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PARTICIPATORY PLANNING AND INSTITUTIONAL PERFORMANCE OF STATE PUBLIC UNIVERSITIES IN MEXICO

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Abstract: Planning exercises in public state universities in Mexico are subject to institutional performance represented by academic indicators of inputs, processes and results, this exercise is associated with the financing of additional resources and has been carried out since 2001 and has remained for 16 years, However, during the continuity of public policy in higher education institutions, it has been a guiding exercise in planning processes but also exhausting for educational institutions. In this sense, this document presents the evolution and reflection of some indicators of capacity, academic competitiveness and financing of universities in the country that have access to this call for extraordinary resources.

PARTICIPATORY QUALITY IMPROVEMENT PLANNING 2001- 2012

The universities of the higher education system presented a series of lags and their quality indicators were not a high priority in the institutional planning proposals, among which we can mention that most of the educational programs they offered were extremely rigid, the undergraduate programs encouraged early specialization, tended to be exhaustive, with very different durations, lacked intermediate outlets and did not sufficiently address the formation of values and entrepreneurial people, among other aspects, individual or group tutoring programs to support student learning were scarce.

Half of the undergraduate students and around 40 percent of those pursuing postgraduate degrees were able to complete their studies and obtain their degrees, which represented a waste of educational resources for the country and a frustration of legitimate personal aspirations for young people, the time required to obtain a degree or graduation was significantly longer than planned, and in

most institutions the diversification of degree options was scarce and bureaucratic procedures were an obstacle that sometimes prevented students from completing the corresponding procedures (ANUIES, 2000).

It was also recognized the scarce relevance of the curricula to meet the requirements of employment and integral student development, there were deficiencies in the integral formation of students, in terms of knowledge, aptitudes, attitudes, values, cultural and sports activities, the provision of social service was carried out with asymmetries due to the heterogeneity of the regulations on the subject and a set of academic factors, The social service projects were located organically, in almost all cases, in the institutional area of dissemination of culture and extension of services and, in general, they were weakly articulated with the objectives of the educational programs.

Some of the programs organized by the Ministry of Public Education (SEP) and by the public institutions themselves in the 1990s resulted in better preparation of full-time academic personnel, reflected in a growing proportion of professors with postgraduate degrees. However, the number of full time professors with a desirable profile and attached to the National System of Researchers (SNI) was low, the number of consolidated academic bodies was also small and their distribution in the country was insufficient and unequal, in addition to the scarcity of institutional policies and programs to enable them in their teaching tasks (SEP, 2005).

Postgraduate programs were generally of low quality; in fact, a considerable number of postgraduate programs did not have the infrastructure or the appropriate academic personnel to ensure adequate training to face the challenges of national development; collaboration between institutions within and outside the country was minimal due

to the rigidity of educational programs and the lack of coordination instruments between institutions and systems that would encourage the transit of students between different educational modalities and options; and national and international mobility of students and professors was very scarce.

Educational policies implemented since 1990 had influenced the beginning of the culture of evaluation, such as the Inter-Institutional Committees for the Evaluation of Higher Education (CIEES), both in the higher education system and in the institutions that improved their self-evaluation and planning processes; however, these processes were still incipient and not very participatory. The extraordinary support programs that the federal government put into operation for the modernization of higher education (FOMES) in the 1990s made it possible to expand the academic infrastructure of public institutions; however, the proposals that the latter developed to compete for these resources focused mainly on improving the infrastructure to support the delivery of educational programs and the conduct of research activities, with secondary attention to the improvement of educational processes and results (Ramiro, 2010).

Based on the previous references of the context of higher education in the period 2001-2012 during two administrations of the federal government, an educational public policy was proposed to promote participatory planning exercises with a vision of institutional performance according to the context of each university, which should be integrated into a Comprehensive Program for Institutional Strengthening (PIFI). Thus, it emerged as one of the main strategies promoted by the Ministry of Public Education to foster the improvement of the quality of public higher education, which proposed a comprehensive, transparent program of enormous impact, which promotes participatory strategic planning exercises and

in which the main actors of the academic life of public universities are involved and assume commitments to achieve the proposed goals, receiving in return support to improve the quality of educational offerings and university management (SEP, 2001).

ORIGIN AND CONCEPTUALIZATION OF THE INTEGRAL PROGRAM FOR INSTITUTIONAL STRENGTHENING

The enrollment of the higher education subsystem in Mexico grew rapidly during the second half of the 20th century; however, such expansion could not be accompanied until the last decade of the last century by pertinent schemes and means to promote continuous improvement and quality assurance of its academic programs, as a consequence, As a consequence, lags such as those mentioned in the previous section were generated, and in order to face them, starting in 2001 the SEP took on the task of promoting participatory strategic planning in higher education institutions, anchored in the so-called Integral Program for Institutional Strengthening and its financing mechanisms (ANUIES, 2000).

In 2001, as part of the first phase of the planning process, 41 state public universities and related institutions, as well as the Universidad Autónoma Metropolitana, formulated the first version of their respective PIFI, which have been updated annually to promote the periodic analysis of the effectiveness, relevance and sufficiency of their policies, strategic objectives and projects established in their PIFI and to advance towards the fulfillment of their goals and aspirations for institutional improvement.

Between 2002 and 2006, 49 Technological Universities (UTES), 9 Polytechnic Universities (UPOLS), 6 State Public Universities of Solidarity Support (UPEAS) and 4 Federal

Higher Education Institutions were added to the initial group of universities; and from 2007 onwards, 26 UPOLS, 40 UTES and 7 UPEAS were incorporated. Finally, in 2012, 34 State Public Universities (UPES), 19 State Public Universities of Solidarity Support, 72 Technological Universities (UTES) and 35 Polytechnic Universities (UPOLS) had their PIFI (SEP, 2001).

DESCRIPTION AND CONCEPTUALIZATION

The design of the planning model promoted by the PIFI was based on the idea that the provision of high quality higher education requires harmonizing the operation of a series of institutional elements so that academic work can achieve socially significant results. In order for higher education institutions to contribute effectively to the social, scientific, technological, economic and cultural development of the country, it is necessary for them to have significant levels of academic capacity and competitiveness. They must also be characterized by their capacity for innovation, their intense inter-institutional collaboration, their participation in academic networks of state, regional, national and international scope, by the mobility of their professors and students, and by the permanent search for new ways of learning: officials, teacher-researchers, students, administrative staff and collegiate bodies (SEP, 2002; Chehaibar, Díaz and Mendoza, 2007).

This scheme takes up the methodological foundations of strategic planning, adapting them to the organizational culture of public universities, to create a useful approach that seeks to establish in each institution the conditions to promote policies, objectives and strategies aimed at supporting institutional consolidation.

This planning process, whose purpose is institutional academic strengthening, has encouraged the communities of public universities to be the main actors in the process. These communities, in a participatory manner, define the future scenarios they wish to make a reality, establishing goals and proposing pertinent and sufficient actions to achieve them, with the purpose of ensuring the fulfillment of their institutional mission.

Thus, the participation of the different institutional actors is not just one more element within the planning model for formulating and updating the PIFI, but constitutes an essential component and implies a new way of conceiving the development of public universities.

By integrating individual capacities around the institution's strategic objectives, universities seek to overcome inertia and improve their management capacity; the participation of the different institutional actors increases the probability of achieving collectively desired results in order to achieve significant progress; institutional authorities require the support of the community, consensus on the institution's main strengths and problems and on the characteristics of the institutional responses.

In summary, the participation of university communities seeks to promote dialogue, the exchange of information, interaction and the increase of institutional capacities to design, execute and evaluate policies, strategies and projects aimed at the integral strengthening of the university, as well as to recognize and evaluate the results achieved. This dynamic has allowed public universities to promote a strategic management process to advance -through a successive approach- towards the collectively desired future state, thus avoiding the risk of facing a future basically built by inertia (SEP, 2004).

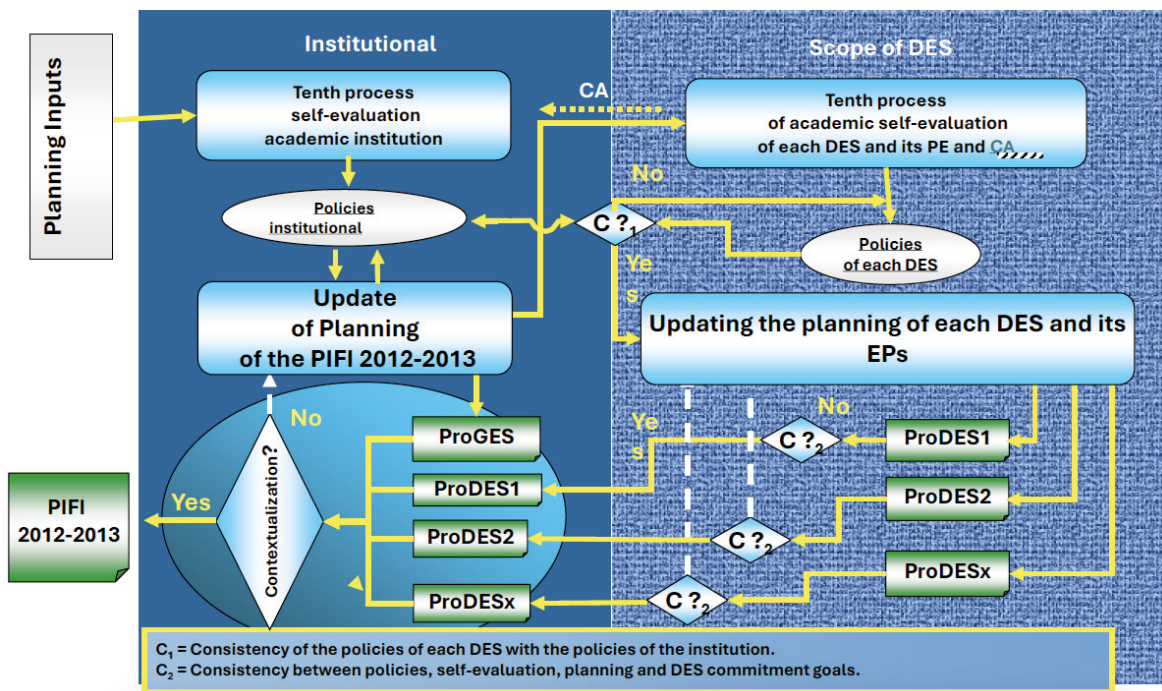


Figure 1 shows the methodological diagram that summarizes the PIFI strategic planning model.

Source: SEP, 2008

GENERAL CHARACTERISTICS OF THE PLANNING PROCESS

SEP (2005) refers to the strategic planning process that has been carried out in public universities to formulate or update their Integral Program for Institutional Strengthening has characteristics such as:

It is adapted to the situation and particularities of each university. The planning process is adapted to each institution, taking into account its current situation and future projection, within the framework of its autonomy and academic freedom.

It is participatory. An outstanding feature of the planning process is that it promotes the institutionalization of participation schemes that involve the members of the central sector headed by the head of the institution (the university's planning groups, the members of the governing bodies of the Higher Education Units -DES-, professors, academic bodies and collegiate bodies).

It is comprehensive. The planning process,

conceptually and operationally, includes the analysis and attention to all aspects directly related to the quality of university functions, which contribute to the achievement of the institutional vision and of each of the DES. Among the main aspects considered are: *academic capacity* (level of faculty training, degree of development achieved by the academic bodies, number of professors with a recognized desirable profile and assigned to the National System of Researchers -SNI-); *academic competitiveness* (quality of educational programs, enrollment in evaluable educational programs recognized for their good quality, operation of tutoring schemes and academic results of students, among others); and *innovation and management* (certification of strategic processes, systematization of information, etc.).

Contributes to the execution of the Institutional Development Plan. Contributes to achieving the objectives of the Institutional Development Plan related to academic capacity and competitiveness, innovation and institutional management.

It contributes to continuous improvement and quality assurance. The planning process focuses on continuous improvement and quality assurance of university functions, particularly educational and management programs, taking as a reference the guidelines, criteria, and information from evaluation and accreditation agencies and the criteria of the ISO 9000 international standard, among other elements.

Its coverage in the higher education system is increasing. The strategic planning process, as a means to improve the quality of higher education, is a *widespread practice* in state public universities, state public universities of solidarity support, technological universities and polytechnic universities. Strategic planning in these subsystems shares common elements, while at the same time it takes into account the characteristics of their respective organizational structures.

It uses the opinions of educational program evaluation and accreditation agencies as inputs. The planning process requires, as a fundamental input for its periodic updating, the evaluation reports formulated by the Inter-institutional Committees for the Evaluation of Higher Education (CIEES) and by the accrediting agencies of educational programs recognized by the Council for the Accreditation of Higher Education (COPAES), as well as the results obtained in the evaluation of the National Quality Graduate Program (PNPC SEP-CONACyT), in the application of the standardized exams of the National Evaluation Center (CENEVAL) and in the National Medical Residency Examination, among others.

The results of the planning process are evaluated by academic peers. These peers are selected by SEP, considering their academic background, professional profile and experience related to institutional planning and evaluation processes.

It includes a feedback stage with the institutions. As part of the cyclical planning process, at this stage each university is informed of the evaluation report of its PIFI and its various components, the recommendations made by the committee of academic peers and the evolution of the values of the indicators of academic capacity and competitiveness; this information has constituted a strategic input not only for self-evaluation, but also for planning; consequently, this phase is at the same time the culmination of one planning cycle and the beginning of another.

It is governed by Operating Rules. The rules constitute a set of provisions that specify how the Program operates, with the purpose of achieving the expected levels of effectiveness, efficiency, equity and transparency. This normative document discloses the Program's target population, the amounts and types of support, the requirements for accessing resources, the obligations acquired by its beneficiaries and the goals sought by the PIFI (SEP, 2006; Comas, 2008).

It has a Guide for its formulation. The integral planning process is aided by a Methodological Guide prepared by the SEP to support the participating institutions; it is a guiding document for those who coordinate and participate in the PIFI formulation process; it is a support for reflection and action that leads to strengthening the strategic planning process.

Based on the evaluation reports, on the progress achieved in meeting the goals, on the timely verification of the exercise of the resources previously allocated and on the financial availability of the extraordinary support funds, the SEP has supported the development of the PIFI through the allocation of resources for the implementation of favorably evaluated projects, in accordance with criteria of impartiality, objectivity, quality and transparency.

ALIGNMENT OF THE INTEGRAL PROGRAM FOR INSTITUTIONAL STRENGTHENING WITH THE OBJECTIVES AND STRATEGIES OF THE EDUCATION SECTOR PROGRAM 2007-2012

The formulation of the Education Sector Program (PROSEDU) 2007-2012 derives from the guidelines established by the National Development Plan 2007-2012 (PND), as well as from a broad national consultation in which numerous institutions, agencies, educational authorities from different levels of government, researchers, students, graduates, the National Association of Universities and Institutions of Higher Education (ANUIES), the Federation of Private Mexican Institutions of Higher Education (FIMPES), the Education Commission of the House of Representatives and other public and private organizations participated.

PROSEDU 2007-2012 proposes to simultaneously face the challenges of quality and equity, promote the evaluation of all actors and processes and promote the use of information and communication technologies as a necessary support. PROSEDU has six strategic objectives. In the area of higher education, the PIFI is aligned with objectives 1, 3, 4, 5 and 6, with the strategies identified in Table 1. As can be seen, the PIFI contributes to the fulfillment of a significant number of strategic objectives, strategies and lines of action of PROSEDU 2007-2012 (SEP, 2007).

SEP has sought, through this strategy, that institutions and their managers, in view of the growing complexity of academic and management work and the indispensable interaction with a constantly changing environment, conceive planning as an effective means to organize internal processes and orient them towards results congruent with a collectively desired and socially significant future. The aim of this strategy is

for institutions to move from formal planning to comply with regulatory requirements and with little effectiveness, to participatory and strategic planning, oriented towards the achievement of relevant goals associated with the objective of reaching higher levels of development and consolidation.

Since the origins of the PIFI, the SEP has promoted that each of the public universities update their planning exercise on an annual basis, with the purpose of promoting the follow-up of the progress achieved, the analysis of the effectiveness, relevance and sufficiency of their policies, strategic objectives, projects and actions established to achieve the vision of the institution and its DES, as well as their goals, likewise, the SEP encouraged the PIFI to incorporate projects that consider, among other aspects (SEP, 2008):

The academic improvement of the faculty and the development of the academic bodies of the DES, as well as their Lines of Generation or Innovative Application of Knowledge (LGAC), the attention to the recommendations made by the Inter-institutional Committees for the Evaluation of Higher Education (CIEES) in order to improve the quality of the institution's educational programs, and in its case, of the academic-administrative management and the accrediting bodies, the updating of study plans and programs and their flexibility, the incorporation of educational approaches focused on student learning, the intensive use of information and communication technologies in educational processes, the improvement of processes and instruments to evaluate learning, individual or group attention to students through institutional tutoring programs, the improvement of student retention rates in educational programs and their timely graduation, the incorporation of students in scientific, technological and outreach activities to strengthen their education, the national and international academic mobility

Objectives	Strategies
I.- To raise the quality of education so that students improve their level of educational achievement, have the means to have access to greater well-being and contribute to national development.	Strengthen the processes of empowerment and improvement of the academic staff.
	Promote the operation of support programs and differentiated attention to students, in order to favor their integral formation and improve their permanence, graduation and timely graduation.
	To contribute to the extension and rooting of a culture of planning, evaluation and continuous improvement of the quality of education in higher education institutions, both public and private.
	Encourage the introduction of innovations in pedagogical practices.
	Promote the internationalization of Mexican higher education and its institutions.
To promote the development and use of information and communication technologies in the educational system to support student learning, broaden their competencies for life and favor their insertion in the knowledge society.	Promote the development and use of information and communication technologies to improve learning environments and processes, the operation of knowledge networks and the development of intra- and inter-institutional projects.
	Promote open and distance education with permanent quality and innovation criteria and standards, with special emphasis on serving regions and groups that lack access to school-based services.
To offer an integral education that balances the formation of citizen values, the development of competencies and the acquisition of knowledge, through regular classroom activities, teaching practice and the institutional environment, in order to strengthen democratic and intercultural coexistence.	Stimulate the participation of teachers, students and the educational community in general in cultural, artistic and sports programs.
	Strengthen the linkage of higher education institutions with their environment, both locally and regionally.
	Promote that students of higher education institutions develop skills and competencies that contribute to facilitate their performance in the different areas of their lives.
To offer quality educational services to train people with a high sense of social responsibility to participate productively and competitively in the labor market.	Strengthen the relevance of higher education programs.
	Strengthen the link between higher education institutions and society through social service.
	Expand the capabilities of the academic staff of higher education institutions to promote the generation and innovative application of knowledge.
To promote school and institutional management that strengthens the participation of schools in decision-making, co-responsibility of the different social and educational actors, and promotes the safety of students and teachers, transparency and accountability.	Strengthen higher education planning and coordination mechanisms and bodies.
	Promote in higher education institutions the planning and formulation of institutional strengthening programs that establish short, medium and long term goals; are built through genuinely participatory processes involving key stakeholders (authorities, researchers and teachers, among others); and are linked to transparent evaluation and accountability exercises.
	Address the structural problems of higher education institutions.

Table 1. Objectives and strategies of PROSEDU 2007 - 2012 with which it is aligned to the PIFI

Source: SEP, 2007

of students and professors, the incorporation of environmental education for sustainable development as part of the student's integral formation, the formation in values as part of the student's integral formation, the integral formation of the student, the strengthening of social service projects, especially those of a community nature, the carrying out of studies to follow up on their graduates and to gather information from employers, the strengthening of links with the different sectors to contribute to the integral formation of students, to facilitate their incorporation into the labor

market, to strengthen their entrepreneurial capacity and to increase the relevance of the education provided by the IES (SEP, 2009; Urbano, Aguilar and Oca, 2004).

Strengthening the institutional capacity to generate knowledge and apply it in an innovative manner, the consolidation of disciplinary niches or areas aimed at building institutional identity, the expansion and modernization of infrastructure to support the work of academic bodies and their students, the adaptation of the organizational structure and institutional regulations, the

training and updating of management and administrative personnel, the development of automated integral information systems for the planning, administration and management of institutional processes, the certification of strategic management processes by the ISO 9001 standard, the development of mechanisms that favor transparency and accountability to society.

GENERAL OBJECTIVES OF THE PIFI

The Program establishes, in its different guidelines from 2007 to 2013, that in the formulation of their proposals, institutions should address the objectives that provide continuity since the origin of the PIFI, such as (SEP, 2007):

Promote and contribute to the improvement and assurance of good quality higher education that trains professionals, specialists and teacher-researchers capable of applying, innovating and transmitting current, academically pertinent and socially relevant knowledge in different areas and disciplines, consolidate in the IES the processes of participatory strategic planning that give rise to schemes of continuous improvement and quality assurance of their evaluated programs and their most important management processes and strengthen that the educational activity in the IES is centered on the effective learning of students and the development of their capacity for lifelong learning.

Consolidate the processes of institutional self-evaluation, external evaluation and continuous quality improvement, in order to maintain the accreditation of evaluated programs at the TSU or Associate Professional and Bachelor's degree levels that have been granted by specialized organizations recognized by COPAES and/or maintain the classification at level 1 of the List of Programs Evaluated by the CIEES. Improve and ensure the quality and permanence of evaluated

graduate programs that have been admitted to the PNPC. Certify, by the International Standard ISO-9000:2008, the academic-administrative processes and consolidate accountability to society on its operation.

THE CYCLICAL PROCESS OF PIFI PLANNING AND DEVELOPMENT

From the birth of the Program until 2012, seven annual and three biennial phases of the planning process have been developed, which have given rise to the formulation, periodic updating and development of the universities' PIFI, even though each of the phases has had characteristic features to promote the comprehensive strengthening of these institutions, in all of them the stages presented in Graph 2 have been followed annually. The repeated practice of each of these stages has generated significant learning that has allowed the annual improvement of the process and its results (SEP, 2012).

MAIN CHANGES AND EMPHASIS OF THE PIFI IN THE PERIOD 2007-2012

During the 2007-2012 period, the PIFI has undergone some changes: biennial planning as of 2008, replications, *on-site* visits, resource allocation through a model based on evaluation results and the consolidation of the e-PIFI system with a new programming platform.

During this same period, new emphases have emerged in order to advance in the process of institutional consolidation, among which the following stand out: training and updating of teaching staff in aspects of didactic and methodological content; the relevance of educational programs and academic services; strengthening and support for programs evaluated in the register of quality graduate programs; promoting national academic cooperation and internationalization; the

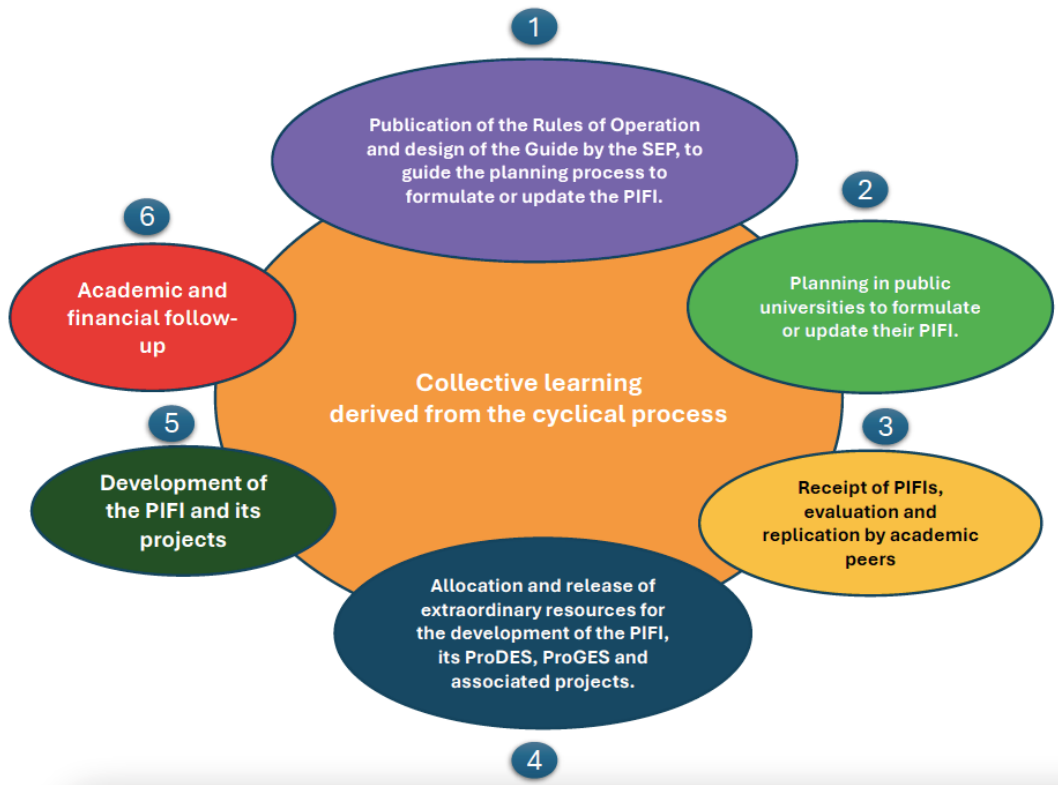


Figure 2. Planning phases

Source: SEP, 2012

promotion of environmental education for sustainable development; the strengthening of links with the environment; the analysis and planning of the EGEL-CENEVAL Undergraduate Examinations; the formation of values as part of the integral formation of the student; and the promotion of a culture of gender equity. Below we briefly review both the changes introduced to the PIFI during the period 2007-2012, as well as the new emphases of the program (SEP, 2012).

MAIN CHANGES IN BIENNIAL PLANNING AS OF 2008

As a result of the learning obtained by the participating institutions in the formulation of their PIFI during seven editions, it was decided to propose, starting in 2008, the first PIFI guide for a biennial period, giving rise in that year to the 2008-2009 PIFI Guide, two years later the 2010-2011 Guide and the last Guide 2012-2013. The right of reply was

incorporated as part of the evaluation process as of PIFI 2008-2009, for PIFI proposals, for this purpose, a new committee is applied when necessary, which re-evaluates these documents, this second opinion replaces the original evaluation, consequently, this becomes the final result, which is unappealable.

Based on the opinion of the group of external evaluators of the PIFI and the reflection of the SEP itself, in 2009 the first follow-up visits to the HEIs were carried out, called *on-site* visits, which were initially carried out on an experimental basis to the 24 largest universities with favorable results in the 2008-2009 evaluation; in the second process of *on-site* visits in 2011, they were carried out in most of the institutions whose opinion was favorable in the evaluation process 2010-2011. Likewise, the objectives of these visits were proposed with emphasis on the evaluators getting to know the institution they have evaluated in greater

detail, which will allow them to have more elements for future evaluations, to deepen their knowledge of the institution's PIFI, as well as its impact on improving its academic and administrative functions, that the visited institution establishes a dialogue with the academic peers, which allows them to clarify their doubts regarding the evaluation report and that the institution has the results of the follow-up visit for its feedback (SEP, 2010).

The results of the visits have been satisfactory; on the one hand, they have allowed the evaluators to get to know and understand the institutions to be evaluated, follow up on their comments and recommendations and apply this reference in the next evaluation; on the other hand, the community of the institutions participating in the Program has been able to hear the evaluators' arguments, their reasons about the result of the evaluation and listen to their recommendations.

INTEGRATION OF FUNDS AND ALLOCATION OF RESOURCES BASED ON A MODEL.

The integration of the FOMES and FIUPEA funds into a single PIFI Fund Starting in 2011, the SEP negotiated with the Ministry of Finance and Public Credit so that the PIFI would have its own resources and would not depend on the FOMES and FIUPEA funds, which have financed the Program since its inception, although they confused the external evaluation institutions and agencies and the auditing agencies. This was a management achievement that makes the Program more operable and avoids wasting time in reporting and accountability.

Since 2007, the allocation of PIFI resources is made through a single model, which contemplates aspects of the comprehensive evaluation of the PIFI of each institution and its elements of the assessment of management projects and Higher Education Unit, among

others, by the Evaluation Committees, contextualized to the dimension and development of each HEI, the evaluation of compliance with the goals-commitment (SEP, 2012). The evaluation of the academic, programmatic and financial goals, established in the PIFI and its component projects, supported in previous years, related to the evolution of the indicators of the educational programs in the process of improvement, the verification of the resources allocated from the previous year, within the established times, the offer of quality postgraduate programs and especially for gender equity projects and day care centers, a specific distribution is made for this type of projects.

CONSOLIDATION OF THE E-PIFI ELECTRONIC SYSTEM

Since the beginning of the PIFI operation, electronic tools have been used to optimize the time for the management of data generated by the program, without which it would be almost impossible to operate it, during the period from 2003 to 2007, data management programs were used that work locally, which resulted in a low level of information integrity, in 2008 the decision was made to restructure the e-PIFI system, The restructuring improved the modules for reception, evaluation and reprogramming, integrating them for the first time in one system, since they were operating separately. In addition, due to the growth in the operation of the program, as contemplated in the Rules of Operation, new modules were developed: Goals-Commitment capture, project capture, uploading and downloading of documents for evaluation, pre-evaluation, evaluation results, evaluation of the replication, evaluation of the "on-site visit, resource distribution, adjustment of allocated amounts, project classification, academic, financial-programmatic follow-up, survey capture and of a new comprehensive approach

to the reprogramming module, as well as the elaboration of online documents in PDF and Excel format of the information contained in the PIFI database (SEP, 2011).

NEW PIFI EMPHASES

During the 2007-2012 period, the PIFI promoted new emphases, with the purpose of continuing to advance in the development of the participating public universities and highlights the *Improvement of the training and updating of the academic staff of the public IES*, initially the PIFI focused the emphasis on the availability of full-time professors (PTC) with qualifications at postgraduate levels, in the 2007-2012 period it was considered important to also attend the rest of the academic staff, promoting and supporting their training, as well as their updating in the contents and didactic-methodological aspects. *Increasing the relevance of educational programs and academic services*. Given the importance of ensuring that the current educational offerings (and the new ones planned to be created in public HEIs) correspond to the vocations and requirements of local and regional development, the PIFI has placed increasing emphasis on this issue. *Strengthen quality graduate education programs*. Since the formulation of the 2008-2009 PIFI, the need for universities to analyze their postgraduate offerings in accordance with the guidelines of the methodology of the National Postgraduate Program of quality SEP-CONACYT (PNPC) and formulate their policies, strategies and actions to improve their offerings at this educational level was emphasized. Since 2010, the integral project of the Higher Education Units supports the strengthening of evaluated postgraduate programs offered in the Higher Education Units with economic resources and a quality incentive policy. This new emphasis has been incorporated into the *Promoting the strengthening of national academic cooperation*

and internationalization” as it recognizes that internationalization is a dimension that Mexican universities must incorporate, establishing international cooperation networks to promote academic exchange, student and academic mobility and the establishment of study accreditation systems, among others (SEP, 2012).

Environmental education for sustainable development has also been promoted. The crisis of non-renewable resources, global warming and, in general, environmental problems make education in this area of utmost importance and, consequently, it is necessary to look for answers in universities to address this situation. In the global economy, it is important *to strengthen the link* between higher education institutions and the social and productive sectors, as well as to establish strategic actions to increase the relevance of higher education and to make a better use of the knowledge generated in the institutions and to develop innovations.

The analysis of the results of the EGEL-CENEVAL exams, as well as the proposals for improvement, as part of the analysis, it is proposed to the institutions the importance of participating in the calls for admission to the list of high academic performance degree programs-EGEL, through the determination of the Academic Performance Indicator by degree program (IDAP), with the attainment of standard 1 or 2 of academic performance.

The promotion of values education is an issue that requires greater attention; therefore, it is important that the institution assigns greater importance to this task, in order to contribute to the integral development of the students. *The attention and integral formation of the student refers* to the quality and its pertinence to the academic capacity and competitiveness that should be reflected in the improvement of the attention and integral formation of the student. *The Culture of gender equity*

among students, academic and administrative staff, this new emphasis was incorporated from 2010, supporting universities to develop a comprehensive project in the field of management to support activities that promote the gender perspective between men and women, as well as the acquisition of materials and bibliography. *Daycare centers and childcare centers*, the Program provides support, starting in 2011, to adapt, remodel and/or equip daycare centers and childcare centers for the children of students who are under their care, which represents an equity support for those students who require this service, can study or continue their studies (SEP, 2012).

PIFI INVESTMENT

The PIFI allocated between 2001 and 2012 to the 34 UPES, 20 UPEAS and 7 Federal higher education institutions (until 2009) a total of \$15,513,667,360.67 (See Table 3). Of that total, \$8,022,448,724.67 was allocated in the 2007-2012 period. Among the universities that have obtained the greatest support, the following stand out: Universidad Autónoma de Nuevo León, with \$883,519,661.67; Universidad de Guadalajara, with \$828,917,747.00; Universidad Autónoma de Yucatán, with \$813,324,226.00; Universidad Autónoma de Baja California, with \$777,766,055.00; Universidad de Sonora, with \$763,561,714.00; and Benemérita Universidad Autónoma de Puebla, with \$732,637,103.00.

The Program has also benefited 68 Technological Universities, with \$287,356,134.00, and 26 Polytechnic Universities, with \$194,021,579.97. Adding the resources allocated to UPES, UPEAS, Federal Universities, Technological Universities and Polytechnic Universities, the PIFI has allocated a total of \$15,995,045,074.64 since 2001 (SEP, 2012).

TYPE OF PROJECTS SUPPORTED

Throughout the period of operation of the PIFI (SEP, 2012), with the \$15,513,667,361.00 granted to UPES, UPEAS and Federal Universities, 17,364 projects have been supported, which are classified according to Table 4 as follows:

By regrouping the 36 types of projects in Table 4 into the main objectives that the PIFI seeks to achieve, there are six major blocks as described in Table 5:

TYPE OF SUPPORTS	AMOUNT
Improvement and quality assurance of educational programs.	\$9,034,188,075
Strengthening of Faculty and Academic Bodies	\$2,722,461,048
Management Improvement	\$2,516,989,826
Comprehensive care and training for students	\$1,240,028,412
TOTAL AMOUNT SUPPORTED	\$15,513,667,361

Table 5. Projects grouped by blocks

As can be seen, the largest amount of resources has been allocated to improving and assuring the quality of the TSU, undergraduate and graduate educational programs, with a total of \$9,034,188,075, which is consistent with the purpose of the PIFI (since it represents its main objective) and with the results achieved in this area.

Also noteworthy is the \$2,722,461,048 pesos that have been allocated to strengthen the profile of the teaching staff and the consolidation of the Academic Bodies. This support is in addition to that granted by the SEP, through PROMEP, to improve academic capacity indicators, once full-time professors reach the postgraduate level.

ACRONYMS	PIFI 2001 -2006	PIFI 2007	PIFI 2008	PIFI 2009	PIFI 2010	PIFI 2011	PIFI 2012	PIFI 2007-2012	TOTAL PIFI
UAA	217,992,630.00	47,413,587.00	49,040,955.00	51,138,157.00	51,942,137.00	52,231,135.00	48,393,134.00	300,159,105.00	518,151,735.00
UABC	364,971,211.00	65,685,820.00	67,629,804.00	70,155,031.00	70,955,255.00	70,908,960.00	67,479,974.00	412,794,844.00	777,766,055.00
UABCS	108,911,210.00	2,316,115.00			2,899,649.00	2,541,440.00	7,510,107.00	15,267,311.00	124,178,521.00
UACAM	59,638,990.00	4,341,925.00	4,420,775.00	4,520,018.00	5,151,070.00	6,180,160.00	6,907,048.00	31,520,996.00	91,159,986.00
IC	0.00		27,814.00	245,621.00	427,867.00			701,302.00	701,302.00
UNACAR	28,053,120.00	2,309,780.00	2,095,649.00	2,165,968.00	2,585,754.00	7,617,814.00	6,771,895.00	23,546,860.00	51,599,980.00
UAC	222,467,210.00	37,259,054.00	37,840,203.00	38,772,199.00	39,934,708.00	41,322,154.00	40,869,763.00	235,998,081.00	458,465,291.00
UAAAN	0.00		639,287.00	1,664,518.00				2,303,805.00	2,303,805.00
UCOL	317,012,140.00	58,442,343.00	59,838,765.00	64,638,344.00	61,277,880.00	58,005,308.00	53,609,395.00	355,812,035.00	672,824,175.00
UNACH	121,138,462.00	1,866,339.00	4,512,618.00	11,941,740.00	15,181,560.00	27,752,546.00	27,158,314.00	88,413,117.00	209,551,579.00
UNICACH	20,775,860.00	4,361,935.00	4,435,679.00	4,528,496.00	5,007,118.00	5,741,084.00	6,347,266.00	30,421,578.00	51,197,438.00
UACH	214,519,570.00	33,574,654.00	34,217,483.00	35,248,396.00	37,564,414.00	42,764,299.00	42,285,215.00	225,654,461.00	440,174,031.00
UACJ	228,740,720.00	16,525,066.00	17,178,933.00	26,695,282.00	28,211,516.00	41,044,289.00	40,525,368.00	170,180,454.00	398,921,174.00
COLECH	0.00						209,043.00	209,043.00	209,043.00
UAM	285,713,154.00	45,173,716.00	47,122,493.00	49,633,897.00				141,930,106.00	427,643,260.00
COLMEX	9,000,000.00	3,642,289.00	3,709,765.00	3,924,438.00				11,276,492.00	20,276,492.00
ENAH	5,727,660.00	1,223,198.00	1,258,052.00					2,481,250.00	8,208,910.00
ENBA	1,822,000.00	731,854.00	761,144.00					1,492,998.00	3,314,998.00
CINVESTAV	0.00		1,955,420.00	4,475,385.00				6,430,805.00	6,430,805.00
UPN	9,250,000.00	1,035,599.00	1,097,473.00	1,175,350.00				3,308,422.00	12,558,422.00
UJED	1,56,828,360.00	34,982,889.00	36,511,600.00	39,981,662.00	40,347,881.00	46,607,904.00	41,609,222.00	240,041,158.00	396,869,518.00
UGTO	198,353,750.00	59,463,101.00	61,218,460.00	63,480,604.00	63,525,563.00	58,429,509.00	52,310,433.00	358,427,670.00	556,781,420.00
UAG	109,015,710.00	1,407,516.00	1,475,570.00	6,397,395.00	9,237,968.00	15,663,800.00	20,027,007.00	54,209,256.00	163,224,966.00
UAEH	320,090,100.00	65,900,727.00	67,709,931.00	70,041,466.00	68,817,391.00	69,152,915.00	56,321,222.00	397,943,652.00	718,033,752.00
UDG	350,566,730.00	73,626,756.00	75,418,342.00	85,727,172.00	79,803,403.00	85,402,416.00	78,372,928.00	478,351,017.00	828,917,747.00
UAEMx	290,351,200.00	57,383,114.00	58,941,932.00	60,950,793.00	63,938,505.00	67,541,597.00	64,938,552.00	373,694,493.00	664,045,693.00
UNEVE	615,000.00	626,818.00	200,000.00	258,132.00	464,469.00	604,632.00	711,519.00	2,865,570.00	3,480,570.00
UNEVEET	0.00				255,509.00	504,950.00	539,558.00	1,300,017.00	1,300,017.00
UMSNH	190,374,450.00	25,591,047.00	26,194,790.00	27,163,019.00	27,522,403.00	38,690,878.00	43,394,159.00	188,556,296.00	378,930,746.00
UCIENEGA	0.00						272,170.00	272,170.00	272,170.00
UAEM	174,918,350.00		3,837,998.00	11,256,207.00	12,238,424.00	20,484,107.00	17,696,739.00	65,513,475.00	240,431,825.00
UAN	94,346,170.00	3,480,628.00	1,000,000.00	1,058,119.00	1,584,672.00	8,137,979.00		15,261,398.00	109,607,568.00

UANL	387,137,325.00	79,503,107.00	81,240,479.00	83,479,445.00	86,003,125.00	85,495,099.67	80,661,081.00	496,382,336.67	883,519,661.67
UABIO	30,527,910.00	1,261,127.00	2,333,598.00	7,574,878.00	8,480,220.00	7,771,975.00	7,381,824.00	34,804,122.00	65,332,032.00
UNPA	1,935,000.00	718,567.00	784,081.00	866,539.00	1,142,297.00	1,261,338.00	1,338,059.00	6,110,881.00	8,045,881.00
UNISTMO	1,709,440.00	629,671.00					632,270.00	1,261,941.00	2,971,381.00
UNISSUR	925,000.00	305,786.00				619,923.00	943,955.00	2,754,204.00	3,679,204.00
UNSIJ	0.00						117,412.00	117,412.00	117,412.00
ACRONYMS	PIFI 2001-2006	PIFI 2007	PIFI 2008	PIFI 2009	PIFI 2010	PIFI 2011	PIFI 2012	PIFI 2007-2012	TOTAL PIFI
UNCA	0.00	2,450,605.00			369,702.00	585,472.00	639,965.00	4,045,744.00	4,045,744.00
UTM	10,609,550.00	484,357.00			774,179.00	985,662.00	1,294,224.00	3,538,422.00	14,147,972.00
UMAR	10,576,470.00	704,673.00	778,105.00	870,529.00	1,320,798.00	1,441,756.00	1,487,877.00	6,603,738.00	17,180,208.00
BUAP	315,190,552.00	64,048,002.00	65,987,419.00	68,486,760.00	70,723,824.00	78,269,303.00	69,931,243.00	417,446,551.00	732,637,103.00
UAQ	214,627,990.00	14,294,912.00	14,841,983.00	21,130,685.00	24,468,466.00	30,307,255.00	33,127,131.00	138,170,432.00	352,798,422.00
UNICARIBE	33,968,440.00	4,445,337.00	6,019,776.00	8,048,767.00	8,185,882.00	8,583,712.00	8,279,934.00	43,563,408.00	77,531,848.00
UQROO	93,136,440.00	10,341,031.00	12,015,670.00	14,173,790.00	14,168,607.00	13,237,827.00	12,369,824.00	76,306,749.00	169,443,189.00
UASLP	318,316,770.00	62,388,429.00	63,899,443.00	65,846,698.00	65,979,030.00	62,581,837.00	57,282,738.00	377,978,175.00	696,294,945.00
UAS	241,180,780.00	37,258,722.00	38,676,060.00	40,502,594.00	44,007,674.00	56,713,581.00	54,258,501.00	271,417,132.00	512,597,912.00
UAIM	2,000,000.00		36,816.00	325,116.00	523,768.00			885,700.00	2,885,700.00
UDO	79,632,841.00	2,249,162.00	3,222,182.00	8,512,304.00	8,669,044.00	16,451,673.00	20,964,882.00	60,069,247.00	139,702,088.00
UNISIERRA	5,767,920.00	2,506,719.00	2,550,172.00	2,688,417.00	2,820,914.00	2,483,664.00	2,043,359.00	15,093,245.00	20,861,165.00
UNISON	346,215,200.00	68,333,441.00	70,165,664.00	72,526,864.00	72,406,627.00	70,097,272.00	63,816,646.00	417,346,514.00	763,561,714.00
ITSON	69,452,740.00	2,070,585.00	2,141,025.00	7,235,415.00	8,368,149.00		13,274,958.00	33,090,132.00	102,542,872.00
CESES	62,250,390.00	4,453,418.00	5,004,263.00	5,887,660.00	6,083,970.00	6,278,685.00	6,653,476.00	34,361,472.00	96,611,862.00
UIAT	153,927,220.00	37,260,888.00	38,659,189.00	40,461,190.00	42,075,854.00	45,698,947.00	43,653,231.00	247,809,299.00	401,736,519.00
UPCH	14,612,190.00	461,130.00			631,067.00	703,090.00	1,043,042.00	2,838,329.00	17,450,519.00
UIAT	155,533,140.00	30,517,614.00	31,110,366.00	32,060,970.00	34,807,659.00	45,625,053.00	42,879,859.00	217,001,521.00	372,534,661.00
UIATx	66,929,840.00	4,349,850.00	4,906,623.00	5,799,527.00	6,416,341.00	15,570,662.00		37,043,003.00	103,972,843.00
UV	301,518,281.00	35,450,957.00	36,065,985.00	37,052,313.00	39,425,376.00	43,595,597.00	42,653,075.00	224,243,303.00	535,761,584.00
UADY	389,928,540.00	69,759,258.00	71,563,800.00	73,889,328.00	73,551,481.00	72,008,621.00	62,623,198.00	423,395,686.00	813,324,226.00
UNO	0.00		37,530.00	331,423.00	717,109.00		830,211.00	1,916,273.00	1,916,273.00
UAZ	82,414,910.00	27,903,451.00	28,557,734.00	29,607,015.00	30,147,834.00	31,214,587.00	33,083,895.00	180,514,516.00	262,929,426.00
TOTAL UPES and UPES	7,491,218,636.00	1,212,516,669.00	1,250,888,898.00	1,364,575,636.00	1,341,764,536.00	1,465,177,084.67	1,387,525,901.00	8,022,448,724.67	15,513,667,360.67
UTNACUAS	3,140,000.00		400,000.00				121,632.71	521,632.71	3,661,632.71
UTACUAS	6,949,230.00	426,720.00	900,000.00			476,357.00	599,153.75	2,402,230.75	9,351,460.75

UTTIJUVANA	1,034,260.00	4,900,000.00	1,155,000.00						1,004,711.00	266,618.80	7,326,329.80	8,360,589.80
UTCAM	2,128,000.00		165,000.00								165,000.00	2,293,000.00
UTRCOAH	900,000.00										0.00	900,000.00
UTCOCAH	11,656,440.00		140,000.00								140,000.00	11,796,440.00
UTTOREON	8,085,370.00		840,000.00						1,554,696.00	1,227,719.34	3,622,415.34	11,707,785.34
UTMANZANILLO	0.00								113,689.00	806,753.48	920,442.48	920,442.48
UTSELVA	1,060,000.00	948,080.00	1,000,000.00						348,302.00	208,039.90	2,504,421.90	3,564,421.90
UTCJ	1,002,000.00	471,307.00	360,000.00						790,655.00	772,935.36	2,394,897.36	3,396,897.36
UTCIH	0.00	613,900.00	710,500.00						1,645,906.00	69,104.27	3,039,410.27	3,039,410.27
ACRONYMS	PIFI 2001-2006	PIFI 2007	PIFI 2008	PIFI 2009	PIFI 2010	PIFI 2011	PIFI 2012	PIFI 2007-2012	TOTAL PIFI			
UTTARAHUMARA	0.00						1,169,917.28	1,169,917.28	1,169,917.28			1,169,917.28
UTDURANGO	0.00						1,262,561.97	1,262,561.97	1,262,561.97			1,262,561.97
UTLAGUNA	0.00						235,485.20	235,485.20	235,485.20			235,485.20
UTSALAMANCA	0.00					1,000,936.00	75,800.52	1,076,736.52	1,076,736.52			1,076,736.52
UTNGTO	0.00	1,571,000.00	1,423,000.00					2,994,000.00	2,994,000.00			2,994,000.00
UTLEON	0.00		870,000.00			2,497,233.00	646,366.40	4,013,599.40	4,013,599.40			4,013,599.40
UTSOGTO	0.00		300,000.00			1,027,767.00	462,934.87	1,790,701.87	1,790,701.87			1,790,701.87
UTCGUERO	0.00		250,000.00				40,381.97	290,381.97	290,381.97			290,381.97
UTRNGUERRERO	0.00		658,500.00			2,878,260.00	2,004,446.06	5,541,206.06	5,541,206.06			5,541,206.06
UTYAMEZQUITAL	3,088,040.00	1,100,000.00	880,000.00			497,733.00	1,102,160.83	3,579,893.83	6,667,933.83			6,667,933.83
UTHHIDALGUENSE	0.00	880,600.00	1,447,000.00			224,923.00	198,905.80	2,751,428.80	2,751,428.80			2,751,428.80
UTTEPEPEJI	12,952,210.00	819,938.00	1,643,000.00			1,484,451.00	617,050.60	4,564,439.60	17,516,649.60			17,516,649.60
UTTUANGINGO	0.00		950,000.00			1,307,841.00	1,497,520.36	3,755,361.36	3,755,361.36			3,755,361.36
UTSHIDALGUENSE	5,187,040.00	78,512.00	170,000.00			747,944.00	519,364.47	1,515,820.47	6,702,860.47			6,702,860.47
UTYALISCO	0.00		1,100,000.00			733,726.00	198,319.03	2,032,045.03	2,032,045.03			2,032,045.03
UTZMGUADALAJARA	0.00	898,968.00	100,000.00			556,843.00	486,942.67	2,042,753.67	2,042,753.67			2,042,753.67
UTFEYELAZQUEZ	0.00		1,265,000.00			971,304.00	1,769,796.21	4,006,100.21	4,006,100.21			4,006,100.21
UTTECAMAC	2,955,720.00		1,100,000.00				231,579.52	1,331,579.52	4,287,299.52			4,287,299.52
UTINEZA	0.00		2,640,000.00				572,847.21	3,212,847.21	3,212,847.21			3,212,847.21
UTSEDOMEX	0.00	515,200.00				423,233.00	170,676.19	1,109,109.19	1,109,109.19			1,109,109.19
UTVOTLUCA	0.00	2,611,000.00	1,100,000.00			970,625.00	239,921.33	4,921,546.33	4,921,546.33			4,921,546.33
UTMORELIA	940,000.00	292,600.00	260,000.00			1,530,790.00	131,961.57	2,215,351.57	3,155,351.57			3,155,351.57
UTEZEMORELOS	0.00		700,000.00			275,308.00	578,188.80	1,553,496.80	1,553,496.80			1,553,496.80

UTCNAVARRIT	0.00		300,000.00					694,071.00	76,557.19	1,070,628.19	1,070,628.19
UTBANDERAS	0.00		465,000.00					365,096.00	82,210.51	912,306.51	912,306.51
UTSERRA	0.00							188,887.91	188,887.91	188,887.91	188,887.91
UTNAVARRIT	0.00	2,100,000.00						744,146.00	117,717.22	2,961,863.22	2,961,863.22
UTGMECOBEDO	0.00								626,514.11	626,514.11	626,514.11
UTSCATARIN	4,722,000.00								100,996.02	100,996.02	4,822,996.02
UTTECAMACHALCO	950,360.00		450,000.00					475,420.00	963,209.66	1,888,629.66	2,838,989.66
UTPUEBLA	2,146,550.00	6,300,000.00	1,490,000.00					1,138,014.00		8,928,014.00	11,074,564.00
UTMATAMOROS	0.00	1,200,000.00	880,000.00					789,544.00	334,739.14	3,204,283.14	3,204,283.14
UTHUEJOTZINGO	416,610.00	1,300,000.00	1,132,000.00					1,900,665.00	794,723.66	5,127,388.66	5,543,998.66
UTTEHUACAN	0.00								1,033,359.87	1,033,359.87	1,033,359.87
UTXUARREZ	0.00	409,505.00	500,000.00					601,079.00	85,562.10	1,596,146.10	1,596,146.10
UTQUEBETARO	1,375,000.00	831,879.00	2,108,200.00					883,965.00	646,016.77	4,470,060.77	5,845,060.77
UTSIRIO	3,671,600.00		980,000.00					633,400.00	315,760.72	1,929,160.72	5,600,760.72
ACRONYMYS	PIFI 2001 -2006	PIFI 2007	PIFI 2008	PIFI 2009	PIFI 2010	PIFI 2011	PIFI 2012	PIFI 2007-2012	TOTAL PIFI		
UTCANCUN	4,586,950.00	3,100,000.00	860,000.00			950,472.00	449,041.96	5,359,513.96	9,946,463.96		
UTRMAYA	0.00	948,080.00				515,476.00	578,341.03	1,093,817.03	1,093,817.03		6,328,621.23
UTSIPOTOSI	5,221,080.00						159,461.23		1,107,541.23		2,084,200.00
UTNOGALES	2,084,200.00								0.00		2,084,200.00
UTHERMOSILLO	15,120,790.00	1,300,000.00	2,243,000.00			403,307.00	695,381.73	4,641,688.73	19,762,478.73		
UTSSONORA	0.00		230,000.00			1,311,698.00	545,705.23	2,087,403.23	2,087,403.23		
UTPEÑASCO	0.00						726,149.08	726,149.08	726,149.08		726,149.08
UTSIRCOLORADO	0.00						824,052.45	824,052.45	824,052.45		824,052.45
UTTABASCO	1,000,000.00	770,000.00	830,000.00			275,861.00	445,488.80	2,321,349.80	3,321,349.80		
UTUSUMACINTA	0.00		470,000.00			1,670,147.00	185,359.76	2,325,506.76	2,325,506.76		
UTTNORTE	1,480,000.00	900,950.00					1,144,582.35	2,045,532.35	3,525,532.35		
UTALTAMIRA	0.00	834,960.00					1,583,058.18	2,418,018.18	2,418,018.18		
UTMBICENTENNIAL	0.00						805,796.60	805,796.60	805,796.60		805,796.60
UTTLAXCALA	6,030,470.00		175,000.00			486,407.00	349,478.33	1,010,885.33	7,041,355.33		
UTSVERACRUZ	0.00		1,494,000.00			341,817.00	1,582,964.91	3,418,781.91	3,418,781.91		
UTCVERACRUZ	0.00	1,700,000.00	2,565,800.00			1,429,397.00	2,538,492.59	8,223,689.59	8,223,689.59		
UTGZAMORA	0.00					3,166,569.00	3,361,374.22	6,527,943.22	6,527,943.22		
UTMYUCATAN	8,051,820.00					274,101.00	694,194.69	968,295.69	9,020,115.69		

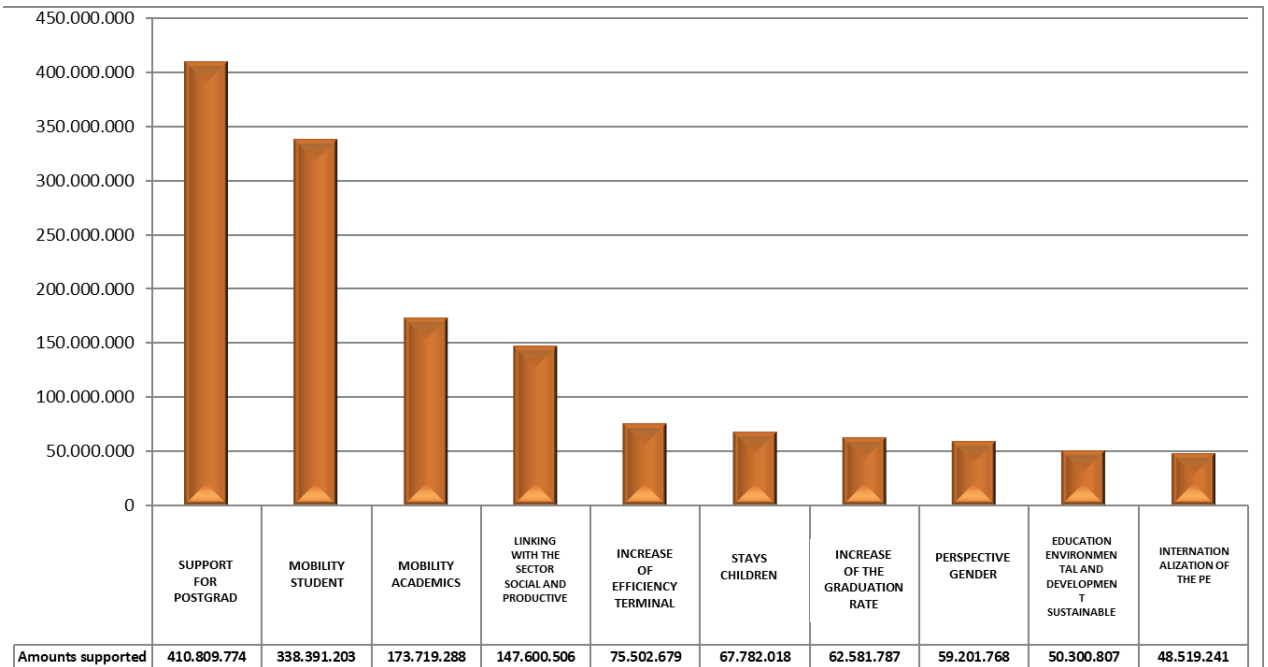
UTRSUR	488,880.00	576,800.00	300,000.00							1,011,442.00	4,535,375.91	6,423,617.91	6,912,497.91
UTZACATECAS	0.00	1,600,000.00								602,035.00	348,512.59	2,550,547.59	2,550,547.59
TOTAL UTES	118,424,620.00	39,999,999.00	40,000,000.00	0.00	0.00	43,727,362.00	45,204,153.00	168,931,514.00	287,356,134.00				
UPAGUASCALIENTES	7,113,230.00									878,163.08	1,122,244.00	3,357,003.08	10,470,233.08
UPBCALIFORNIA	0.00	999,163.00	1,996,000.00									2,995,163.00	2,995,163.00
UPCHIAPAS	0.00	4,829,832.00	6,771,000.00	5,036,701.00	1,057,443.00	1,588,355.38	1,075,890.00	20,359,221.38	20,359,221.38				20,359,221.38
UPDURANGO	0.00	750,968.00	450,000.00	1,370,139.00	528,017.00		3,099,124.00	3,099,124.00	3,099,124.00				3,099,124.00
UPGPALACIO	0.00	1,624,199.00	1,940,800.00		642,186.00		1,041,982.00	5,249,167.00	5,249,167.00				5,249,167.00
UPGTO	0.00		60,247.00	861,503.00	1,779,586.00	1,990,680.39	1,153,347.00	5,845,363.39	5,845,363.39				5,845,363.39
UPROSAS	0.00						920,817.00	920,817.00	920,817.00				920,817.00
UPBICENTENARIO	0.00						899,568.00	899,568.00	899,568.00				899,568.00
UPTULANCINGO	3,800,000.00	1,903,979.00	2,815,000.00	4,109,445.00	2,571,725.00	2,393,414.57	1,170,167.00	14,963,730.57	18,763,730.57				18,763,730.57
UTPACHUCA	6,560,420.00	1,777,982.00	1,092,000.00	2,173,120.00		328,706.68	1,077,003.00	6,448,811.68	13,009,231.68				13,009,231.68
UPPEMADERO	0.00		108,500.00			509,051.61	1,167,580.00	1,785,131.61	1,785,131.61				1,785,131.61
UPMHIDALGO	0.00				864,312.00	1,426,773.98	988,234.00	3,279,319.98	3,279,319.98				3,279,319.98
UPZMGUADALAJARA	0.00		932,000.00		865,609.00	1,229,553.25	830,402.00	3,857,564.25	3,857,564.25				3,857,564.25
UPVMEXICO	0.00	3,189,567.00	3,065,500.00	4,367,458.00	1,693,304.00		1,077,003.00	13,392,832.00	13,392,832.00				13,392,832.00
ACRONYMYS	PIFI 2001-2006	PIFI 2007	PIFI 2008	PIFI 2009	PIFI 2010	PIFI 2011	PIFI 2012	PIFI 2007-2012	TOTAL PIFI				
UPTECAMAC	0.00				1,068,045.00	1,752,758.76		2,820,803.76	2,820,803.76				2,820,803.76
UPMEMORELOS	0.00	2,157,075.00	700,000.00		120,000.00	2,542,243.72		5,519,318.72	5,519,318.72				5,519,318.72
UPPUEBLA	0.00		555,000.00	1,631,389.00	2,079,208.00	2,144,636.71	989,932.00	7,400,165.71	7,400,165.71				7,400,165.71
UPAMOZOC	0.00				622,567.00		1,376,143.00	1,998,710.00	1,998,710.00				1,998,710.00
UPQUERETARO	0.00	1,244,229.00			575,494.00		814,427.00	2,634,150.00	2,634,150.00				2,634,150.00
UPSPOTOSI	38,885,250.00	2,515,497.00	876,000.00		1,819,944.00	902,395.00		6,113,836.00	44,999,086.00				44,999,086.00
UPSINALOA	0.00	1,422,409.00	2,590,000.00	1,974,964.00		513,641.54	1,139,666.00	7,640,680.54	7,640,680.54				7,640,680.54
UPGMEJICO	0.00				757,971.00	1,362,391.56		2,120,362.56	2,120,362.56				2,120,362.56
UPCTABASCO	0.00						1,092,733.00	1,092,733.00	1,092,733.00				1,092,733.00
UPVICTORIA	0.00				1,314,032.00	2,273,314.92		3,587,346.92	3,587,346.92				3,587,346.92
UPTLAXCALA	0.00	585,100.00			862,956.00			1,448,056.00	1,448,056.00				1,448,056.00
UPZACATECAS	3,740,000.00		1,047,953.00		1,445,724.00	1,163,918.82	1,436,104.00	5,093,699.82	8,833,699.82				8,833,699.82
STOTAL UPOLS	60,098,900.00	23,000,000.00	25,000,000.00	21,524,719.00	22,024,719.00	22,999,999.97	19,373,242.00	133,922,679.97	194,021,579.97				
TOTAL IES PIFI	7,669,742,156.00	1,275,516,668.00	1,315,888,898.00	1,386,100,355.00	1,363,789,255.00	1,551,904,446.64	1,452,103,296.00	8,325,302,918.64	15,995,045,074.64				

Table 3. List of amounts allocated to UPES, UPEAS, Federal IES, UTES and UPOLS with PIFI resources.

Type	Type of projects	PIFI 2011-2006		2007-2012		2001-2012	
		Project	Amounts	Project	Amounts	Project	Amounts
1	TUTORING SCHEMES	366	325,319,168	291	109,448,663	657	434,767,831
2	APPLICATION OF LEARNER-CENTERED OR LEARNER-FOCUSED APPROACHES	216	312,409,848	550	475,672,166	766	788,082,014
3	E-LEARNING	27	62,150,070	47	67,833,224	74	129,983,294
4	INCORPORATION OF NEW TECHNOLOGIES	93	192,207,260	288	400,196,564	381	592,403,824
5	STRENGTHENING THE PROFILE OF FACULTY AND ACADEMIC BODIES	792	726,976,686	1795	1,214,453,923	2,587	1,941,430,609
6	IMPROVEMENT AND QUALITY ASSURANCE OF EDUCATIONAL PROGRAMS	1,900	2,729,089,167	1100	968,275,689	3,000	3,697,364,856
7	LIBRARY STRENGTHENING	201	895,759,728	195	474,954,666	396	1,370,714,394
8	ALUMNI FOLLOW-UP	86	48,997,599	109	48,062,849	195	97,060,448
9	CURRICULAR FLEXIBILITY	242	294,311,680	121	103,839,651	363	398,151,331
10	INFRASTRUCTURE AND EQUIPMENT	379	1,145,275,959	683	906,002,996	1,062	2,051,278,955
11	ADAPTATION OF REGULATIONS AND MANAGEMENT IMPROVEMENT	386	631,656,555	197	110,880,776	583	742,537,331
12	ACADEMIC MOBILITY			215	173,719,288	215	173,719,288
13	CONSOLIDATED AND CONSOLIDATING ACADEMIC BODIES	1,882	127,064,915	1980	371,981,903	3,862	499,046,818
14	POSTGRADUATE SUPPORT			595	410,809,774	595	410,809,774
15	CERTIFICATION OF MANAGEMENT PROCESSES			139	85,372,403	139	85,372,403
16	UPDATING OF CURRICULA			179	132,645,205	179	132,645,205
17	STUDENT MOBILITY			476	338,391,203	476	338,391,203
18	SELF-ACCESS CENTERS			35	32,369,435	35	32,369,435
19	LINKAGE WITH THE SOCIAL AND PRODUCTIVE SECTOR			195	147,600,506	195	147,600,506
20	IMPLEMENTATION OF INSTITUTIONAL ADMINISTRATIVE INFORMATION SYSTEMS			150	156,142,669	150	156,142,669
21	COMPREHENSIVE STUDENT CARE			334	247,682,421	334	247,682,421
22	COMPETENCY-BASED EDUCATIONAL PROGRAMS			61	65,369,012	61	65,369,012
23	ATTENTION TO SOCIAL SERVICE			45	27,797,433	45	27,797,433
24	INTERNATIONALIZATION OF THE			44	48,519,241	44	48,519,241
25	ACADEMIC NETWORKING			129	108,264,332	129	108,264,332
26	INSTITUTIONAL CONNECTIVITY			75	150,143,444	75	150,143,444
27	INCREASE IN THE GRADUATION RATE			79	62,581,787	79	62,581,787
28	RESEARCH LABORATORY EQUIPMENT			216	302,307,238	216	302,307,238
29	INCREASE IN TERMINAL EFFICIENCY			133	75,502,679	133	75,502,679

30	INCORPORATION OF A SECOND LANGUAGE			30	14,295,220	30	14,295,220
31	PROMOTION OF THE GENDER PERSPECTIVE			140	47,122,183	140	47,122,183
32	GENDER LIBRARY			62	12,079,585	62	12,079,585
33	ENVIRONMENTAL EDUCATION AND SUSTAINABLE DEVELOPMENT			65	50,300,807	65	50,300,807
34	NURSERY SCHOOLS			22	67,782,018	22	67,782,018
35	STUDENT RETENTION			18	13,320,473	18	13,320,473
36	PROMOTION OF CULTURE			1	727,298	1	727,298
TOTAL AMOUNTS		6,570	7,491,218,636	10,794	8,022,448,725	17,364	15,513,667,361

Table 4. Classification of amounts by type of project



Amount allocated to projects related to the new PIFI emphases, 2007-2012.

Indicator	Number			Percentage		
	2002	2006	2012	2002	2006	2012
PTC	22,987	27,274	32,032			
PTC with postgraduate degree	14,151	20,589	28,324	61.6	75.5	88.4
Population of PTC with Ph.	3,421	6,690	12,673	14.9	24.5	39.6
PTCs attached to the SNI	1,778	2,981	5,594	7.7	10.9	17.5
PTC with PROMEP Profile	5,556	7,321	16,269	24.2	26.8	50.8
CA in formation	2,159	2,282	1,366	91.5	77.4	49.2
CA in consolidation	167	479	862	7.1	16.2	31.0
Consolidated CA	33	189	551	1.4	6.4	19.8

Table 6. Evolution of academic capacity indicators in UPES and UPEAS

Source: PROMEP Academic Coordination, 2012.

According to the new PIFI emphasis, in the 2007-2012 period, the types and amounts of projects shown in Graph 4 stand out. In the first place, the support granted to graduate programs recognized by the National Quality Graduate Program (PNPC SEP-CONACyT), with 410.8 million pesos (see Graph 3); likewise, the support assigned to student and academic mobility, with 338.4 and 173.7 million pesos, respectively (SEP, 2012).

The most important items of expenditure in the amounts allocated by the PIFI in the period 2007-2012 to the various projects are the \$2,826,157,483.30 for academic infrastructure that has been channeled for the acquisition of computer equipment, updating of laboratory equipment, renovation of classroom and library furniture, multimedia equipment for educational innovation, among others, which have a direct impact on improving the quality of educational programs, and the \$2,421,075,375.48 that have been granted for services, which support the concepts of transportation, lodging and meals for professors, students and visiting scholars, who carry out national and international academic mobility, as well as attendance at international academic events.⁴⁸ that have been granted for the item of services, which support the concepts of transportation, lodging and meals for professors, students and visiting scholars, who carry out national and international academic mobility, as well as attendance to academic events (congresses, seminars, symposiums, academic network works, among others), aspects that have an impact on the consolidation of the academic plants of the universities and reinforce the comprehensive training of students (SEP, 2013).

ACADEMIC CAPACITY AND COMPETITIVENESS IN UPES AND UPEAS 2002, 2006 AND 2012

Society demands that public institutions of higher education train their students integrally and that their graduates contribute to the social, economic, political, cultural, technological and scientific development of the country. It also expects its educational programs to be recognized for their good quality and that the knowledge acquired by students is certified as a guarantee of the training received.

In all these cases, universities are required to have the highest level of academic staff. Table 6 shows the evolution of the academic capacity indicators of UPES and UPEAS in the period from 2002 to 2012, with emphasis on the period 2007-2012, it is observed in all cases significant improvements in the last period (SEP, 2013).

Full-Time Professors (PTC) registered in the PROMEP of UPES and UPEAS totaled 22,987 effective in 2002; the figure rose to 27,274 in 2006 and 32,032 in 2012, the number of PTC with postgraduate degree amounted to 14,151 in 2002 (61.6% of the total number of PTC), in 2006 it rose to 20,589 (75.5%) and in 2012 to 28,324 (88.4%), the number of PTC with PhD was 3,421 in 2002 (14.9% of the total number of PTC). In 2006 the figure rose to 6,690 (24.5%) and in 2012 to 12,673 (39.6% of the total number of PTC), the number of PTC attached to the SNI stood at 1,778 in 2002 (7.7% of the total number of PTC); in 2006 it increased to 2981 (10.9%) and in 2012 to 5,594 (17.5%), PTC with PROMEP profile increased significantly in the period: 5,556 in 2002 (24.2% of total PTC), 7,321 in 2006 (26.6% 26.8%) and 16,269 in 2012 (50.8%), The number of Consolidated Academic Bodies (CAEC) in 2002 was 167 (7.1%), 479 in 2006 (16.2%) and 862 in 2012 (31.0%), the

number of Consolidated Academic Bodies (CAC) increased from 33 in 2002 (1.4% of the total Academic Bodies registered in the PROMEP) to 189 in 2006 (6.4%) and 551 in 2012 (19.8%).

EVOLUTION OF ACADEMIC COMPETITIVENESS INDICATORS 2003, 2006 AND 2012

The main results of the academic competitiveness indicators (SEP, 2006) in 2003 there were a total of 458 educational programs recognized for their good quality at the TSU and bachelor's level (28.6% of the total number of evaluable educational programs at this level); their number rose to 921 in 2006 (52.2%) and to 1,657 (79.7%) in 2012. The enrollment associated with good quality educational programs at the TSU and bachelor's level in 2003 was 218,504 (34.3% of the total evaluable enrollment at this level), 439,952 in 2006 (62.6%) and 792,750 in 2012 (90.1%) see Table 7.

Since 2008, when the strengthening of good quality graduate education programs was incorporated as a new emphasis in the PIFI, there has been significant growth in UPES and UPEAS. The number of graduate-level educational programs recognized by the PNPC increased from 457 in 2008 (22.3% of the total number of graduate programs) to 840 in 2012 (36.6%). Of the 1,583 quality graduate programs recognized by the PNCP, a little more than half (53.1%) are offered at UPES and UPEAS (SEP, 2009).

ADVANTAGES AND DISADVANTAGES FROM THE PERSPECTIVE OF THE EDUCATIONAL INSTITUTIONS REGARDING THE OPERATION OF PIFI

Educational institutions highly value the role of PIFI in improving the quality of public higher education. According to the content of the interviews conducted with representatives of educational institutions, the PIFI is considered a strategic program. According to them, PIFI has allowed educational institutions to focus on performance evaluation, both academic and managerial, based on results and quality indicators, some other advantages, benefits and disadvantages perceived by the institutional representatives mentioned below:

The advantages of the PIFI are that it has strengthened the culture of planning-evaluation-budgeting, it promotes strategic planning, both at the individual level of professors, as well as collegial (CA) and university managers at all levels to achieve the objectives of improving academic quality and management, In short, it has contributed to the establishment of a culture of planning and evaluation for the achievement of quality, and has succeeded in sowing in the university community the paradigm of the culture of teamwork, continuous improvement, performance evaluation and accountability, It has established planning based on the fulfillment of commitment goals, an aspect that has been incorporated in the fulfillment of the Institutional Development Plans (PDI), has allowed the organization and systematization of institutional information, established a common language among the university community to refer to the continuous improvement of quality, making use of the concepts of indicators of capacity, competitiveness, management and some others referring to academic results, and links to other strategic programs for the

Indicator	Number			Percentage		
	2003	2006	2012	2003	2006	2012
Good quality undergraduate and graduate programs	458	921	1,657	28.6	52.2	79.7
Enrollment associated with good-quality undergraduate and graduate programs.	218,504	439,952	792,750	34.3	62.6	90.1

Year	State public universities and solidarity-supported universities						National PNPC	
	PNP		CBP		PNPC		No.	%
	No.	% of national total	No.	% of national total	No.	% of national total		
2008	275	36.3	182	57.9	457	42.7	1,072	100.0
2009	273	36.3	186	50.1	459	42.9	1,069	100.0
2010	287	37.4	339	63.2	626	48.0	1,304	100.0
2011	239	34.4	401	63.9	640	48.4	1,322	100.0
2012	246	34.7	594	68.5	840	53.1	1,583	100.0

Table 7. Evolution of good quality PE of TSU and Licenciatura and their associated enrollment in UPES and UPEAS 2003 - 2006 - 2012.

Source: Directorate of Planning and Statistics of the General Directorate of University Higher Education, 2012.

achievement of quality in higher education: PROMEP, SNI and PNPC SEP - CONACYT, among others, the biennial update from the year 2008 gave oxygen to the universities to properly guide the execution of resources, the feedback from expert peers in situ has become an important input for continuous improvement processes, allowed the closing of gaps between educational programs and greater empowerment of the academic staff, labeling resources to support teaching, research, liaison and management activities, complementary to the regular budget, allows the achievement of institutional objectives and DES .

In addition, the PIFI has allowed resources to reach centrally the spaces where academia is carried out, which has generated confidence in the program among academics, students and directors of the schools and faculties that make up the DES, incorporated the culture of financing extraordinary resources based on results oriented to quality improvement, obtaining financial resources based on quality improvement, has expanded and improved the quality of the services that universities offer to society, which would have been difficult to achieve with ordinary resources alone (Díaz, 2008).

The disadvantages expressed by the institutions are that very broad expectations are generated by the DES and institutional management to address the areas of opportunity detected, however, it is not always possible to overcome them due to the insufficient resources granted, too much time is invested by academics and university directors in the management of resources, there is no congruence between the resources received and the institutional wear and tear that means to elaborate, execute and manage the projects and report the results obtained, the change of criteria during the exercise of resources, either for the processes of capture, filling of formats, presentation of information, interpretation of indicators, generate confusion and discouragement in the personnel involved in the execution of the resources, the Rules of Operation are increasingly rigid because they do not allow modifications to be made according to the change of situations and academic circumstances, The Rules of Operation are increasingly rigid because they do not allow modifications to be made as situations and academic circumstances change, which is very common in the three

substantive functions of a university, the exercise has been bureaucratized due to the excessive integration and presentation of reports and/or reports, a lot of time is spent on filling out various forms, particularly in relation to the review and authorization of transfer requests for the use of carryovers and the reprogramming from one activity to another. In addition, it does not allow flexibility in financial execution, unlike other national funds, which are also mostly based on PIFI indicators, the reprogramming process is excessive in the request for the detail of the description of the movable property or service, for the use of approved resources, the transfer of financial resources from the Program is not made directly to the University, inadequate planning for the release of the e-pifi system modules and insufficient time for its operation (SEP, 2011).

CONTINUITY AND PERMANENCE OF EDUCATIONAL QUALITY PROGRAMS 2013-2014

During the change in educational policy, the integral program for institutional strengthening was continued with a change of name at two points in time by the SEP, as described in the following section.

PROGRAM TO STRENGTHEN THE QUALITY OF EDUCATIONAL INSTITUTIONS (PROFOCIE) 2013-2014

In objective 3.1, goal 3 of the National Development Plan establishes the theme of *Mexico with Quality Education and Developing the human potential of Mexicans with quality education*. It also states in strategy 3.1.3 the need to *Ensure that study plans and programs are relevant and contribute to students' successful progress in their educational trajectory, while developing meaningful learning and competencies that*

will serve them throughout their lives. On the other hand, the National Education Program (PSE) 2013-2018, describes the objectives 1 and 2, to *ensure the quality of learning in basic education and the comprehensive training of all groups of the population and strengthen the quality and relevance of higher secondary education, higher education and training for work, in order to contribute to the development of Mexico*. In addition, strategies 2.3 and 2.5 of *Continuing the development of mechanisms for quality assurance of higher education programs and institutions, strengthening the relevance of job training, secondary and higher education to respond to the country's requirements* are also addressed (SEP, 2013).

The objective of PROFOCIE was to contribute to strengthening the quality and relevance of upper secondary and higher education and job training, through quality educational programs with the following emphasis (SEP, 2014):

Consolidate the processes of institutional self-evaluation, external evaluation and continuous quality improvement, promote and contribute to the improvement and assurance of quality higher education that trains higher technicians, professionals, specialists and teacher-researchers who contribute to the knowledge society by applying, innovating and transmitting current knowledge, consolidate in the State Public Universities (UPES) and Solidarity Support Universities (UPEAS), academic organizational structures and participatory strategic planning processes that give rise to continuous improvement and academic quality assurance schemes.

It should be noted that the purposes of the proposals supported in their planning exercises and projects of the UPES and UPEAS, represented a continuity in the topics with minimal variations such as: achieving and maintaining the accreditation of the Higher University Technical and Bachelor's

degree educational programs by organizations recognized by COPAES and CIEES, improving and ensuring the quality and permanence of the postgraduate educational programs that were admitted to the PNPC, certifying the academic-administrative processes and consolidating accountability to society regarding their operation.

The structure of the document gives continuity to a methodology to strengthen the strategic and participatory planning capacity of public higher education institutions and improve the quality of their educational programs and management processes, in a comprehensive, transparent and high-impact program that involves the main actors in the academic life of public universities and *assumes commitments to meet the proposed goals*, receiving in return financial support to improve the quality of educational offerings and university management. The strategy sought that the different areas that make up the institution share the same vision and mission, that they harmonize their academic and institutional development strategies, that they make better use of their resources and that they orient their efforts in the same institutional direction, in the updating processes, a deep and participative self-evaluation is required at the three institutional levels, Higher Education Units and Academic Bodies and Educational Programs.

During the self-evaluation, the assessment of the educational programs and academic bodies of each of the DES was integrated and the prioritized and integrated actions were established for each DES and projects associated with each proposal of the institutions, as well as the commitments assumed by the universities in the goals-commitment, at the institutional level and for each of its DES.

Once the process of formulating the ProDES and ProGES was completed and their consistency evaluated by the institution, they should be clearly contextualized and as the university intended to improve and ensure the quality of its educational programs and strategic management processes. In this sense, the projects within the framework of the ProDES and ProGES were characterized by a careful scheduling of their actions and resources requested to achieve compliance with the institutional and DES commitments within the planned timeframe and to advance in closing the quality gaps within the DES and among the DES.

In this exercise, the consistency in the contextualization in congruence with the policies, objectives, strategies and actions of the institution and commitment goals associated with the projects proposed in the management and DES, avoiding duplicities, as well as optimizing resources were assessed.

As in previous years, a follow-up exercise is complemented with an on-site visit that allowed the evaluators to meet the evaluated institutions, follow up on their comments and recommendations and apply this reference in the next evaluation, in this sense, the institutions participating in the Program have been able to hear the arguments of the evaluators, their reasons about the result of the evaluation and listen to their recommendations and established a dialogue with the academic peers, professors, students and managers of the institutions (SEP, 2013).

PROGRAM TO STRENGTHEN THE QUALITY OF EDUCATION (PFCE) 2016-2017

In this proposal of continuity with the educational public policy as established by the PSE 2013-2018 to *contribute to strengthen the quality and relevance of basic education, higher education and training for work, through the strengthening and implementation of plans and programs of study*, in accordance with the in the management of extraordinary competitive resources particularly in the PFCE 2016-2017, the integration of the proposals of the academic and management planning process presented by the institutions was changed, whose objectives are the achievement of educational quality and of the services offered by the Public Higher Education Institutions from the different areas that constitute the university work, designing policies, objectives, strategies, projects and results indicators that allow protecting the institutional strengths and addressing the main problems and influencing the achievement of the quality of the Educational Programs (SEP, 2016).

In the planning process they carried out, it was necessary to conduct a comprehensive and in-depth analysis on the progress achieved from 2013 to 2016 in strengthening institutional academic capacity and competitiveness and the current academic and management situation whose purpose was to identify the actions to be developed to achieve the objectives of the Institutional Development Plan and the quality indicators to be established for the period 2016-2018, with the resources allocated to this Fund in the Federal Expenditure Budget 2016 and 2017, and will be financed in the projects favorably ruled by the Evaluators Committees formed by the SEP.

The objectives established in PFCE 2016-2017 are to promote and contribute to the improvement and assurance of quality higher

education that trains higher technical personnel, professionals, specialists, professors and researchers who contribute to the knowledge society by applying, innovating and transmitting current, academically pertinent and relevant knowledge in different areas and disciplines, with social responsibility. Consolidate in the UPES, UPEAS, academic organizational structures and academic strategic planning processes and institutional management that lead to continuous improvement and academic quality assurance schemes in response to the issues of achieving and maintaining the accreditation of university technical and undergraduate educational programs that have been granted by agencies recognized by COPAES and CIEES, improve and ensure the quality and permanence of graduate educational programs that achieved their entry to the PNPC, and institutional management and administration, certify academic-administrative processes and accountability to society for their operation, strengthen educational models focused on student learning and the development of their capacity for lifelong learning, achieve the vision and goals set by the IES in their Institutional Development Plan, meet the academic recommendations of external evaluation and accreditation agencies recognized by the SES (CIEES, COPAES, CONACyT, CENEVAL).

Promote curricular relevance and flexibility, based on the results of graduate and employer follow-up studies, increase the number of PTC with a desirable profile and members of the SNI/SNCA, contribute to the consolidation of the CA recognized by the SES of the SEP, promote and strengthen the internationalization of higher education, educational innovation and the integral formation and values of students, promote environmental education for sustainable development through the educational offer related to the environment, optimize the systems and instruments

of the IES for the evaluation of the learning achieved by the students, strengthen the institutional programs of accompaniment to the students for their permanence, graduation, graduation and timely graduation, strengthen the linkage of the IES with the social and productive environment, review and, if necessary, adapt institutional regulations in accordance with their continuous improvement processes, expand and modernize comprehensive information systems and the academic infrastructure of laboratories, workshops, pilot plants, foreign language centers, computer centers and libraries in accordance with the academic model, consider structural reforms in the IES that have an impact on improved institutional functioning and viability, promote a cross-cutting policy of gender equality among administrative staff, professors and students as well as in the educational processes, promote the strengthening, together with CONACyT and the other founding HEIs, of the Consortium that seeks to optimize resources so that the participating HEIs benefit from access to databases and electronic journals, with the purpose of promoting digital culture and access to knowledge (SEP, 2016).

The emphasis of the PFCE 2016-2017, is integrated with priority issues in coverage with equity, i.e. the opportunity to access higher education represents a clear cause of inequity, which is manifested in unequal coverage by state, in low number of graduates and an even lower number of doctoral students, flexible and comprehensive study programs in support of young people who drop out or do not enter higher education because the teachings in higher education do not respond to the current context and because young people are forced to choose a career when they have little information, relevant teachings and in real contexts one of the frequent causes for dropping out of studies and for irritation among graduates

is the poor relationship that is perceived between, information and communication technologies have transformed the world and education, their potential to improve teaching and accelerate learning is very great, yet their penetration in Mexican higher education is just beginning, The internationalization of universities and higher education systems has always reflected the quality of some and vice versa, and internationalization is a factor that contributes to raising the quality of educational institutions and systems.

In the linkage between HEIs and the productive, social and governmental sectors, which have an impact on the development of the country and the linkage actions are strategic because they contribute to the integral formation of the student, to the increase of employability conditions and entrepreneurial capacity, to the social relevance of higher education and in obtaining greater income for the educational sector and to its social and economic development, in gender equality, educational institutions act directly in the construction of a culture that can potentially change or perpetuate forms of thought and social action to maintain them hierarchical or to influence their transformation, Finally, it is important to continue strengthening or establishing institutional mechanisms to report on the fulfillment of social commitments, transparency and proper management of resources allocated to the institution and the dissemination of the accreditation of educational programs, timely reports on compliance with performance indicators, the use of public resources received, the results of external audits conducted by firms registered with the Ministry of Public Administration, among other actions.

EVOLUTION OF INSTITUTIONAL PERFORMANCE INDICATORS 2006-2015.

This section describes the years 2006 to 2015 in which UPES and UPEAS have participated at the national level.

Full-time professors during 2006 was 26031 registered in PRODEP of UPES and UPEAS and increased to 35387 (36%), in the case of PTC with PRODEP profile in 2015 rose to 30348 (289%) with respect to 2006, PTC with doctorate between 2006 to 2015 rose to 15833 (144%), the indicator that represents a greater challenge for the institutions is the National System of Researchers and represents an increase from 3093 in 2012 to 8726 (168%) in this period (see graph 4).

In the following graph 5, represents the gender participation of professors who collaborate in the institutions as part-time, so the differences are becoming smaller between men and women, i.e. between 2006 were 28215 to 2015 are 33386 men, representing a growth rate of 18% and in the case of women in 2006 there were 15157 and in 2015 amounted to 22466 transit to 48% of women professors participating in higher education institutions.

The number of Full-Time Professors (PTC) registered in the PROMEP of UPES and UPEAS totaled 26031 in 2006; the figure rose to 35387 in 2015, which represents a growth rate to 2015 of men (27%) and women (53%), which is shown in Figure 6, the increasing participation of female professors.

Regarding full-time professors with doctorate degrees in UPES and UPEAS institutions represented 6481 in 2006 and 15833 in 2015, so the growth rate to 2015 was women 200% and men 120%, it should be noted that the training with doctorate degrees was significant in the gender issue see graph 7.

In graph 8, represents the full time professors attached to the SNI stood at 3093 in 2006 and in 2015 increased to 8276, however

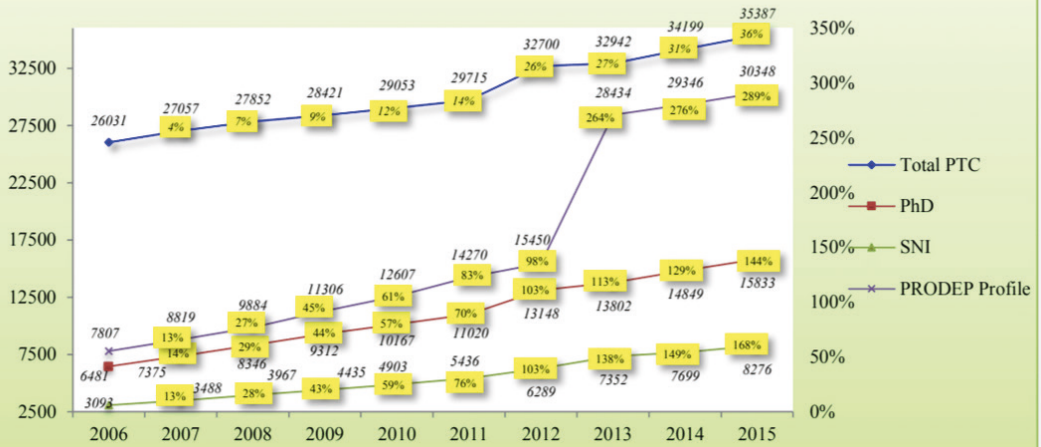
when disaggregating the data by gender it is important to highlight the growth rate in 2015, in the case of women who achieved this membership rose 3102 (262%) and men with 5174 (131%) with respect to the year 2006.

Graph 9 shows the number of full-time professors belonging to PROMEP in 2006 was 7807 and in 2015 there are 30348 in total, however when separated by gender there is a growth rate in 2015 of 159% (7364) and men 363% (22984) with respect to 2006, it should be noted that the program changed its name to PRODEP in 2013.

Graph 10 shows the growth rate of quality enrollment in 2006 was 466235 and in 2015 it was 833148; however, the challenge for institutions in the area of academic competitiveness is to maintain and evaluate new educational programs that can be evaluated at the TSU and bachelor's degree levels. On the other hand, postgraduate programs incorporated to the PNPIC in 2015 had a significant growth rate of 656%.

Graph 11 shows the data of the financing allocated 1,104,256,030.01 pesos in UPES and UPEAS institutions, in 2645 projects and in 2015 450,701,321.0 pesos in 499 projects, which represents a negative growth rate (-0.59) with respect to 2006, highlighting the economic crisis that the federal government administration is going through and the drop in the price of oil, since it is part of the subsidy provided to social programs such as the higher education system, it is also clarified that the PIFI program changed to PROFOCIE in 2013.

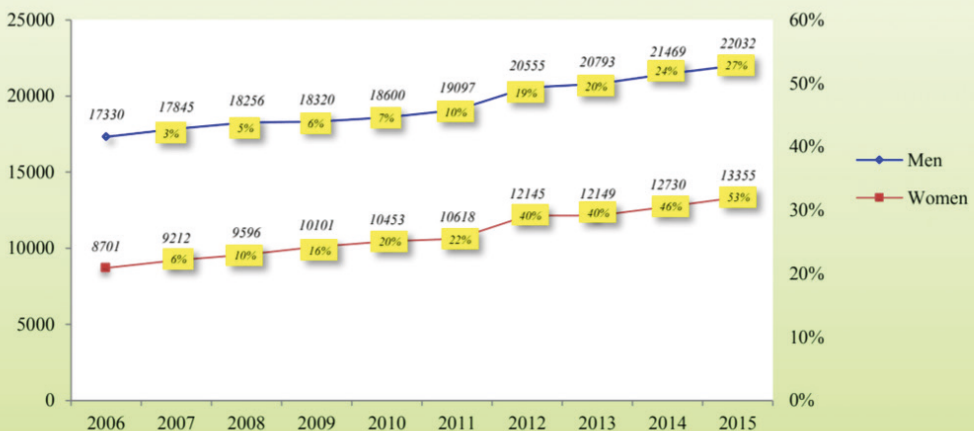
Graph 4. Evolution of full-time professors (FTE).



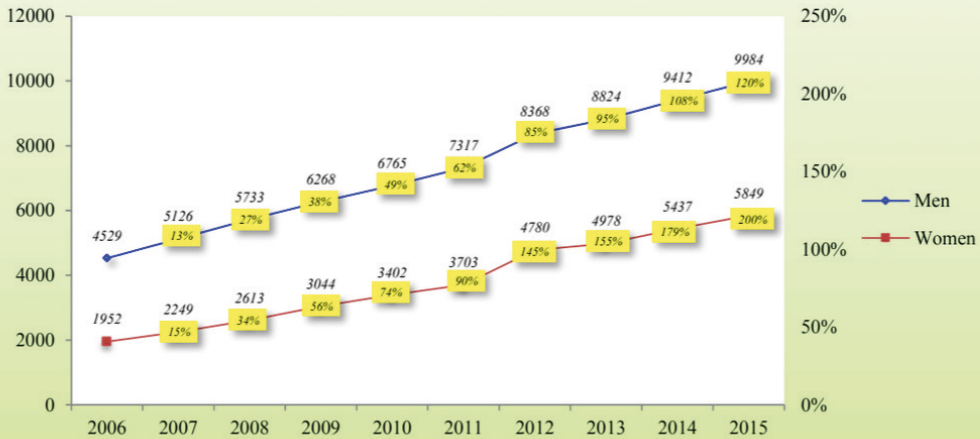
Graph 5. Gender comparison of part-time professors



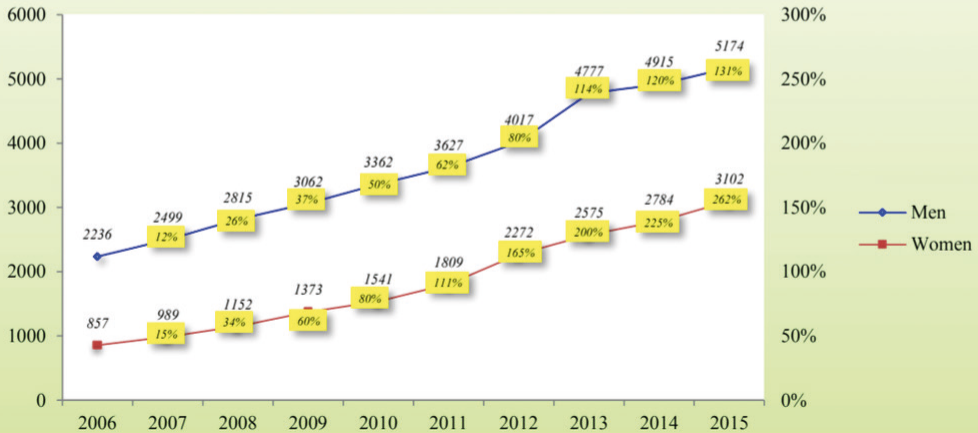
Graph 6. Gender Comparison of Full-time Professors



Graph 7. Gender comparison by maximum qualification (Ph.D.)



Graph 8. Gender comparison by National System of Researchers (SNI)



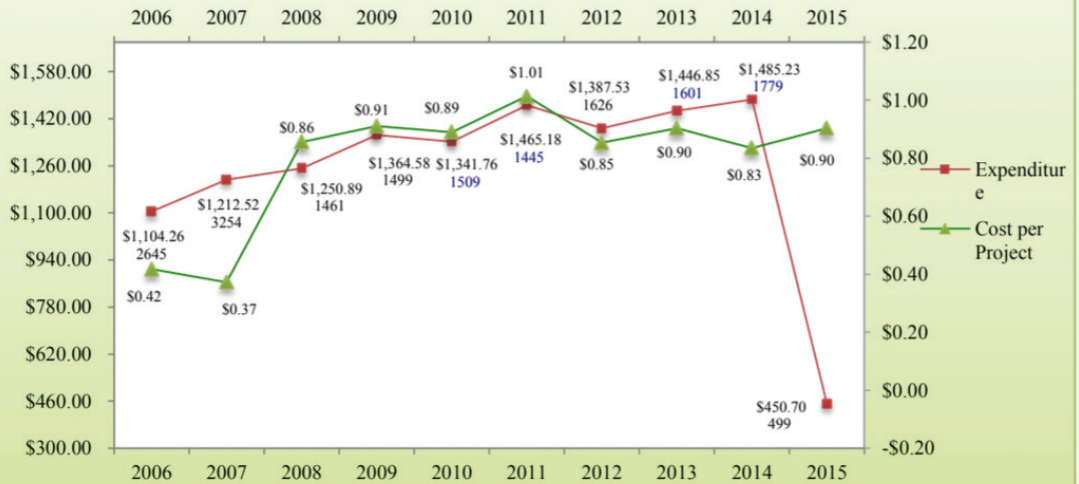
Graph 9. Gender Comparison by PROMEP and PRODEP Profile



Figure 10. Quality Enrollment



Graph 11. National PIFI and PROFOCIE Financing



CONCLUSIONS

The Integral Program for Institutional Strengthening (Programa Integral de Fortalecimiento Institucional) is the most important program to promote the quality of public higher education. It encourages public institutions to carry out planning processes with a strategic and broadly participatory approach that allows them to reach higher levels of development, leaving aside the type of planning that for a long time was only useful to meet some regulatory requirement and that showed little effectiveness in supporting the institution in the fulfillment of its commitments.

The results achieved by the public universities, ratified by the testimonies given by the institutional leaders, allow us to conclude that the PIFI has been an effective strategy to improve and strengthen the main indicators of academic quality and management of the institutions, while at the same time contributing to a culture in favor of planning, evaluation and social responsibility.

The new emphases of the PIFI proposed during the period 2007-2012 and PROFOCIE 2013-2014 are perceived as useful and have allowed participating public universities to continue advancing, for all these reasons, the representatives of the educational institutions agree that it should continue to be strengthened, especially in the financing fund.

Based on the proposals for biannual planning that changes to triannual, as well as its evaluation, an annual follow-up is carried out for the allocation of resources in the projects that have been favorably approved in the educational institutions.

It is important that the universities plan their proposals and formulate the projects of the different extraordinary funds in a single planning exercise within the framework of the PFCE, continue to promote the strengthening of this program and its main strength is the

involvement of university authorities, the majority of academics and collegiate bodies, in order to root the culture of planning and evaluation.

A team of recognized experts will participate in the formulation of the Guide, which establishes the emphasis for resource planning and management and will be promoted with a medium or long-term vision, and in situ visits will become mandatory and the results will be considered for resource allocation in the year in which they are made.

Institutional policies are required to improve the functioning of the academic-financial follow-up carried out through the e-PIFI system by improving the connectivity offered by the SEP and strengthening the staff dedicated to the development and programming of computer systems.

It is important to strengthen the new emphases through the incorporation of second generation input, process and results indicators. Likewise, institutional management has been strengthened with improvements in the attention of professors and students, through the strengthening of institutional connectivity, electronic means of communication, improvement in administrative reforms, administrative regulations with the certification of the different existing standards, among others.

The resources were oriented to address institutional priorities and to carry out actions of greater impact, consistent with the objectives of improving and ensuring the quality of educational services; however, it should be noted that the partially financed projects generate budget adjustments each year in the institutions and this is reflected in the period 2006 to 2015, so it should be assessed whether the operating rules are consistent with these adjustments established in the Federal Expenditure Budget each year.

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