

A Meta-planing Systemic Model for Mexican Public Universities

R. Llarena del Rosario¹, F. Lara-Rosano²

¹ CENEVAL,

² Centro de Ciencias Aplicadas y Desarrollo Tecnológico

Centro de Ciencias de la Complejidad

Universidad Nacional Autónoma de México

México, D. F., México

*rllarenat@yahoo.com.mx

ABSTRACT

Planning has been performed in Mexican public universities, since the 1940s, as a function promoted by government policies. However, the results were not as expected. We found through an exploratory study that this lack of planning efficiency derived from the obsolete planning conceptions and methods adopted.

In this paper a meta-planning model is proposed, based on the application of complexity sciences to social organization problems. In this context, only an eminently participative meta-planning process would allow to impulse change and development at the Mexican public universities.

Keywords: Complex systems, university planning, soft systems, meta-planning.

1. Introduction

Planning has been performed in Mexican public universities, since the 1940s, as a function promoted by government policies. However, the results were not as expected, because planning was done just to fulfill external requirements.

In the second half of the 20th century, the Asociación Nacional de Universidades e Instituciones de Educación Superior (ANUIES) was created, from which proposals to improve higher education have emerged. As a result, the Sistema Nacional de Planeación Permanente de la Educación Superior (SINAPPE) was founded in 1979. The Federal government wanted to boost planning at public universities by conditioning to it the allocation of additional financial resources. Planning was used for 4 main objectives: 1) the increase of quality in education, 2) the growth and development of the institutions, 3) the modernization of funding policies by incorporating academic and organizational criteria, and 4) the rational use of resources within institutions.

To obtain additional resources to regular subsidies, institutions must submit an Institutional Consolidation Integral Program (Programa Integral de Fortalecimiento Institucional, PIFI), which implies a

planning-evaluation process. Planning is then almost mandatory, but the planning purpose assumed by the public universities is to obtain additional resources rather than institutional development.

In 1999, the ANUIES identified some causes that limited the efficiency of institutional planning: the uncritical acceptance of the models following government guidelines; the design of a unique hierarchical planning model; the alienation from the academic community; the lack of internal strategies to implement and evaluate the development plans, as well as the lack of continuity mainly associated to administration reshuffles.

Notwithstanding these facts, ANUIES and the Federal Public Education Ministry (SEP) consider planning as a self-regulation instrument, a path guideline to define a desirable vision of the educational systems.

2. Objectives

Based on this background, we proposed an investigation to approach the planning process according to the new paradigm of Complex Systems, based on following hypothesis: The planning inefficiency at public universities has been due to the

hierarchical, reductionist, and rationalist planning conceptions adopted as well as political interests, imposition by the authorities, methodological insufficiencies and the lack of awareness, more than the lack of validity of a proper planning approach as an useful instrument to guide the organizations.

Additionally, it was assumed that before starting the planning or reviewing one, it is necessary to plan this process through a meta-planning to get an adaptive and dynamical solution.

The research objectives defined were:

- To analyze the planning problems at public universities
- To evaluate the appropriateness of a meta-planning process at public universities to improve the planning practice.
- To suggest a meta-planning methodology to get a dynamical adaptive planning process for public universities.

3. Methodology

The project considered a documentary, exploratory, descriptive and propositive study. The exploratory study was considered because we didn't find any literature related to planning for planning at public universities

The descriptive character of the study was considered because it specifies the determinant properties at public universities related to the planning problems to solve, and whose results were subject to a qualitative analysis rather than a quantitative one.

The basic information sources were the literature on the theories of and for the planning practice at Mexican public universities, the literature on Complexity Sciences and meta-planning, as well as documents of the universities themselves, and the institutional assessments of the Comités Interinstitucionales para la Evaluación de la Educación Superior (CIEES).

4. Exploratory Analysis

For the exploratory study, we selected a sample of 12 public universities with 10,000 to 20,000 students or more covering 12 geographical regions in Mexico.

A second selection criterion of the sample was the possibility of having official information about the institutions in the self-assessment reports and the external assessment of the CIEES.

The defined categories were included in questionnaires with probable-answer options, which were answered by the rector, and the planning staff. Besides, we took into account the opinion of several members of the university community. The information was completed with the institutional reference data.

The information for each university was analyzed by determining: planning motivations, planning objectives, planning attitudes, expected products, power structure and power style, as well as the characteristics of the planning organism. It was considered that the categories of analysis were not exclusive, and that more than one option could be chosen, assigning a percentage for each of them.

For the information analysis, descriptive statistics were used: A frequency distribution applied to the defined categories, determining the mean of such distribution.

5. Results of the Exploratory Analysis

The information compiled allowed to diagnose the planning process at Mexican public universities. It was noticed that all institutions have realized planning; nonetheless, they started planning after the ANUIES suggested it, and SEP gave specific economical support for this purpose.

Planning was done according to the general institutional standards. Nevertheless, it depends on the political will of the rector. The fulfillment of external requirements was the most important purpose (39%) for planning; 38% universities make means planning, in which the planners assume the aims (mission, vision, and objectives) as given, and follow a rational approach for means definition. The purpose to plan was to consolidate the actions undertaken before, which are considered appropriate, and thus, they should continue. An important part of the institutions (23%) make normative or ends planning, i.e., the planning mode is related to the revision or the re-adaptation of the ends.

Regarding the attitude of the people responsible for planning, in two-thirds of the institutions, it was

a combination of inactivism and reactivism. Decisions are taken at the Rectory, with a corrective orientation. The institution's administration tends to separate it from undesirable situations. Problems are solved by common sense, intuition, and experience.

This has affected the prevalence of resistance to change. A third part of the universities has a predominantly preactive attitude. University officials are in general satisfied with the outcomes, while recognize that changes are needed in some areas and processes. In this sense, achievements are sought but without contributing to political conflicts, so the rector and his team members devote a lot of time for communicating with power groups to convince them of the Rectory's plans.

Regarding the scope, at 67% universities, the global vision of the institution is considered in both, the problem definition (as an institutional diagnosis), and the solution proposals. Notwithstanding, this is an internal vision, as a closed system which does not identify the context, its relations, nor their consequences.

Planning final product has been an institutional development program or plan. For its preparation, just a few institutions promote a widely participation among the community. And regarding the applicability, it often coincides with the rectory period. In most cases, periodic goals, responsible people, financial requirements, instrumentation mechanisms and evaluation criteria are not precised. This can be explained as follows: plan presentation is a requirement to apply for subsidy and once presented, it became not useful anymore.

Regarding the power structure, there is no a predominant one: in the 50% of universities, the power structure is hierarchic (decisions are vertical and authoritarian, while horizontal exchanges are almost non-existent). The rector is an active actor. Absence of conflicts within the institution, and vertical authority and mutual support outside the institution were feigned. However, in each rector election opposite interests emerged.

In 25% institutions, the power structure behaved as a power forces field. Plenty of time is lost negotiating and searching power balance. In each group, leaders are clearly identified, but the power of the groups is temporary.

Regarding the role of planning staff, they are bureaucratic technicians, according to the rational power dominant style. In six universities (50%), they concentrate in planning related tasks but in the rest they had also some other functions. In three cases, the responsible of planning belong to the rector consulting staff.

These results are the evidence of the suggested hypothesis: public universities did planning, but with little expectations of the results. In most cases, planning was not a development policy, but an external requirement fulfillment for getting financial resources.

On the other hand, if external requirements have been the motivation for the planning exercise, the meta-planning model we propose could be adopted by the government as the planning model required to manage public universities.

6. Systemic Meta-planning Model

For the meta-planning model design we took Rojas (2007) concept of metamodels; Mintzberg (1998) strategic theoretical approaches; Checkland & Poulter (2006) action-research methodology and McMillan (2005, 2008) and Stacey (2003) complexity approaches for planning.

The meta-planning process must depart from the precise delimitation of the planning object. This delimitation will depend on starting a new planning project or continuing an existing one. Moreover, it implies defining and differentiating the system from its environment, recognizing the contingent external parameters, i.e., threats and opportunities, as well as the available control space for decision-making related to the university management.

To define the meta-planning process, a role structure based on the Soft Systems Methodology (Checkland & Poulter 2006) was adopted. Belonging to this role structure we have: the "client's role" constituted by the group of persons whose decision caused the meta-planning to happen; the "practioner's role", that is the group of persons who are conducting the meta-planning exercise and the role of the "owner of the meta-planning", that is the people who could be regarded as being concerned about or affected by the situation of the university and the outcome of the effort to improve it.

The “client’s role” is organized in a Strategy Steering Group (SSG), led by the rector, who has the highest management level at the university, and works with the people responsible for the substantive functions. This group will have a global idea of the meta-planning objective, the process dimension, and the change that it implies, as well as the available information, and will have the required resources to take the foreseen and emerging actions. The group will formulate the desired image of what is expected for the long-term (at least, ten years) for the university, and the changing actions in periods of three to five years.

The “practitioner’s role” is occupied by an expert facilitators group (EFG) composed of management and planning staff, who sees clear the meta-planning objective, and who knows the general procedure for organizational change actions. This group helps to organize the different meta-planning groups which will work in workshops, and stimulate the member interactions in these groups to work in an open and fearless creative manner. With the EFG’s work, positive feedback loops will be created that over time, they will have the potential to amplify the efforts in each group of the organization (butterfly effect).

The “owner of the meta-planning” role is integrated by focus groups (FG), composed of people of different areas, levels, and hierarchies, who will analyze key topics of the university related to the expected image and contribute to define what needs to be changed and how to do it. Focus groups work in interactive workshops designed for feedback, proposals diversity, and a continuous organizational learning process to analyze and solve problems.

Finally, as part of the practitioner role, voluntary support groups (VSG) are established. These are groups of people external to the university, who support the focus groups and the expert facilitators’ activities, and who do not receive a compensation for their job. In these VSG groups, former students, scholars, and people interested in helping can participate, as they represent the average user of the university services.

The integration of these groups follows the hypothesis that a system does not depend on the number of components, but on how the

components in each hierarchy are related. The first relevant action to initiate the meta-planning process is in charge of the SSG: to define the objective of the planning, and begin the meta-planning process, which will become a macro-level dynamic model that will guide the actions of the whole organization.

The SSG can rely on the Soft Systems Methodology (Checkland & Poulter 2006) proposing the desired image of the university, which will focus the change process. The rector will explain the aspects implied in such image.

The EFG promotes the personnel’s participation in focus groups in a freedom context to establish well-founded agreements. It is necessary that the facilitators overcome the communication barriers between the executive personnel and the assistants.

To begin the meta-planning process, the SSG will explain, in a formal act, the desired image, the meta-planning complexity approach, as well as its scope and specific use to guide the organizational changing process at the university, as well as the relevance of the active participation of the personnel in the discussion, the identification of real problems, and the solution for them. Besides, the rector will emphasize the organizational changing model based on the complexity approach against the traditional hierarchical model.

An underlying characteristic in the described activities is the interaction between the personnel in the focus groups to discuss the desired image, to detect key problems or situations requiring changes at the university, to suggest objectives (ends planning), and to establish actions and procedures coherent with the proposed objectives (means planning). In general, the aim is to generate a synergic movement that includes all the institutional areas.

The desired image in the soft systems model, is a flexible one, because it is to be applied in contexts in which human and social factors participate with the possibility to modify the ends. This means that the initially outlined desired image can be adjusted according to the results obtained in the focus groups workshops.

In the metamodel, the university is seen as a network of actors who interact within a complex and organized system. The creation of focus groups responds to the Giddens' structuration theory (1976, 1984): the properties of individual minds and the social practices are constituted by recurrent practices, because they do not exist outside the action, but they are constituted within it. The social and the individual levels are not separate, each of them derives from the pattern reproduction of interactions among people, which has a transformation potential.

In the focus groups, a positive atmosphere of equality and respect prevails to eliminate the fear of failure, because in any process is inevitable that something will go wrong. People of different operative positions could feel intimidated and fearful of looking ridiculous because of the habit of asking for permission and waiting an order before doing the action. The expert facilitator group will promote the participation of all people conforming the focus groups, particularly, regarding imagination, creativity, experimentation, audacity at taking chances, and initiative to propose alternative ideas to change the current state.

Allen (1998) has demonstrated that the interaction between diverse entities results in the potential for their transformation, and that in chaotic interactions, the transforming potential of human interaction emerges when participants are diverse and different enough among them to cause a dynamic and fluid communication.

As soon as the focus groups have detected problems or situations to change, and also have identified solution alternatives (ends planning), in a general meeting, the groups' representatives will expose the results, and will have feedback from the other members, mainly about the points suggested by a group having convergences, divergences, and even conflicts with what was suggested by other groups.

When, in a second moment, the focus groups have established actions and procedures coherent with the proposed solution alternatives (means planning), there will be another general meeting to inform the results obtained.

The expert facilitator group will have all the information on the results of the focus groups workshops, will elaborate the work technical reports, and will meet with the SSG to compare the initial desired image with the image established by the focus groups.

The meta-planning model is viable and some of the suggested techniques have been successfully applied in changing the structure and operations of the Open University in England (McMillan 2005, 2008).

7. Conclusions

In order to guide public universities to the most convenient path for each institution and for the improvement of Mexican higher education system, planning is essential to improve quality in education.

This perspective acquires significant relevance in the meta-planning concept i.e. how to plan the planning process without affecting the independence and autonomy of the public universities, which most of them have by law.

The proposed meta-planning model is based on a general and flexible methodology, derived from the complexity approach and the soft systems methods. Our aims are that any public university can apply it for planning, based on a broad participation of the university community and the respect for the organization's autonomy. The meta-planning model is viable and some of the suggested techniques have been successfully applied in changing the structure and operations of the Open University in England (McMillan 2005, 2008).

Acknowledgements

This work was supported in part by the project Conacyt 152008

References

- [1] Allen, R. G. (1998). Crop. evapotranspiration - Guidelines for computing crop water requirements - FAO Irrigation and drainage paper 56. Utah, USA: Utah State University Logan.
- [2] ANUIES. (1999). La Educación Superior hacia el Siglo XXI – Líneas estratégicas de desarrollo. México: ANUIES.
- [3] Checkland, P. y Poulter, J. (2006) Learning For Action: A Short Definitive Account of Soft Systems Methodology, and its use Practitioners, Teachers and Students. UK: Ed. Wiley.
- [4] Giddens, A. (1976). New Rules of Sociological Method: a Positive Critique of interpretative Sociologies. London : Hutchinson.
- [5] Giddens, A. (1984). The Constitution of Society. Outline of the Theory of Structuration. Cambridge.
- [6] Lara-Rosano, F. (2002). Cibernética y Sistemas Cognitivos en Ingeniería de Sistemas: un enfoque interdisciplinario. J. Acosta Flores (ed). México: Alfaomega.
- [7] Lara-Rosano, F. (2011). Complejidad en las Organizaciones en Flores J. & Martínez Mekler, eds) Encuentros con la Complejidad. México: Siglo XXI y UNAM.
- [8] Llarena, R. et al, (1981). Panorámica y Perspectivas de la Planeación Educativa en México, Documento Síntesis de la Comisión Temática No. 7. Congreso Nacional de Investigación Educativa.
- [9] McMillan E. (2008) Complexity, Management and the Dynamics of Change: Challenges for practice. London: Routledge.
- [10] McMillan E. (2005) Encouraging Strategic Change by Using Complexity-Based Principles: A Case Study of the Open University, in Managing organizational complexity: philosophy, theory and application (K. Richardson, ed.). ISCE Publishing.
- [11] Mintzberg, H. et al. (1998). Safari a la estrategia. Barcelona: Ed. Granica.
- [12] Rojas, B. G. (2007). Problemas metodológicos de los estudios comparados en universidades. I Encuentro latinoamericano de estudios comparados en educación. Argentina. Recuperado de www.saece.org.ar/docs/congreso2/rojas_bravo
- [13] Stacey, R. D. (2003) Complexity and Group Processes, London: Routledge.