-experiential Educational Model, which launched in 2023, driven by digital transformation and integrating advanced technologies, including artificial intelligence, micro-credentials, and experiential learning. This initiative aligns with the institution's 2036 strategic plan, guided by four foundational elements: fostering a culture of innovation, achieving significant impact, enhancing national and international relevance, and providing transformative experiences. In the wake of the pandemic in 2020, CETYS assessed the digital competencies of the teaching staff and their adaptation to technology-driven teaching contexts following a strategic shift enabled by the Flex 360 model, which facilitated multimodal education amid forced classroom closures. This new educational framework, known by the community as CETYS Multi-experiential, addresses post-pandemic expectations of flexibility, expanded use of educational technology, and demands for enriched multimodal learning experiences. Innovative components such as virtual laboratories and micro-credentials have been incorporated to promote curricular flexibility and continuous skill development. This approach would allow CETYS to position itself as a transformative and adaptable higher education institution supported by humanistic and experiential learning principles.

1   INTRODUCTION

Our world now goes through shorter cycles, which impacts how we live, organize ourselves, and work. Two factors identified in the early decades of this century have accelerated transformations and generated new skills: acceleration and hyper connection due to the use of the internet and the transformative disruption of artificial intelligence, as well as the COVID-19 pandemic. These changes, as reflected in a new society, are social, technological, economic, and environmental [14]. The trends involve changes in work and learning methods, making technology more prevalent to facilitate these activities remotely. The digital gap between generations has widened even more, with Millennials being the first native digital generation, followed by Generation Z and Generation Alpha, whose identities are shaped mainly by social networks and the presence of artificial intelligence in their digital environments [16]. New job skills are in demand, uncertainty surrounds current economic models, climate change continues, and new sustainable policies and practices are emerging — all of which impact education [2][7][15]. Human beings seek purpose and essence, aiming for personal, professional, and social development.

CETYS University has reflected on the future of education in the coming years: the impact of technology (online education, MOOCs, the cloud, social media), adaptive learning, education that is not limited to classrooms, curricular competencies recognized by international organizations, a greater emphasis on internationalization, a stronger push for research, knowledge production and dissemination, evolving work skills and conditions, lifelong learning, student success, mental health, and key post-pandemic practices and technologies such as artificial intelligence, blended and hybrid course models, learning analytics, micro-credentials, open educational resources, and high-quality online learning.

After completing its strategic development plan in 2020 and facing a pandemic that disrupted the world, CETYS reviewed its learnings. It reflected on a constantly changing world and identified some initiatives and projects to focus on in its new 2036 Strategic Plan.

2   METHODOLOGY

CETYS University

CETYS University is located in the strategic Cali-Baja region, one of the world's most dynamic borders. With 63 years of history, it has three campuses: Mexicali, Tijuana, and Ensenada. Its mission is to form individuals with the moral and intellectual capacity to contribute to the country's economic, social, and cultural development.

Currently, CETYS University has more than 8,000 students in its educational system. The student distribution by campus and gender ratio reflect a notable presence of students from Southern California and other states outside Baja California.

The university offers 38 academic programs, including 22 undergraduate, 13 graduate, and 3 high school programs. Of those, one undergraduate program and three graduate programs are offered in the virtual Flex mode.

Recently, CETYS completed the design of a new institutional development plan called Plan CETYS 2036. Its vision spans a horizon of at least 15 years, with the institution's governing body, Instituto Educativo del Noroeste, A.C. (IENAC), establishing the foundation for this new plan based on three criteria:

a) Maintaining its mission (unchanged since 1977) of providing humanistic, comprehensive education.

b) A long-term vision culminating in CETYS' 75th anniversary in 2036.

c) Strengthening and advancing internationalization.

Learnings from the CETYS 2020 Strategic Plan, the COVID-19 Pandemic, and Educational Trends in Mexico and the World

The CETYS 2020 Strategic Plan focused on developing digital skills among faculty and students. In 2014, asynchronous courses were introduced across all undergraduate academic programs, with at least 10% of each program's courses offered online with teacher support [6].

In 2017, CETYS began systematically training professors in instructional design and facilitating asynchronous teaching. By 2020, the digital education department offered 20% of the courses in each program in asynchronous mode. In addition to skill development, CETYS has created an infrastructure to manage and facilitate courses through virtual platforms [5].

The COVID-19 pandemic posed significant challenges for educational institutions worldwide. CETYS saw this period as an opportunity to transform and strengthen its educational model, laying the foundation for a new one. During the pandemic, CETYS activated its Academic Continuity Plan and adopted the slogan "Stay at Home," ensuring, thanks to previous experiences, both the continuation of educational services and the well-being of the university community.

To adapt to pandemic restrictions, a multimodal strategy that ensured academic continuity through advanced technological tools was established. Over 900 professors were trained to use virtual platforms such as Blackboard and Zoom, with ongoing support through workshops, courses, and help desks. This effort facilitated the transition to non-face-to-face learning and was positively evaluated in terms of learning outcomes and satisfaction among students and faculty.

A consolidated team had already begun working on a new educational model to align with the 2036 Strategic Plan, adapting to new realities, experiences, and trends in higher education. CETYS participated in various international conferences, conducted a documentary analysis of innovative educational models, and held focus groups to design its future-oriented educational transformation [8][9][14][18][19].

These learnings led to the consolidation of a new educational model known as the Multi-experiential Educational Model, grounded in humanism and meaningful learning. This model, based on the principles of flexibility, innovation, and experiential learning, allows CETYS to remain a humanistic institution that adapts to global changes.

A paper should contain the description of your study and should be structured in different sections such as: Abstract, Introduction, Methodology, Results, Conclusions, Acknowledgements (if applicable) and References. Please note that title and authors list should be coincident with the accepted abstract.

3 RESULTS

In 2022, CETYS officially launched the 2036 Strategic Plan, along with the Multi-experiential Educational Model, promoting a redesign of undergraduate programs with three key pillars: humanism, flexibility, and multi-experientiality. These new programs took effect in August of 2023

3.1 Multi-Experiential Model

For the transformation of CETYS' educational model, three essential dimensions were considered: a) Institutional philosophy, b) Curricular pedagogy, and c) Academic administration.

When describing an educational model, it must start with a philosophical foundation, considering anthropological, sociocultural, psychopedagogical, and professional epistemological conceptualizations. These are essential references that reflect the ideals of an educational institution committed to people's development. The educational model in an institution determines its pedagogical, curricular, and academic approach.

Jacques Delors used the constructivist theory to prepare the famous report for UNESCO [10]. This theory highlights a framework of four learning elements: learning to learn, learning knowledge, learning to do, and learning to be. It has given rise to multiple teaching methodologies, among which experiential learning and service learning stand out.

The CETYS Multi-experiential Educational Model seeks to transform university teaching through a comprehensive approach that combines humanistic elements, curricular flexibility, and learning based on real experiences. This model arises from the need to innovate in response to the challenges of a changing and globalized environment and is aligned with CETYS' institutional values, which promote the formation of people with intellectual, moral, and ethical capabilities to contribute to economic, social, and cultural development.

The model is based on three key pillars:

a) Humanistic philosophy: Recognizes each student as a unique individual and promotes their integral development beyond the simple acquisition of technical knowledge.

b) Academic flexibility: Offers options for personalizing students' learning pathways, allowing adaptation to their interests and needs.

c) Experiential learning: Promotes knowledge acquisition through practices, projects, and real-world situations, fostering meaningful learning and the development of transversal competencies.

3.1.1 Humanism

The model is based on a humanistic philosophy that places the student at the center of the learning process. This approach seeks to develop the individual comprehensively, fostering both their intellectual abilities and ethical and social values.

The pedagogy of alterity is a key element, focusing on recognizing others and ethical formation in every educational interaction. CETYS promotes character formation, encouraging moral capacity and social responsibility. These values are reflected in academic programs that seek professional success and commitment to social well-being and justice.

The main humanistic characteristics of the model are: 1) focus on the integral formation of the person; 2) development of values such as honesty, responsibility, and respect; 3) promotion of critical thinking and ethical dialogue.

The Distinctive Competencies for CETYS Education (CODECs) Model links CETYS' educational philosophy and the objectives of the CETYS 2036 Development Plan.

These CODECs connect the institutional philosophy with curricular design and academic guidelines, ensuring that graduates acquire essential competencies to face the challenges of the global environment. The competencies included in the CODEC model are oral and written communication, critical thinking, emotional intelligence, adaptability to change, and creative change management.

These competencies align with CETYS' values — freedom, justice, and truth — and promote integral formation by connecting them with the institutional mission as well as with fostering experience-based and innovative learning.

The Integral Formation Institute (INFIN) ensures the management and facilitation of a series of core courses focused on CETYS' humanistic formation.

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3.1.2 Flexibility

This approach allows students to design personalized academic pathways, selecting courses and experiences that align with their interests and professional goals.

The model promotes both internal and external academic mobility and facilitates the incorporation of international experiences, exchanges, and professional internships. Additionally, it considers labor market needs and social demands to keep academic programs updated and relevant.

The key characteristics of curricular flexibility are personalization of learning pathways, incorporation of international experiences and professional internships, credit recognition and validation of studies, and active student participation in decision-making about their education.

Through E-Campus, CETYS seeks to offer flexibility in the on-site campus academic offering and other modalities, such as synchronous virtual, asynchronous virtual, and hybrid (on-campus students and students connected synchronously). These options allow students seeking multimodal study opportunities to find the right means to study flexibly. All of this is achieved using teaching-learning technology.

In addition, CETYS aims to provide technological resources to students and teachers, including artificial intelligence, adaptive learning, and learning analytics, which enhance the learning experience.

Students also have the opportunity to participate in innovative experiences connected to employability, such as micro-credentials or certifications that prepare them for a changing and challenging world [7].

The learning experiences may or may not be international, although this educational model aims for 100% of students to have transformative international academic experiences, making it a graduation requirement.

This model allows students to design and build learning pathways based on industry-related experiences. Within an experiential academic environment, students will choose from a catalog of educational experiences to decide which area they wish to specialize in during the final stage of their program. It is assumed that in the initial stage of the program, students immersed themselves in the university environment, and over time, they accumulated knowledge and experiences that will help them define their path into the workforce.

Strategic partnerships are essential for students to have life-changing experiences, so CETYS seeks to form consortiums with other educational entities and industry partners. These alliances aim to provide students with access to a global community, professors and students from different universities, and projects that develop life skills. These partnerships will always involve entities committed to educational quality, industry benchmarks, and a national and international vision [13].

3.1.3 Experiential Learning

Experiential learning is one of the distinctive elements of the Multi-experiential Educational Model. This approach is based on the idea that students learn better when actively participating in real-world experiences, allowing them to apply theoretical knowledge in practical and meaningful contexts.

Experiential learning is a formative process that involves students physically, socially, intellectually, cognitively, and emotionally in concrete experiences [17]. According to Dewey [1], participating in a learning experience can help develop skills, knowledge, behaviors, and values. It allows students to interact with their environment and find meaning in the learning object.

CETYS promotes this methodology through capstone projects, community service, professional internships, and extracurricular activities. The goal is to develop transversal competencies that allow students to adapt to complex and changing situations, thus promoting continuous and meaningful learning.

4   CONCLUSIONS

The Multi-experiential Educational Model developed by CETYS University is an innovative and effective response to global challenges and the demands of higher education in a post-pandemic context. Based on the principles of humanism, academic flexibility, and experiential learning, this model transforms traditional educational programs and provides students with meaningful opportunities to develop transversal competencies in real-world settings.

Implementing this model aims to demonstrate improvements in acquiring digital skills and students' ability to adapt to changing work environments. Additionally, the inclusion of micro-credentials and the integration of advanced technological resources enable an education that is aligned with the needs of the global job market.

With this multi-experiential approach, CETYS strengthens its commitment to the comprehensive development of its students, fostering both professional and human growth and positioning the institution as a benchmark in educational innovation, internationalization, and the formation of professional citizens who integrate into society and positively impact their surroundings.

This educational model was implemented last August 2023, and its first evaluation stage is now being run.Use as many sections/subsections as you need.

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