

Comprehensive Planning System for Educational Services: Tool for the transition of Academic Corps

Sistema de Planeación Integral para Servicios Educativos: Herramienta para la transición de los Cuerpos Académicos

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DOI: 10.35429/EJC.2022.15.8.21.26 Received September 18, 2022; Accepted December 30, 2022

Abstract

In higher education institutions, it is essential to constantly strengthen the academic staff and thereby contribute to raising the quality of all its activities, such as teaching, research, and dissemination of culture, creating the conditions for the staff to collaborate through the Academic Corps have professional growth and in turn contribute to the academic capacity of the institution itself. A methodology with a qualitative descriptive and cross-sectional approach was chosen. Based on the main results, it was proposed to integrate into the Planning System for Educational Services of FIME a module for strategic projects that contributes to the development of the Academic Corps, which favors their strengthening for the transition towards consolidation, with significant results in growth. and improvement of the institution's indicators. With its implementation, it was possible to collect 16% of the plans belonging to the different Academic Corps (CA) of the faculty, in addition, the amount of CA in their different areas of knowledge increased.

Academic Corps, Planning System, Degree of Consolidation

Resumen

En las instituciones de educación superior es fundamental fortalecer la planta académica en forma constante y con ello coadyuvar a elevar la calidad en todas sus actividades, como la docencia, la investigación y difusión de la cultura, creando las condiciones para que el personal en forma colaborativa a través de los Cuerpos Académicos posea un crecimiento profesional y a su vez contribuya la capacidad académica de la propia institución. Se optó por una metodología con enfoque cualitativo de tipo descriptivo y de corte transversal. A partir de los principales resultados se propuso integrar al Sistema de Planeación para Servicios Educativos de la FIME un módulo para proyectos estratégicos que contribuya al desarrollo de los Cuerpos Académicos, que favorezca su fortalecimiento para la transición hacia la consolidación, con resultados significativos en el crecimiento y mejora de los indicadores de la institución. Con su implementación se logró recabar el 16% de las planeaciones pertenecientes a los diferentes Cuerpos Académicos (CA) de la facultad, además se incrementó la cantidad de CA en sus distintas áreas de conocimiento.

Cuerpo Académico, Sistema de Planeación, Grado de Consolidación

Citation: GONZALEZ-IBARRA, Ana María, PALOMARES-RUIZ, María Blanca Elizabeth, TORRES-BUGDUD, Arturo and TREVIÑO-CUBERO, Arnulfo. Comprehensive Planning System for Educational Services: Tool for the transition of Academic Corps. ECORFAN Journal-Republic of Colombia. 2022. 8-15: 21-26

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Introduction

Higher Education Institutions (HEIs) are responsible for creating the foundations of knowledge that contribute to the training of future professionals. To achieve this, HEIs must have teachers sufficiently prepared in their areas of specialisation and at the same time promote the substantive actions of teachers, among which research stands out, in order to meet the needs of today's world.

Based on the above, it is essential that institutions support and promote the strengthening of their academic staff, as this is an important key to the fulfilment of institutional objectives (Dimas, M., Torres, A. & Castillo, J., 2012). According to Torres, A., Castillo, J., Treviño, A., Báez, E., Sordia, C., Palomares, M., Álvarez, N., (2012) consider that one way to raise the quality of activities such as teaching, research and dissemination of culture is to create optimal economic conditions and provide benefits to academic staff who stand out for their permanence, dedication and quality in the academic performance of their assigned functions.

In this respect, technological and scientific development has been promoted through research programmes with the aim of generating new lines of knowledge that can be applied both individually and collectively. For this reason, and in order for HEIs to achieve their objectives, the Ministry of Public Education (SEP), through the Under-Secretariat of Higher Education (SES), promotes the Programme for the Professional Development of Teachers (PRODEP), which seeks to develop research capacities in higher education teaching staff in Mexico through the integration of teachers in Academic Corps (CA), thus supporting the qualification of high quality, committed and competent professionals (SEP, 2019).

PRODEP's task is to promote calls for the creation of ACs, among others, with the aim of raising the educational level of HEIs. The purpose of these CAs is to strengthen the tasks of production and application of knowledge, through the grouping of professors dedicated to research who act on the basis of objectives aimed at the creation and implementation of new knowledge that in turn contributes to a better quality education (SEP, 2019).

In this sense, according to López, S. (2010), the creation of new academic Corps in educational institutions aims to foster cooperation in teams through academic activities. According to PRODEP, the CA are the basis of institutional development, given that they self-regulate the functioning of the institution and in turn originate academic environments with a copious intellectual wealth, as well as participation in the training of human resources of the institution (Ortega, C. & Hernández, A., 2016).

The ACs are divided into three levels: Consolidated (CAC), in consolidation (CAEC), and in formation (CAEF). However, for a CA to move from one level to another, it is necessary for it to comply with a series of requirements proposed by the Programme. In the first phase, its members must be identified, of which half of them are recognised as having a desirable profile, and the lines of generation and application of knowledge are defined.

To move on to the next phase, more than half of the members of the AC must have the highest qualification and have innovative application products, in addition to the majority of the members having recognition of the desirable profile and participating continuously in lines of generation, among other aspects.

In the last phase, the majority of the members have the highest academic qualification, i.e. they have a PhD, have extensive teaching experience, demonstrate intense academic activity and participate in national and international academic exchange networks (PROMEPE, 2022).

Therefore, it is necessary for HEIs' academic staff to have a Development Plan based on the frameworks of reference corresponding to the institutional strengthening programmes. In this way, it is possible to outline the short and medium-term objectives and thus, achieve the transition from one degree to another, and as a consequence, achieve the strengthening of the CA and the institution. In this sense, Dimas, M. Torres, A., Palomares, E. & Sordia, C. (2019) mention that: "if a planning structure oriented to the transition of the academic Corps is designed, it will be possible to contribute to their development and evolution for the benefit of the educational programmes" (P. 26).

For this reason, the objective of this study is to promote the culture of Planning in the ACs in order to meet the requirements established by the PRODEP that contributes to achieving the corresponding indicators for the consolidation of the ACs of the Institution and that in turn has an impact on indicators such as Academic Capacity and Competitiveness. This is intended to be achieved through the creation of a module in the Integral Planning System for Educational Services (SPISE) with the purpose of integrating the Development Plan of the ACs.

On the other hand, the Integral Planning System for Educational Services (SPISE) was developed by the Faculty of Mechanical and Electrical Engineering of the Autonomous University of Nuevo León, located in the Northeast of Mexico. This system is a tool that aims to establish a projection structure that contributes to the achievement of FIME's vision, with the purpose of strengthening the Educational Programmes through an academic-administrative management that favours indicators such as: Academic Capacity and Competitiveness.

Therefore, for this study, the research question is: How to integrate a module in the SPISE to meet the requirements established by PRODEP and achieve the transition of the CA of FIME? In addition, a series of specific questions are established that contribute to fulfilling the objective of this research. These questions are: How to strengthen the Planning Model in terms of the CAs? How to promote the culture of Planning in the CAs of the Institution?

Methodology to be developed

Scope of the research

The present study was developed collaboratively in the areas of Academic Capacity and the Coordination of Strategic Planning belonging to the Subdirection of Planning and Liaison of the Faculty of Mechanical and Electrical Engineering of the Universidad Autónoma de Nuevo León.

Research design

This research has a qualitative approach which, as explained by Hernández - Sampieri, Fernández Collado & Baptista Lucio (2014), focuses on understanding phenomena from the perspective of the participants in a natural environment and in relation to their context (P. 358). The study is descriptive and cross-sectional.

The technique used was documentary analysis, which is defined by Hernández Sampieri, Fernández & Baptista (2000), as the technique that allows us to investigate, consult and select materials of interest selectively, in order to nurture the purpose of the study (p.50). Among the documents considered for this study are: the reference frameworks established by PRODEP, the UANL Development Plan and the FIME Development Plan.

Hypothesis

By having a tool that allows the development of the AC Planning project in a more organized and friendly way, there will be a better follow-up of the goals established by its members and, in turn, promote their transit in a degree of consolidation according to with the guidelines established by the corresponding instances.

Developing

Planning refers to the organization and selection of actions that help to meet certain objectives, through research and use of available resources (Ramírez *et al*, 2019, p. 8). Planning and prospective exercises are basic tools that allow us to chart the path towards the future of education.

In this way, the concept of Planning includes reflecting on the fundamental nature of the organization and deciding how it should be located or positioned in its environment, how its strengths must be developed and used, and how risks and opportunities will be faced. It also includes refining the basic and long-term ambitions, and translating them into more specific and short-term objectives, as well as the methods for their realization (Ramírez *et al*, 2019, p. 14).

With regard to FIME, its mission has as a priority training professionals with ethical principles and values, who are competent, competitive and innovative and are committed to achieving sustainable, scientific, technological and cultural development of society. In addition, it has the purpose of generating timely, relevant and transcendent contributions to the advancement of science, technology, innovation and the humanities, and to improving the level of human development of Nuevo Leon society and the Country. (FIME, 2021)

The academic plant that makes up FIME is made up of: 58 professors who have a bachelor's degree, 393 with a master's degree and 203 with a doctorate degree, which results in a total of 654 professors.

Based on the above, we can emphasize that FIME is a leading Institution concerned with the continuous improvement of its indicators that impact aspects such as Academic Capacity and Competitiveness, which positions it within the most recognized Engineering Schools in the country.

Results

From the documentary analysis we found that: FIME has a Strategic Planning that is reflected in its Development Plan, which is structured based on its Priority Programs, in which the Priority Program stands out: Generation, application and transfer of knowledge for sustainable development; Among the policies are: "2.3 Full-time professors who are registered in the National System of Researchers will be promoted to form part of an Academic Corps cultivating defined and pertinent lines of generation and application of knowledge. Likewise, that the full-time professors who are part of the Academic Corps are registered in the National System of Researchers, preferably at the highest level". (FIME, 2019) (p. 86)

Other policies related to the Academic Corps that are found in the FIME Development Plan are: "2.13 Full-time professors who currently work in the faculty will be promoted to achieve the maximum academic qualification, as an essential aspect for the development and consolidation of the Academic Corps and of the undergraduate, postgraduate and research, innovation and technological development study systems". (FIME, 2019) (p. 86).

In addition, policy 2.15 states that: "it will ensure that the Academic Corps have a medium-term Development Plan that establishes the strategies that must be implemented to achieve their full evolution.

Based on these results and in its commitment to continuous improvement, a module was developed in the Comprehensive Planning System for Educational Services (SPISE) whose purpose is to be a tool that contributes to carrying out a tactical planning exercise for CAs that make up FIME. This system was developed by the Planning Coordination of FIME's Subdirectorate of Planning and Liaison and in its first phase its objective was to prepare Tactical and Operational Planning exercises for the different areas that make up the faculty, which are aligned to the UANL and FIME Development Plan.

In a second phase, the capture module was integrated into SPISE, which allows CA leaders to prepare a planning exercise in order to establish the guidelines so that they can transition to a degree of consolidation. As it is possible to see in figure 1, the user can select between doing his Operational Planning, or AC Planning in the case of being the leader of one.

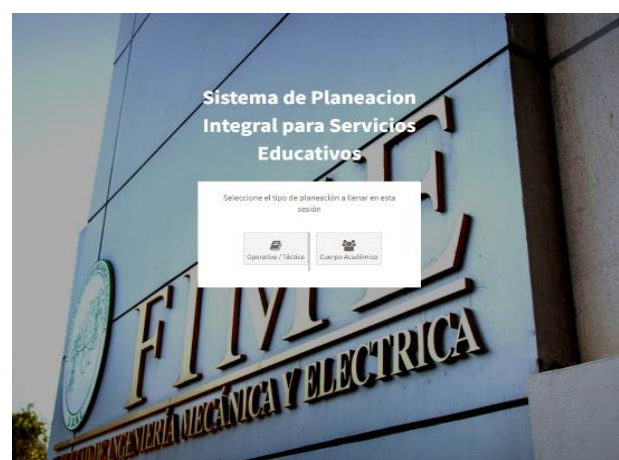


Figure 1 User planning access screen

As shown in Figure 2, on the home page the members of the Academic Corps are listed, as well as the parts that make up the Planning: Diagnosis, Philosophy, Project, Timeline and Development in Prosa. In addition to this, it is possible to identify the research area to which it corresponds, as well as its current and expected status.

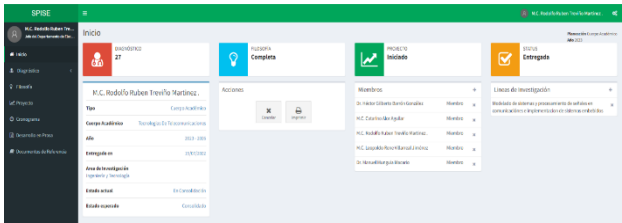


Figure 2 CA Planning Home Page

In figure 3, it is possible to carry out the current diagnosis of the AC by establishing the strengths and weaknesses corresponding to each of its categories. These categories are those established by PRODEP.



Figure 3 Diagnosis of the CA

It has a section that establishes the philosophy of the AC, i.e. its mission and vision, the purpose of which is to give direction to the work of the AC.

Next, the project is created in which the general objective, specific objectives, goals, strategies, actions and resources with which it is planned to achieve the consolidation of the AC are established (figure 4).

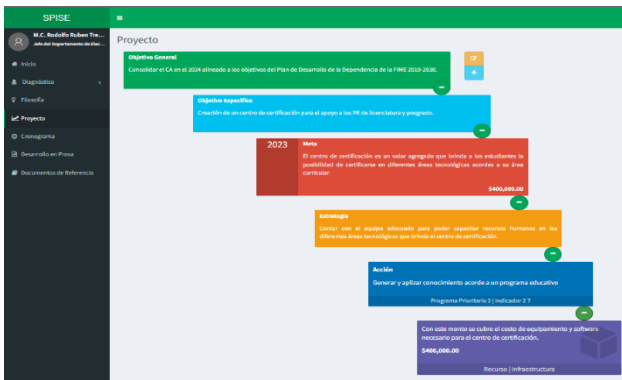


Figure 4 AC Project

Finally, as part of the planning, the project must be developed in prose, which has the following structure: mission and vision of the AC preloaded in the category of philosophy, introduction, justification, methodology and expected results, conclusions and references used.

Since the implementation of the system, 16% of the plans belonging to the different Academic Corps of the faculty have been collected. On the other hand, FIME has managed to increase the number of CA in its different areas of knowledge. The institution has 43 CA, of which 15 are consolidated (CAC), 15 in consolidation (CAEC), and 13 in formation (CAEF).

As can be seen in figure 5 below, the creation and consolidation of ACs has been increasing, which represents an achievement for the institution. And it is thanks to the improvement of substantive actions developed by the PTC, the obtaining of external recognitions, and the entrance to the National System of Researchers (SNI).

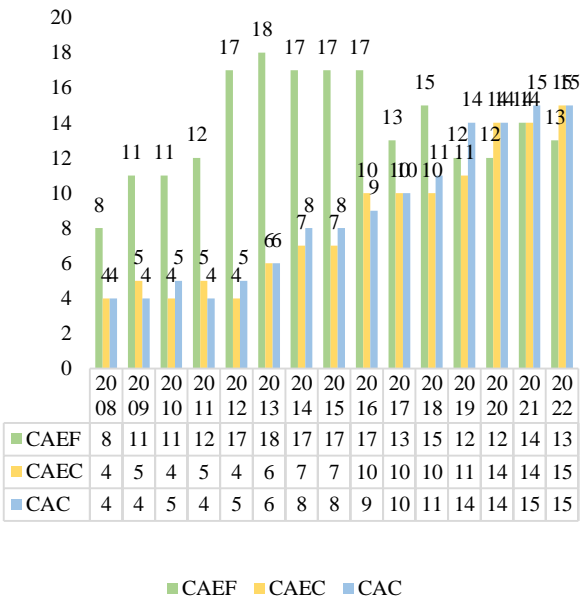


Figure 5 Evolution of the Academic Corps from 2008 to date
Own Elaboration

Conclusions

Undoubtedly, having an Institutional Development Plan that promotes the strengthening of the Institution's Academic Corps, together with the support of administrative areas such as the Sub-Directorate of Planning and Liaison, which has the Strategic Planning and Academic Capacity Coordination Offices, which have worked constantly to design strategies that facilitate the work of the academic and administrative areas of the faculty, as well as the Academic Corps, has allowed the accompaniment for their transition to be successful.

On the other hand, it is worth mentioning the recent adverse periods such as the COVID-19 pandemic, which resulted in a considerable loss of professors, together with the decision of the members of the AC to retire, the changes in governmental educational policies in terms of restrictions on calls and economic stimuli for research may have repercussions on the reduction of the number of ACs in the faculty. In order to face these challenges, FIME, through various strategies established in its Development Plan, will continue to promote the creation and transition of ACs among its professors for the benefit of the educational programmes, which, in turn, favour university education.

A follow-up of the ACs is recommended in order to visualise the degree of consolidation achieved in subsequent calls for proposals.

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