POLITICAL AND RATIONAL MODELS OF POLICY MAKING IN HIGHER EDUCATION.

(The creation and establishment of the National System for Permanent Planning of Higher Education in Mexico. 1970-1986.)

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To Celia, Emilio and Tania.
This has been yours.

To M'Cuca and D'Fede.
You have been there.

To Federico and David.
You know why.

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ABSTRACT.

This study explores the policy-planning process in the provision of higher education in contemporary Mexico.

A theoretical framework is developed by drawing upon current discussion on higher education coordination and planning. Particular emphasis is given to the relationships between their interactive and technical concerns.

This analysis suggests that policy-planning in higher education is a process in which the disciplinary concerns of those academics involved co-exist with their vested interests. A "political nature" of policy-planning in higher education becomes apparent when the disciplinary concerns and the conflicting vested interests of academics converge. It is thus not necessarily the 'politician' who brings to this process its political dimension.

The System for Permanent Planning of Higher Education (SiNaPPES), established in 1978 as the principal mechanism for the formulation of higher education policy in Mexico, is used as a case study and is at the heart of the discussion. An examination of the creation and subsequent operation of the SiNaPPES mechanism reveals the 'political nature' of the rationale behind its establishment. The analysis thus provides two perspectives on the creation of SiNaPPES. The concern of its formal history is technical planning while in the second, its alternative interpretation, is interactive planning. The analysis of the formal history that planning has not been fully achieved is challenged. The thesis argues that SiNaPPES, has been successful as a means of coordinating institutions and academics in higher education.

The analysis is restricted to the period 1970-1986 leading up to the creation and operation of SiNaPPES in 1978 and the publication in 1986 of the third version of the National Plan for Higher Education (PNES). The study is supported by documentary evidence and interviews with those academics closely associated with the creation of SiNaPPES.

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GLOSSARY

ANUIES	Asociación Nacional de Universidades e Institutos de Enseñanza Superior. National Association of Universities and Higher Education Institutions.
CCH	Colegio de Ciencias y Humanidades. College of Sciences and Humanities.
CD	Centro de Didáctica. Centre of Didactics.
CISE	Centro de Investigación y Servicios Educativos. Centre of Educational Services and Research.
CNME	Comisión de Nuevos Métodos de Enseñanza. Commission of New Teaching Methods.
CNPIE	Comisión Nacional para la Planeación Integral de la Educación. National Committee for the Integral Planning of Education.
COEPES	Coordinación Estatal para la Planeación de la Educación Superior. State Committee for Higher Education Planning.
CONACYT	Consejo Nacional de Ciencia y Tecnología. National Council of Science and Technology.
CONPES	Coordinación Nacional para la Planeación de la Educación Superior National Committee for Higher Education Planning.
CORPES	Coordinación Regional para la Planeación de la Educación Superior. Regional Committee for Higher Education Planning.
COSNET	Consejo Nacional de Educación Tecnológica. National Council of Technological Education.
CPNES	Centro para la Planeación Nacional de la Educación Superior. Centre for the National Planning of Higher Education.
DGCE	Dirección General de Coordinación Educativa. General Directorate of Educational Coordination.
DGES	Dirección General de Educación Superior. General Directorate of Higher Education.
ENEP	Escuela Nacional de Estudios Profesionales. National School of Professional Studies.
IPN	Instituto Politécnico Nacional. National Polytechnic Institute.
ITAM	Instituto Tecnológico Autónomo de México. Autonomous Technological Institute of Mexico.
ITESM	Instituto Tecnológico y de Estudios Superiores de Monterrey. Institute of Technological and Higher Studies of Monterrey.

PCAI	Programa de Colaboración Académica Interuniversitaria. Inter-university Program of Academic Collaboration.
PEIDES	Plan Estatal Indicativo de Desarrollo de la Educación Superior. Indicative State Plan of Higher Education Development.
PIDES	Plan Institucional de Desarrollo. Institutional Plan of Development.
PNE	Plan Nacional de Educación. National Educational Plan.
PNES	Plan Nacional de Educación Superior. National Plan of Higher Education.
PNFP	Programa Nacional de Formación de Profesores. National Programme for the Training of University Teachers.
PRIDES	Plan Regional Indicativo de Desarrollo de la Educación Superior. Indicative Regional Plan of Higher Education Development.
SEIT	Subsecretaría de Educación e Investigación Tecnológica. Underministry of Technological Education and Research.
SEP	Secretaría de Educación Pública. Ministry of Higher Education.
SESIC	Subsecretaría de Educación Superior e Investigación Científica. Underministry of Higher Education and Scientific Research.
SiNaPPES	Sistema Nacional de Planeación Permanente de la Educación Superior. National System for Permanent Planning of Higher Education.
UAA	Universidad Autónoma de Aguascalientes. Autonomous University of Aguascalientes.
UAG	Universidad Autónoma de Guerrero. Autonomous University of Guerrero.
UAM	Universidad Autónoma Metropolitana. Metropolitan Autonomous University.
UANL	Universidad Autónoma de Nuevo León. Autonomous University of Nuevo León.
UAP	Universidad Autónoma de Puebla. Autonomous University of Puebla.
UAS	Universidad Autónoma de Sinaloa. Autonomous University of Sinaloa.
UAT	Universidad Autónoma de Tamaulipas. Autonomous University of Tamaulipas.
UASLP	Universidad Autónoma de San Luis Potosí. Autonomous University of San Luis Potosi.

UIP	Unidad Institucional de Planeación. Institutional Planning Unit.
UM	Universidad de Michoacán, University of Michoacan.
UNAM	Universidad Nacional Autónoma de México. National Autonomous University of Mexico.
UV	Universidad Veracruzana. Veracruzana University.
UY	Universidad de Yucatán. Yucatan University.

Chapter 1. **INTRODUCTION.**

1.1. Aims.

The study attempts to improve our understanding of the rationale behind the establishment of the National System for Permanent Planning of Higher Education (*Sistema Nacional de Planeación Permanente de la Educación Superior* - SiNaPPES) and the part played by academics in the process. In so doing, it analyses the roles the academic community has played in the policy-planning process in the provision of higher education in contemporary Mexico.

The central focus of the study is an understanding of policy formulation rather than policy implementation. The study follows Cerych's distinction between the process of educational policy formulation and its implementation; the latter having more to do with evaluation and policy impact, and the former with the process of how policy comes into being (Cerych, 1984, see also Easton, 1965, 1979). In keeping with this argument, the study is more concerned with an analysis of policy than for policy (Ham and Hill, 1984). Therefore, the question may be asked: "if it does not contribute to improvements in policy-making why undertake the policy analysis?" (Ibid). In these terms the thesis can be best seen as academic research into the process: its purpose oriented towards understanding policy-planning in higher education rather than influencing policy or developing theory related to it (Shipman, 1985). Nonetheless, it is hoped that the outcomes of the study will be of some practical value for policy-making and planning in Mexican higher education.

1.2. Scope and Focus.

From 1970, for more than a decade, Mexican higher education expanded at a rate far greater than at any time in its history, either before or since. The major issues of higher education policy during this period were directed towards: i) expanding facilities, ii) improving overall quality, iii) increasing funding and iv) improving processes of coordination and planning.

Central to higher education policy in the decade of the 1970s, therefore, were the creation of new higher education institutions and the enlargement of existing ones. These were a response to the growth in the number of students, eighty per cent of whom were enroled by the growing number of public autonomous universities. This expansion, coupled with increased funding and expanded facilities, demanded greater and more efficient coordination among the public autonomous universities. The need for effective coordination became a major concern of academics and others associated with higher education.

During the early seventies, planning was a central issue in the coordination of higher education and subsequently shaped the creation of the national mechanism for policy planning for the public autonomous universities - SiNaPPES. The process by which this policy-planning system was created and the role of academics within it are the principal themes of this research. The creation of SiNaPPES in 1978, however, must be seen in the context of the prevailing conditions and circumstances from 1970 to 1986, the period of its conception, development and operation. SiNaPPES was one of three major developments in higher education during this period, the others being the wide ranging educational reforms of 1970 and parallel academic reforms within the autonomous universities, and the publication in 1986 of the National Plan of Higher Education (PNES) which was prepared using the SiNaPPES

machinery. The main features of the period are detailed later in this Chapter (Section 1.5).

In the higher education reforms of 1970 which saw an expansion of the public autonomous universities, the introduction of new courses, improved teaching and research and the establishment of new universities, the National Autonomous University of Mexico (UNAM) and the National Association of Universities (ANUIES) were the principal driving force and the key players. From 1978, however, the newly created SiNaPPES became the principal mechanism for policy-planning for autonomous universities and since then has been the primary instrument in the coordination and governance of Mexican higher education.

The proposal for the creation of SiNaPPES, arising from an initiative by representatives of the National Association of Universities and Higher Education Institutions (ANUIES) and the Under Ministry of Higher Education and Scientific Research (SESIC), was formally adopted at the Eighteenth National Assembly of the ANUIES (ANUIES, 1979).

ANUIES itself had been established in 1950 by the public autonomous universities and although membership was extended to other higher education institutions during the early 1970s, it continued to be monopolised by the universities and it is their interests that have predominated. The Under Ministry of Higher Education and Scientific Research (SESIC) had been established within the Ministry of Education (SEP) a few months before the creation of SiNaPPES with responsibility for the public autonomous universities while a separate under ministry, the Under Ministry of Technological Education and Research (SEIT) was established at the same time to deal with the technological institutes. Since the establishment of SiNaPPES, representatives of SESIC and ANUIES have provided coordination at the national level

through the body for the National Coordination of Higher Education Planning (*Coordinación Nacional para la Planeación de la Educación Superior* - CONPES) though at the institutional level all public universities participate as partners of the System through their respective planning units.

As a policy-planning mechanism, SiNaPPES was designed to produce a set of national policies to serve as guidelines for higher education development which would then be enshrined in the National Plan of Higher Education (Plan Nacional de Educación Superior - PNES). The first version of the National Plan of Higher Education was presented to and approved by the National Assembly of ANUIES in 1981 (CONPES, 1981d). Until 1986, it was updated periodically (ANUIES, 1979, CONPES, 1981d, 1986). Since then the PNES has not been updated, although in 1988-89 the key points of the 1986 PNES were included as the higher education guideline in the government's educational policy statement. This study is concerned only with the period to 1986.

The creation of SiNaPPES was influenced by many factors some of which have yet to be studied in detail. Among these can be included the increase in number of autonomous universities incorporated into the policy-planning process during the 1970s, their growing diversity in terms of courses, access policies, funding and academic and administrative structures, and principally the differing interests of academics and their very varied views on participation in the planning process. An examination of these factors is fundamental to an understanding of SiNaPPES.

Two alternative explanations of SiNaPPES are the core of the thesis. The first is in terms of a rationale that claims that the policy process is 'rational and linear'. In other words, it is a process in which research feeds the policy makers and enables them, within an agreed legislative framework, to reach clearly defined and well

argued decisions, while their faithful implementation is left to administrators and professionals (Shipman, 1985 p. 273). The thesis goes on to provide evidence for the alternative view that in practice these assumptions do not occur and that the process "is neither rational nor linear" (Shipman, 1985 p. 273). In order to examine the nature of the policy process within the context of Mexican higher education, the research uses a qualitative approach in the form of a multifaceted case study of SiNaPPES.

1.3. Research Questions.

The creation of SiNaPPES and its operation is the key to an understanding of the contemporary policy-planning process in Mexican public autonomous universities, which started in 1970. However its establishment as a mechanism regarding the expansion and reform of public autonomous universities has not previously been analysed. The founding of SiNaPPES has usually been considered either as a short term administrative action for the efficient management of higher education and associated with only one particular government or as part of a longer term effort by successive governments to control higher education institutions. In the case of the former, it has frequently been asserted that higher education planning is largely a technical measure concerned mainly with educational development in economic terms in order to fulfil the demands of the productive structure and, as such, may be in conflict with the intrinsic nature and role of higher education. The latter, however, is commonly regarded as an attempt by government to assert control over the autonomy of universities and to restrict academic freedom. In both cases the underlying argument is that technical planning through SiNaPPES is imposed on higher education (e.g. Villaseñor, 1989, Didriksson, 1987).

The further assumption is that the fixed six-year cycle of Mexican governments has frequently inhibited longer term policy-planning, thence its analysis in a longer term perspective (e.g. De la Garza, 1990, Villaseñor, 1989). By 1986, however, when the National Plan of Higher Education (PNES) was produced the policy period of analysis, contextual to SiNaPPES, had lasted for 16 years (1970 to 1986), and SiNaPPES had been involved in the processes of planning and policy formulation of Mexican higher education for more than eight years (1978 to 1986): both longer than a single federal government administrations. In fact, during the period of SiNaPPES existence three updated versions of the PNES were produced and SiNaPPES became an accepted mechanism of university policy-planning. Thus the whole higher education policy period lasting 16 years has been considered as a necessary context to analyse the creation and establishment of the planning mechanism.

Bearing in mind the differing views on the establishment and role of SiNaPPES, the thesis seeks to examine:

1. The involvement of academics in its conception, establishment and operation.

2. The participation of academics in shaping the particular features and dynamics of national coordination and governance of public autonomous universities.

3. The response of academics from different disciplines and with different interests to the higher education policy-planning process.

4. The extent to which the specific characteristics of higher education coordination and planning reflect a 'political nature' and can explain the creation of SiNaPPES.

In order to undertake this examination it has been necessary to

i) define a period of higher education policy and identify characteristics of autonomous universities which impinged on the creation and establishment of SINaPPES, and

ii) reconstruct the story of the creation and establishment of SiNaPPES to understand the contemporary policy planning process with respect to autonomous universities.

1.4. Theoretical Relevance.

While there is a distinct and flourishing academic literature on higher education issues in the United States and western Europe, this is not the case for many countries in Latin America (See Altbach, 1979). In relation to the subject of this study, for example:

i) few studies in educational planning and policy concerns in Mexico exist and where they do, they confine themselves to the period in office of specific governments (e.g. Latapí, 1982, Villaseñor, 1989, Castrejón, 1976);

ii) most studies are primarily concerned with general educational policy at the national level and, working on the assumption that presidential authority operates at all levels within a highly centralised Federal Government that changes every six years, consider this governmental pattern to be the predominant influence in policy-planning thus overlooking higher education's own dynamics. (e.g. Villaseñor, 1988, Didriksson, 1987, Guevara, 1981);

iii) some studies focus mainly on the technical aims of the planning process in higher education (e.g. Rangel Guerra, 1970,1979, King *et al*, 1971, Castrejón *et al*, 1976, ANUIES, 1985), while others stress the economics of education perspective with regard to both funding and the distribution of educational opportunities (e.g. Muñoz Izquierdo,1980, Pescador, 1981);

iv) though some recent studies have considered the interaction of the technical and political characteristics of planning (e.g. McGinn and Porter, 1984), or planning in higher education (e.g. Porter, 1988, Bolaños, 1985, 1986), they do not specifically consider its academic dynamics.

This research aims to contribute to the field by focusing on the role of academic interests in the creation and establishment of SiNaPPES, the analysis of which has not previously been systematically undertaken; exploring the academic characteristics, the policy planning processes and the 'political nature' of higher education in the case study; and, in so doing, considering higher education policy over a period longer than the six-year term of a federal government.

1.5. Design of the study.

1.5.1. An approach and a period of analysis.

The research process in this study and the relationship between theory and empirical work follows the pattern of what is referred to as 'grounded theory' (e.g. Glaser and Strauss, 1967), although the author agrees with Becher (1989) that more research is needed on the subject matter of this study to strengthen the approach. Following this approach, systematic empirical analysis of higher education issues in Mexico was carried out in parallel with the theoretical analysis. Both the theoretical

analysis and the observation fed one another: higher education policy-planning issues were examined in the context of appropriate theoretical considerations. In so doing, it was noted that the presence of specific characteristics of organisation and governance of Mexican universities and the role of academics within them echoed the view of some authors that the development of specific forms of organisation and governance in higher education are conditioned by national circumstances.

In order to fulfil the aims set out above a better understanding of the changing pattern of the contemporary higher education coordination policy was necessary. But to do this and identify a clearly defined period during which current coordination policy can be seen to have evolved, it was initially necessary to take a broad look at this policy during this century. This initial study analysis indicated that current coordination policy has its roots in the expansion and reform of higher education in the 1970s. Significant trends in the growth, funding, development and planning of higher education were identified over the period 1970-1986 and it is in this context that the study of SiNaPPES has been undertaken.

A number of other factors also influenced the decision to select the period 1970-1986. First, it was necessary to study SiNaPPES over a period longer than a six-year term of government so that the creation of SiNaPPES could be seen against the background of specific higher education issues, academic interests, policies and actions - all of which may well transcend the period in office of a specific government - and analysed accordingly (During this period there were, in fact, three changes in the Federal Government: 1970, 1976, and 1982).

Second, a longer period permits observation of changes in the pattern of higher education. In Mexico, for example, while the changing role of the UNAM in the coordination of higher education policy is discernible over the period 1970-1986

- due largely to the impact of the growing number of universities - this would not have been the case over a shorter governmental period. Moreover, restricting analysis to the six-year, Mexican, political cycle there would have been a tendency to give undue emphasis to governmental considerations and ignore academic influences.

Finally, the defined policy-period should be of a manageable dimension for academic analysis, started in 1988, by a single postgraduate researcher.

There were wide ranging changes in Mexican higher education during the 1970s and 1980s, aiming at the development of its provision in order to better face the modernisation needs of the country (Latapí, 1982, Castrejón, 1976, Rangel Guerra, 1970, Solana, 1970). The principal policy trends in higher education during the period 1970-1986, which in turn defined the period itself, are described in the following paragraphs:

There was a noticeable period of enrolment growth in higher education between the late 1960s and the early 1980s, with particularly rapid growth during the 1970s. The provision of higher education was expanded and other developments encouraged. Public autonomous universities accounted for the greater part of the enrolment growth. Universities were enlarged and a number of new ones created.

A process of innovation and reform in the public autonomous universities began in the late 1960s and accelerated from the early 1970s onwards. Wide ranging educational reforms were initiated by the Federal Government in 1970 which for the higher education sector aimed to modernise the system through improved quality and diversification of its provision. There was encouragement and support on matters such as the appointment of more full time academics, the introduction of innovative

teaching-learning processes, the establishment of new degrees, and an emphasis on increasing the efficiency in higher education academic organisation (Castrejón, 1976).

A significant increase in public funds was provided for higher education innovation and expansion. The participation of the Federal Government in higher education funding was increased from 45 per cent in 1970, to 65 per cent in 1976, whereas financial support from the state governments decreased correspondingly from 55 per cent in 1970 to 35 per cent in 1976. Financial constraints facing the country, put a halt to this tendency by the early 1980s (CONPES, 1986, Castrejón, 1976).

An increasing emphasis on higher education planning by the National Association of Universities (ANUIES) took place from the late 1960s onwards. This emphasis and a parallel governmental concern with educational planning during the 1970s led, in 1978, to the creation of the National System for Permanent Planning of Higher Education - SiNaPPES - as the mechanism of policy formation and planning for higher education, whilst safeguarding institutional autonomy of universities. In 1981 the National Plan of Higher Education was produced through SiNaPPES. After that, the PNES was updated in 1983 and, in 1986 the most recent version of the PNES was produced. The PNES has not been updated since, although, as was said earlier, a summarised account of it was included in the governmental programme for higher education in 1988-1989.

That these issues and trends began in 1970 gives us a convenient starting point for this study, and the production in 1986, through the SiNaPPES mechanism, of the most recent version of the PNES permits us to define the end date of a coherent policy-period for our analysis.

1.5.2. Higher education expansion and coordination: their particular features in Mexico.

The period of structural development of modern Mexican higher education is often taken to be from the late 1940s to the early 1960s (King et al, 1971, Osborn, 1976, Levy, 1980). This interpretation relates the extension of educational services, to the changes and hopes of the post war period. The world scene changed after the Second World War, and certainly the post war changes affected Mexico, both in its educational aims and in the social and economic conditions. These changes affected Mexico and Mexican higher education, but neither in the same manner nor with the same impact as in the developed countries that were involved in the postwar reconstruction. While higher education expanded in developed countries after World War Two, the concern of Mexico was directed to the provision of basic education and a vocational emphasis in the structure of secondary education (Meneses, 1983).

Due to the worldwide post-war conditions, however, Mexico started a period of development and industrialisation under an economic policy directed towards the substitution of imports. During the 1950s and 1960s the Mexican economy had a period of high and steady economic growth which has been referred to as 'the Mexican miracle'. Under these circumstances Mexican higher education had to meet a demand for highly skilled people, and the improvement of Scientific and Technological research to improve its contribution to the economic and social development of the country. As a result, higher education was initially developed and expanded both in terms of student enrolments and numbers of institutions. The number of public universities was doubled to 20, and 8 Institutes of Technology were founded between the late 1940s and 1960s. The National University was provided with large physical facilities in a new very large campus with capacity to accommodate 30,000 students,

Nevertheless, by the 1970s, the facilities of the new campus of UNAM (the University City) were no longer adequate for the increased demand (Llarena, 1980).

The twenty years from 1960 to 1980 was a period of global expansion of higher education. In most developed countries higher education expansion reached its peak during the 1960s with rates of growth of up to 16 percent per annum. This expansion was accompanied by major changes in the pattern of higher education and attempts at its qualitative improvement (e.g. Ben-David, 1977). Clearly these changes were to a great extent the result of deliberate policy measures, but at the same time it seems that elements of the policies were themselves a consequence of such changes. What is certain, however, is that during the two decades in question, many Western European countries introduced "an exceptionally large number of new policies and reforms" all with the aim of improving higher education (Cerych, 1984).

On the face of it, Mexico followed a similar pattern. During the 1970s, there was a noticeable period of expansion and development with the main aim of modernisation. This period coincide to some extent with the world wide period of higher education expansion mentioned above and widely referred to in the literature. This world wide expansion also influenced the Mexican pattern. We would suggest, however, that this recent period of expansion in Mexican higher education was late in relation to other countries; and that it can be seen primarily with regard to the Mexican circumstances. In this perspective, our suggestion concurs with Teichler who notes that individual systems of higher education have reacted differently in the face of overall pressures for expansion (Teichler, 1990).

The period of most rapid growth in Mexican higher education can be identified as starting in the late 1960s and reaching its peak in the 1970s with rates of

enrolment as high, or even higher, than a number of developed countries (Muñoz Izquierdo, 1980). It was not until the 1970s that Mexico experienced a very high rate of increase of demand for higher education studies. This was largely in response to the increasing numbers of students completing secondary education during the 1960s. Furthermore, the expansion trends of the developed countries and the underlying notion of investment in human resources (Flores de la Peña, 1970), also influenced the policy for expansion in Mexico.

The patterns of higher education in different countries reflect specific national circumstances which in turn influence, and are influenced by, policies introduced to promote desired changes. Higher education policies, however, are influenced by developments in other countries through international comparisons (Blaug, 1969). This happened, for example, in the United States during the second half of the nineteenth century. During this period a number of American scholars and students attended German universities and brought back to the United States fresh ideas about conducting and organising research. They acquired an understanding and familiarity of German higher education practices which - in the process of being incorporated in American universities - had a strong impact on the development of American higher education (Baldridge *et al*, 1978). In this perspective modern American higher education owes much to the influence of the German experience. The American system borrowed selectively from the German higher education practices as other countries such as England and Japan have also done (Perkin, 1984).

Indeed, according to some authors, modern systems of higher education have only been developed in Europe - particularly in France, Germany and England - and the United States whilst development elsewhere has been a process of imitation of these influential systems. This has largely occurred, so it is argued, because the

development of higher education in modern times is concerned with the development of knowledge and science, and this has not happened everywhere (Ben-David, 1977).

It has been further claimed that this process of imitation in Latin American countries has been mainly conducted by copying the external and formal characteristics of the aforementioned higher education systems, while ignoring the local circumstances in which the processes of development of knowledge and science occurs. As a result, the outcome of such a process of imitation is frequently an hybrid which challenges the assumptions of the development process itself (e.g. Ribeiro, 1971).

As far as the coordination of higher education is concerned, universities in common with a few other organisations such as the church, seem to have developed a kind of mechanism (Clark, 1983), enabling them to adapt to changing social circumstances since their appearance during medieval times in Europe. These 'mechanisms' have, in turn, made universities acquire an interesting feature of relative independence in modern societies. This is particularly noticeable in western industrialised democracies at the present time (Becher and Kogan, 1980). It is therefore appropriate to study universities as unique organisations (Clark, 1983, Kogan, 1984).

There is the further consideration that within this process of adaptation of universities to particular societies, the specific circumstances of these societies have provided the conditions for higher education institutions to develop singular characteristics of organisation and governance which are susceptible to analysis on a national basis. There is an influential point of view which maintains that a better understanding of these characteristics of organisation and governance can be obtained by analysing contemporary systems of higher education in a 'cross-national

perspective' (Clark, 1982). From this perspective it is possible to analyse how systems of higher education reflect national characteristics. In Clark's view a cross-national horizon aims to provide general categories of analysis which, in their turn, are derived from the national characteristics developed by higher education systems (Clark, 1983a, 1983b).

In Clark's analysis contrast is made between the influential developed systems of continental Europe on the one hand, and the United States on the other. This, it is argued, is useful in that it provides a wider scope for the understanding of other systems of higher education, even less developed ones. Clark aims to avoid the analytic distortion of what he refers to as a very 'home based' perspective. This distortion is produced when different systems of higher education are compared and the characteristics of the less influential systems are diminished by overestimating the features of the developed ones.

Following this perspective referred to above, it may be said that the Mexican higher education experience has not influenced Western higher education development. It also shares a number of common characteristics with the systems of other developing countries. Its influence, however, has been within Latin America where it has had an impact for many years, and has its roots in the foundation of universities in Mexico and Lima - the two Vice Royalties of Spain in the New Colonies (e.g. De la Garza, 1990, Soberón, 1983, Steager, 1974). More recently, the autonomy of Mexican universities, particularly the UNAM, has been considered of significant influence for other Latin American universities (Rodríguez Cruz, 1987). For our purpose, the particular characteristics of coordination and governance developed by Mexican universities are central to our study of the policy-planning process. The defined period, from 1970 to 1986, is a necessary context for their analysis.

1.5.3. Additional considerations.

The researcher has been both an insider and an outsider at institutional and national levels of SiNaPPES. He has participated in the Institutional Planning Unit of a new university created in the early 1970s, and in the national coordination of SiNaPPES during the process of formulation of the 1986 updated version of the National Plan of Higher Education. For the last five years, however, he has been detached from the system and its process - an outsider 'standing back' from the everyday dynamics of the process. This experience over the past twenty years has generated his interest in a systematic analysis of the 'unknowns' surrounding the creation and establishment of SiNaPPES and its dynamism.

The author has conducted this study from an academic perspective. This should minimise former planning assumptions about higher education policy, and permit the development of a new and alternative perspective of analysis. Moreover, as a participating observer of the policy-planning process in SiNaPPES (See Perry and Zuber-Skerritt, 1992), the author has attempted a kind of 'naturalistic approach' (Stake, 1980, Fetterman, 1989). The study thus began with general questions which were refined as the process of research advanced (Agar, 1986, Fetterman, 1989). The researcher was reluctant to simply borrow a theoretical paradigm or a model already formulated elsewhere and based on different conditions without first considering its appropriateness to Mexican circumstances. He took the view that such an attitude is unable to distance the model and its assumptions from the framework under which it was developed. This attitude tends to project the conditions of the model, rather than to provide an explanation of the subject under analysis. The development of the American higher education as a system of universal access, and the underlying assumption that American trends would be followed by other countries in Europe illustrate this attitude. A later review of this issue recognised

that this assumption was not entirely valid (Trow, 1979). In fact recent work argues that higher education has displayed a tendency to follow its own parameters in each country, rather than follow a single universal model (e.g. Teichler, 1990).

A similar attitude has also been discussed by McGinn, Schiefelbein and Warwick (1979), based on a case study of educational planning project financed by an international agency in El Salvador and Chile. The failures of these educational planning projects were simplistically assigned to local political factors by the donor agency. The authors of the case study argue that, as a condition of funding, the technical criteria for the planning exercises was provided by the donor and these criteria contributed to the failures of the planning process by ignoring the local circumstances and characteristics of the two educational systems.

There still remains the consideration of whether local conditions and circumstances, or the assumptions of the models related to them, are modified over time. New theoretical findings change earlier assumptions. The relevant point here is to suggest the value of looking for a suitable framework of analysis which can really contribute to an understanding of the phenomena (Goetz and LeCompte, 1984), of specific local circumstances and characteristics of higher education. With regard to Mexican higher education, university autonomy has long existed. Yet it was only recently that studies took account of the evidence of universities being autonomous, therefore suggesting that the assumption of an 'authoritarian style' in the Mexican government should not be extended to the universities (Levy, 1980).

The literature review in this research includes contemporary theoretical perspectives on higher education issues and its coordination and governance. Although directed to higher education in developed Western countries, these views provide useful insights as they keep some heuristic and epistemological flavour when looking

at the characteristics of higher education and the way they have been developed on a national basis.

These issues and views underline the appropriateness of a case study, based on a combination of qualitative methods. Therefore a combination of historical and organisational approaches has been attempted (Clark, 1976, 1984b).

1.6. Outline of the thesis.

The thesis is presented in 9 chapters. Chapter 1 has outlined the aims, scope and research questions of the study. The chapter has also explained how the research is oriented and designed. In brief, the study aims at an appropriate interaction between the theoretical and the empirical analysis. A period of higher education policy is defined to contextualise the creation of SiNaPPES, and two interpretations of it are produced. Thence the operation of SiNaPPES is viewed in the light of these interpretations, and a conclusion is reached. This structure is shown in Figure 1:

Figure 1

THE STRUCTURE OF THE THESIS
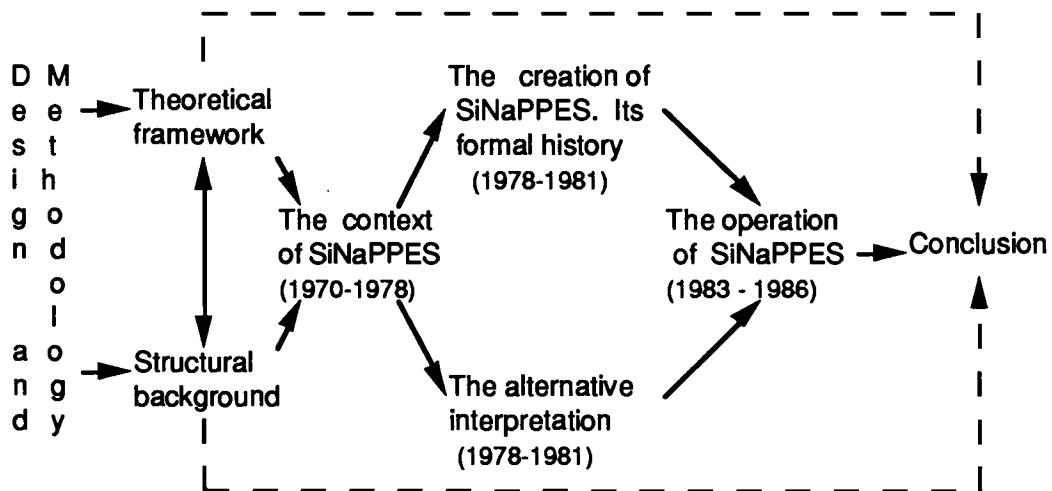
The theoretical framework in Chapter 2 draws on current literature about the major issues of contemporary higher education systems and focuses on the dynamic features of their coordination and governance. The analysis gives special consideration to the suggested uniqueness of higher education systems and their 'political-conflictual dynamics'. Subsequently, the chapter draws on recent discussion about educational planning and analyses the interaction between the technical concerns and political conditions of planning. This interaction is discussed in relation to the particular characteristics and dynamics of higher education which leads us to an identification of the specific 'political nature' of higher education planning. Thus this 'political nature' of higher education planning is proposed to feed the empirical analysis of the planning system in the case study.

The methodology in Chapter 3 considers the relation between educational policy and educational research. It justifies the choice of a qualitative approach as an appropriate methodology for this study. Methodological considerations include the features of qualitative methodology as strategic combination of methods, and the advantages and limitations of the proposed case study, which is based on information from written data -published and unpublished- and interviews with key participants in the creation and functioning of SiNaPPES.

The structural background of higher education planning in Mexico in Chapter 4 provides a detailed structural view of the country today, its main features and the educational system in which higher education is situated. This is followed by a detailed account of higher education in Mexico, and an analysis of the organisation, structure and coordination process of public autonomous universities.

The context of SiNaPPES' creation in Chapter 5 gives an analytic account of the development of the universities and their policy-planning concerns during the 1970s, prior to the creation of SiNaPPES. It does so by reviewing in detail the major actions of universities and university-related bodies through the university reform and expansion: the context of SiNaPPES' creation.

The formal history in Chapter 6 reconstructs the formal creation and establishment of SiNaPPES. It provides a detailed view of the principal characteristics of this planning mechanism. This history, the 'formal history' of SiNaPPES, is recounted in terms of its concerns with technical planning and universities-government partnership.

The alternative interpretation in Chapter 7 provides an alternative perspective of SiNaPPES with regard to the participation of academics in its creation and establishment. This 'alternative interpretation' considers both the prominent participation of academics, and the interaction of the different views of the academics - as knowledge-bearing groups with vested interests - in SiNaPPES' processes, as features of the 'political nature' of policy-planning in higher education. It tells a so far unpublished story of SiNaPPES.

The operation of SiNaPPES in 1983 and 1986 is reviewed in Chapter 8 in the light of the main emphases of the two interpretations of it, which are formulated in Chapters 6 and 7.

The conclusion in Chapter 9 goes over the findings which resulted from the interaction of theoretical and empirical analysis, and articulates the conclusion of the study: the feasibility of the 'political nature' of higher education as a significant element in the rationale of SiNaPPES. It also assesses the coherence of the defined

higher education policy period for the purposes of the study. Finally, a number of issues for further research are seen with regard to current policy issues of higher education in Mexico.

The **Bibliography** includes all the sources used both in English and Spanish in alphabetical order. The unpublished sources, and the documents consulted in archives are also presented separately.

The **Appendices** include the codified list of the interviews, including their institutional reference, and a number of methodological insights from them; a chronology of SiNaPPES and the PNES; and also the main contents of the PNES in 1981, 1983 and 1986.

Chapter 2. **THEORETICAL FRAMEWORK.**

Introduction.

The purpose of this chapter is to provide a view of the main theoretical issues in higher education policy-planning and its particular political characteristics. First it draws on major studies of contemporary systems of higher education. Then it distinguishes the particular characteristics of higher education as a set of institutions strongly linked with knowledge. The relative independence of higher education in contemporary societies is highlighted.

Four models of higher education coordination are distinguished: bureaucratic, political, collegial, and organised anarchy. To discuss the conflict in higher education coordination these four models are re-grouped into three given that the organised anarchy is a variant of the collegial model. The discussion leads to the consideration of a political conjunction specific to higher education. This is concerned with the rationality of the actions of academics owing allegiance to different institutions and different disciplines.

The second part of the discussion draws on the educational planning literature, and reconsiders the interaction of its technical concerns and political constraints in conditions of limited knowledge and vested interests. The political constraints of planning are considered as part of the planning process itself, which is then viewed as an interactive process in which vested interests are supported by technical justifications.

Thirdly, the discussion relates the technical-political interaction of educational planning to the particular situation of higher education. This discussion leads to the idea that there is a specific "political nature" of higher education which results from the fragmented nature of its organisation.

The chapter concludes with a comprehensive overview of this theoretical perspective in relation to the major themes to be examined about the higher education planning mechanisms in the case study which forms the empirical part of this thesis.

2.1. Universities and their particular characteristics.

Universities as we currently know them are a 'Western' institution, that originated in Europe in medieval times, and were spread worldwide through 'Western channels'. This happened sometimes when countries were under colonial rule, and sometimes when they were imported by a piecemeal process of absorption (Altbach, 1979, Cowen, 1989, Clark, 1983a). Their importance and significance in modern societies has been widely discussed in the literature. Universities have been closely linked to the education of leaders in society, the creation of knowledge, and the training of people; and the transmission of knowledge, culture, and common understandings.

For Latin American countries, Spanish-speaking ones in particular, the purposes of the creation of the first universities in the "New World" during the sixteenth century, was to contribute to education and development in those societies and in the formation of their cultural identity as colonies of the Spanish domains (Steager, 1974).

Over time, the increasing complexity of societies made universities acquire a 'plurality of missions'. They continued to be involved in teaching and cultural transmission but also undertook research, technological development, professional training, acceleration of economic growth, and promotion of social justice (Altbach, 1979, Scott, 1984). Others authors, however argue that universities have basic functions which are teaching and research; the other acquired 'missions' do not really belong to universities and could be left aside without much deterioration of their identity (e.g. Ben-David, 1977).

In parallel to the first view, most Latin American authors argue that universities became central to their societies, through the process of cultural conformation and transmission, development of knowledge, promotion of social justice, formation of leadership, acceleration of development, and 'service' to the population (Solana, 1970, Rangel Guerra, 1978, Soberón, 1983, Rodríguez, 1990).

In either case, the changes and challenges have stimulated universities to adapt to changing social conditions, while they maintain their universal identity as universities they have develop particular characteristics. In Clark's words, these institutions

> "must either have been created with a very successful adaptive mechanism or have acquired one to have gotten past all the dangers from environmental changes along the way, and still maintain a continuous identity through generation after generation" (Clark, 1982 p.184)

The significance of universities in contemporary societies has been emphasised further by their expansion during the last three decades, and with consequent increases in their cost, size and complexity. Such expansion has been a worldwide phenomenon in virtually all advanced and developing countries. In many cases this expansion has been extremely expensive for public budgets in that this level of education has been largely supported by public funds. It has brought to bear on them governmental attention and pressures; integration into national plans, calls for public accountability and monitoring of performance.

At the same time this expansion has increased the number and complexity of these institutions, higher education systems have been diversified and have developed unique national features. These characteristics make them particular organisations deserving study in their own right (Becher and Kogan, 1980, Clark, 1976, 1978, 1982, 1983b).

2.2. Higher education systems. Some issues raised in recent studies.

During the past three decades there have been several major studies of the development of higher education, focusing on its institutional framework, and its organisational and governance characteristic. They have approached higher education institutions and their processes with different frames of reference and from different perspectives of analysis. Some have included a single system while others have included a small number of systems in a comparative perspective. Many have been specially concerned with the specific characteristics of organisation and governance of particular national systems.

A number of these studies which focus on the organisation and governance of higher education, can be seen as having developed a cumulative knowledge base over time, despite the variety in their scope. The following account illustrates this cumulative process.

An early study concerned with the development of modern higher education with regard to the national conditions of a number of countries was conducted in the 1960s by Ben-David and Zloczower. This study included the German, English and American Systems and claimed that these three are the most influential systems of modern times. The study focuses on the qualitative interaction among the three systems; how they influenced each other's development, and how this occurred as a result of different national characteristics and circumstances. The national characteristics of these three countries produced different features in their three higher education systems, their organisation, and their relationship with their respective societies (Ben-David and Zloczower, 1962).

In a later study with similar concerns however, Ben-David adds the French system to those of Germany, England, and the United States as having been the most influential of modern times. He argues that all other higher education systems have been influenced by these four in one way or another. Most others have reproduced the features of the four systems, even if they have been in existence a long time, and have developed some characteristics of their own. This study focuses on the large and influential scientific developments in the four countries considered, and how these developments strongly influenced the change and processes of higher education in a manner rather difficult to forecast beforehand (Ben-David, 1977).

A wider study of higher education systems was conducted by the International Council for Education Development (ICED) in 1977, and included 12 higher education systems as varied as Australia, Canada, Federal Republic of Germany, France, Iran, Japan, Mexico, Poland, Sweden, Thailand, England, and the United States. Its main purpose was to provide a comparative description of these systems of higher education with regard to their structure, organisation and effectiveness. It also aimed to provide qualitative information about distinctive characteristics of those systems and their development on an individual basis. The ICED study was thus a general and to some extent atheoretical perspective of the structure and organisation of these systems from a comparative viewpoint. Although this study included a number of higher education systems from a larger variety of countries and signalled specific and qualitative characteristics of individual systems at random, it did so in an illustrative but unsystematic way. For example the Canadian paper highlights the report of its regional pattern (Sheffield, 1978), while the Iranian reports its long existence (Reza, 1978), and the Japanese emphasises its most recent reform (Narita, 1978. See also Becher, *et al*, 1978, Rangel Guerra, 1978).

Van de Graaf et al, in a similar comparative-historical perspective, included six Western 'important countries' and Japan. This study however focuses on a particular issue: the patterns of authority in these systems, in order to analyse how 'academic power' is shaped in higher education. The study proposes a six-level structure for the analysis of coordination and governance of higher education systems, and reports different forms of legitimated authority in them. In general, these forms of 'power' range from strong chairs to collective bodies (Van de Graaf, *et al*, 1978).

A few years later, within a single national perspective, a study of contemporary British higher education was conducted by Becher and Kogan. Its purpose was to provide a systematic description of higher education processes and structure in Britain. Since the view was not intended to be 'parochial', but capable of generalisation, the higher education characteristics identified in the study are assumed as fairly similar among 'Western developed industrialised democracies' (Becher and Kogan, 1980).

Two years later Clark, in the most influential study to date, proposed the need for a cross-national perspective of analysis for higher education national systems and their processes of organisation and governance. This cross-national perspective provides general categories of analysis such as division of work, beliefs, and authority, which would be useful for empirical work at a national level. The use of these categories in the analysis which identifies the nationally-developed features of higher education systems will, in its turn, feed the general categories of the cross-national perspective (Clark, 1982).

Clark's view is that a cross-national perspective is necessary to overcome the analytic distortion produced by 'home-based' studies of higher education. Such a distortion, he argues, is produced by comparing influential systems with non-influential ones when studying a single country, and then projecting the features of influential systems 'deviantly' to higher education trends in other countries. A cross-national perspective would provide enough scope to study the specific national characteristics of a wider range of systems (Clark, 1982).

In summary, the Western idea of the university, which has spread worldwide, has acquired a particular identity in modern times which deserves study. The identity of any particular national system has been influenced throughout the world by the major systems, but individual systems have also developed national characteristics of governance of their own.

This phenomenon has been referred to in different ways. For example Ben-David (1977) highlights the difficulties of forecasting change and future behaviour of higher education with regard to scientific development and international influence. Clark (1983b) notes that higher education, strongly concerned with knowledge, has developed hegemony in relation to certain knowledge-related tasks and functions. Becher and Kogan (1980) emphasise the very academic nature of higher education and how it has been able to govern itself and to mediate between society's social demands and higher education's own expectations. Finally, Clark (1982) suggests a relative independence of higher education in contemporary societies and a cross-national perspective for the analysis of higher education systems where nationally-developed features are a significant concern.

2.3. Higher education coordination. Its particular features.

When referring to recent phenomena of modern higher education - its expansion, diversification, and organisational complexity - all analyses have referred to the strengthened presence of, and significant participation by the government in its coordination. Most studies relate this governmental presence to the increased amount of public funds devoted to higher education. Some however, for example Teichler (1988), point to the stronger presence of the government and the tendency to build

sophisticated mechanisms for higher education coordination as a response to its increased complexity.

The studies reported in the section above, describe different general patterns of higher education coordination, from a centralized style (as in France) to an autonomous one (as in England). By looking at these two higher education systems, a continuum can be established between two main points of reference in coordinating arrangements for higher education nationally: state authority and academic institutions.

Higher education systems, so it is argued, can be very dependent on the state authority for their decision-making processes. In Clark's' view, the extreme case in these circumstances was the higher education system in the Soviet Union (Clark, 1982), where the presence and intervention of the state authority was extended even to academic matters such as selection of courses, acceptance of students, management of academics, as well as determining the criteria for research. He claims that the French system could be viewed near the middle of such an axis since the decision-making process is to some extent dominated by governmental officials and academics are included in the civil service. Nevertheless academic concerns such as the structure of courses are largely influenced by academics.

The other extreme of the axis refers to the systems which can rely strongly on academic criteria and professional capacity in taking decisions on their internal matters (e.g. England). In these systems academics have been able to maintain their prominent influence in the management of higher education. The extreme typical example for Clark (1983) close to 'Academic Oligarchy' is that of Italy (See figure

2). Here, he claims, academic guilds are very strong notwithstanding the administrative network of the Ministry of Education which had reached even higher education. There is nevertheless, the 'ever possible' presence of the government, as it is referred to in England by Becher and Kogan (1980).

The American higher education system is commonly referred to as having much choice and competition, similar to the market economy of that country. Its federal, very decentralised structure of government, is also cited by Clark in support of this particular pattern of higher education provision (See figure 2). Even so, the expansion of higher education after the second world war also demonstrated an increased commitment and economic support on the part of the Federal Government (Baldridge *et al*, 1978).

There are thus three points of reference for the coordination of higher education nationally. National systems of higher education are coordinated with different tensions, according to these three points of reference: the government, the market, and academic institutions themselves.

Clark develops a triangle of coordination starting from an axis with the State Authority and the Market at the extremes. The extreme examples for him of such an axis are the Soviet Union and the United States respectively. Subsequently he developed the former single axis into a triangle to give scope to the ever-present academic guilds. He had then: the State Authority, the Market, and the Academic Oligarchy in a triangle of coordination (Clark, 1978, see also Clark, 1983a, 1983b, 1984, Van de Graaf *et al*, 1978). In this perspective, these three points of tension can be seen in figure 2, on the next page.

Figure 2

THE COORDINATION OF HIGHER EDUCATION

STATE AUTHORITY

USSR
*Cuba

France   USA
                  *Chile   MARKET

*Venezuela   Britain
**Mexico
Italy

ACADEMIC OLIGARCHY
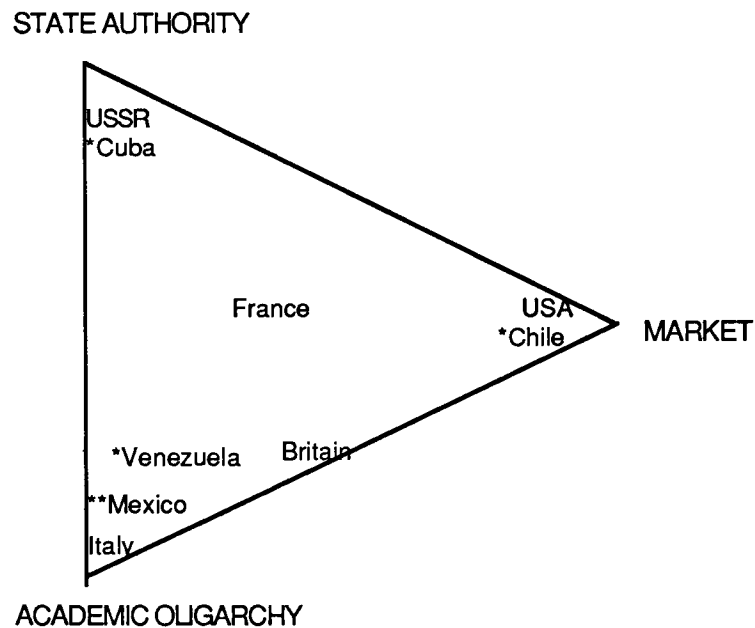
Source. Clark, 1983.
Formulation. Martínez, 1992.
** Martínez, 1992.
* Albornoz, 1990.

An analogous perspective to the triangle of coordination proposed by Clark is considered by Albornoz in relation to Latin American higher education coordination. Albornoz suggests that Cuba and Chile are close to the State Authority and the Market points of influence respectively, and that Venezuela is closely related to the Academic Oligarchy (Albornoz, 1990). In the following section some major points of the Mexican case are provided which permit us to locate it near the angle of Academic Oligarchy.

Clark proposes four paths for the analysis of higher education coordination (See Berdahl, 1983) resulting from its proposed 'Triangle of Coordination': i) the political, whose function is to articulate the variety of public interests; ii) the bureaucratic, whose function is to compose a formal system and to provide a fair administration; these two may be related to the angle of the State Authority; iii) the academic, whose function is to protect academic-professional self-rule; and iv) the market, whose function is to protect freedom of student choice (Clark, 1978, 1982 pp. 265-66).

Berdahl takes the view that the academic and market points of tension in the analysis of higher education coordination are forward-looking because the other two, political and bureaucratic, "we all recognise as traditional". These two new paths, academic and market, Berdahl describes as 'insightful' since the former permit the exploration of the way academics maintain and protect the academic work, and the latter how the market protect freedom of students choice (Berdahl, 1983 p. 70).

The academic nature of higher education dealing with the process of knowledge which is observed in most of the analysis discussed in this chapter, may be related to the singular characteristics of higher education and its coordination processes. Academics concerned with knowledge provide this system with relative independence from the State Authority, and the Market. Higher education develops its own particular features and processes of governance and coordination inside academia. These features and processes can be studied as the contemporary characteristics of a relatively autonomous institution on a national basis.

This academic path of higher education coordination accords with the purposes of this study. By referring to the Triangle of Coordination of higher education, the main respective features of public autonomous universities in Mexico may be related here.

Clark originally focuses on the U.S.A. and U.S.S.R. experiences at the extremes of his original axis, and referred to them as ideal types of State Authority and Market. In the case of the State Authority's tight control, this is in fact exercised by the government on behalf of the State; hence by referring to that apex of the triangle as the Government, the triangle acquires, to some extent, a wider perspective in which the State may be, then, considered as the entity where different interests in society converge and establish a balance -or imbalance- among them (Ham & Hill, 1984).

In the case of the USSR the State Authority was supposed to be the true expression of a completely established public domain in which there were neither social differences nor private distinguishable interests, hence the political interests could establish a common will based upon consensus exercised through the State Authority. However, that was not necessarily true. In the case of the United States where the existence of the Market is strong, there has also been an increased presence of the State Authority in higher education matters; this can also be regarded as the presence of the government, or governments at federal and state level, on behalf of the State (Baldridge *et al,* 1978).

2.4. The coordination of universities in Mexico.

After the Mexican Revolution, the main social agreement supporting the strong Mexican Revolutionary State was a coalition between public concerns and private

interests. Following Levy (1986 pp. 114-115) a 'public-private alliance' which is itself a "paradox" has provided the country with political stability and economic development. Under the terms of this alliance, the creation and development of public autonomous universities had been largely supported.

Regardless of whether this alliance is considered as a 'paradox' or the consideration itself could be inappropriate to understand Mexican features (Cleaves, 1985); we have then an alliance between public and private spheres which has been there for more than seventy years, and has sustained the Mexican state since the Revolution. This alliance of interests echoes the notion of the State as the entity representing the articulation of different interests in society, distinguishable - even if not different - from the Government. This feature helps to explain better the notion of the relative independence of higher education in Mexico.

A more detailed view of the structure and governance of Mexican higher education is provided in Chapter Four. Some general comments and comparisons are given here in order to provide a contextual perspective of it with regard to what is discussed in this section. The autonomy of Mexican universities has its roots in the National Autonomous University of Mexico (UNAM). It was granted in 1933 as a result of a long struggle between the National University and the Federal Government, despite the fact that the autonomy of the university was an aim enshrined in its initial design in 1881. This struggle for university autonomy is better understood if we recall here some of its main premises as follows:

i) the National University was created at the time of the Mexican Revolution (1910-1917), hence it acquired some additional emphasis within its aims, with

regard to the identity and development needs of the new Mexican state and nation. Some commentators have referred to the National University as the "educational arm of the State" (Levy, 1986).

ii) The National University, as a civic educational institution, could be viewed as re-created in the place of the Royal and Pontifical University which had lasted for 300 years, but had been closed in the late 1800s.

iii) after the National University was granted a charter as an autonomous institution in 1933, its guaranteed funding from public sources was also assured (See Levy, 1977a).

iv) the National University became the strongest academic body which, 'decreed to be a public institution decentralised from the government', has provided academic guidance and affiliation to all higher education studies provided in private institutions (Rangel Guerra, 1979). By so doing the National University developed an academic structure which enabled it to exercise an exemplary influence in the public universities as well (De la Garza, 1990). Although public autonomous universities in the states also became strong academic bodies, the academic affiliation of private institutions was mainly with the National University. Recent views point out the academic control of the National University as a relaxed one through which there is a good deal of institutional freedom, and that is the reason, they suggest, why private higher education institutions maintain this academic affiliation (Levy, 1986).

v) in 1950, the National Association of Universities and Higher Education Institutes (ANUIES) was created by the public autonomous universities themselves, although the funds for its operation have been provided by the Federal Government since the start.

vi) upon all these premises, university autonomy was enshrined in the Constitution of Mexico in the late 1970s.

Accordingly, there was neither a Ministry nor an office of higher education, from the time the National University was granted autonomy in 1933 until 1978, when the Under Ministry of Higher Education and Scientific Research (SESIC) was created. In the same year, the National System for Permanent Planning of Higher Education (SiNaPPES) was also created, with its coordination shared on equal terms at national level by SESIC and ANUIES.

It is illustrative to see these main characteristics of Mexican higher education in relation to the main coordination features of British and American higher education by following the analysis of Berdahl (1983). He highlights the prominence of academics in the coordination of British higher education. The best example was the creation and operation of the University Grants Committee (See also Geiger, 1988). In its turn, in the American case there is a strong influence of the state coordinating bodies, which have not the prominent academic participation that the UGC had in the English case. The American characteristics may be related to the existence of the states before the federation, and the independent colleges before the state ones (Berdahl, 1983).

In the case of Mexican higher education, the concern about the consolidation of a nation was stronger than the preeminence of the states, and education has been mostly encouraged and supported by the Federal Government since the Revolution, as is explained in more detail in Chapter Four. Within this context, autonomy of individual universities is strong and it is also manifested through the National Association of Universities. As a 'buffer' body between the government and the autonomous universities, ANUIES officials are elected by the universities and not appointed by the government as in the UGC (Becher *et al*, 1978). ANUIES does not have, however, the same funding involvement as the UGC did in Britain (Berdahl, 1983). ANUIES does not participate so closely in the process of 'distributing' the public funds among universities (Becher *et al*, 1978), although it can be viewed as being the most important advisory body on higher education policy (Valadés, 1982), particularly regarding coordination and planning concerns (Rangel Guerra, 1979), whose influence even reached funding policy for autonomous universities (De La Garza, 1990). As a result of SiNaPPES' creation in 1978, the role of ANUIES in the coordination of higher education was strengthened although it was shared with SESIC.

We have a situation then in which public autonomous universities in Mexico have established a pattern of autonomy among them, and in their relationship with the government, even though they have been supported mostly by public funds (See e.g. Latapí, 1982, Levy, 1977a). Accordingly, in relation to the triangle of coordination proposed by Clark, Mexican universities may be situated near the Academic Oligarchy angle in the triangle of higher education coordination.

2.5. Perspectives in higher education governance.

According to a recent study of patterns of higher education in Western developed countries, the analysis of higher education systems has recently moved its focus towards their forms of coordination and governance (Teichler, 1988). The study relates this new approach with another change; what was previously a search for similar trends in higher education systems, frequently on a comparative basis, with the tendency to look for a singular paradigmatic model for higher education development, has shifted towards the study of the characteristics of individual systems. Teichler claims that there is an unresolved issue between a general model and the specific characteristics of different patterns of higher education. Different approaches and models have been useful for explaining specific systems and their characteristics in particular circumstances, but they have not been able to provide more general explanations.

There are some other views which have also suggested a limitation of the analytical perspective. Analysis becomes a lens which highlights different issues, information and ways of looking (Alisson 1970). Accordingly attention to specific characteristics of organisation and governance in higher education has encouraged the development of different models or perceptions of the organisation of higher education and its institutions. These perspectives have been described in general as: collegial, political, bureaucratic, and organised anarchy. The organised anarchy perspective may be viewed as a variant of the collegial one because of the singular way decisions are reached in a community of professional academics (Cohen and March, 1974).

Researchers into universities and higher education institutions have frequently borrowed paradigms from organisational theory. For some authors, the major paradigm borrowed within this process, comes from Weber's bureaucratic model, the bureaucratic metaphor (Cohen and March, 1974). However the general characteristics of the bureaucratic model such as formal hierarchy, explicit delegation of authority to officers and positions, and consequently the codified coordination of those units, and the supposed impersonal ruling procedures (Clark, 1982 p. 118), were not sufficiently helpful in the understanding of the characteristics of higher education processes.

A different paradigm was then based on Parsons' professionalism, addressed to academics and formulated in opposition to the former one as a 'collegial' model (Baldridge, 1971). Colleagues in a community of scholars have differences, but they reach consensus on their central task because they belong to a world of reason, and their concern is knowledge. The main difference when approaching higher education dynamics is in the way conflict is understood; that is, between bureaucratic models on one side, and collegial ones on the other. Conflict is recognised by the latter models, but it is seen differently.

From the collegial perspective, conflict is managed in a distinct way in a community of scholars, where the inherent properties of an academic field can profoundly affect the way of life of those engaged in its exploration (Becher, 1984, 1989). The very academic nature of higher education emphasises its specific rationality. The notion of organised anarchy suggested by Cohen and March (1974) may be viewed, as was noted above, as a variant of the collegial perspective resulting from higher education's uniqueness (Becher and Kogan, 1980).

However, in proposing what he has called a political model, Baldridge (1971) makes three main criticisms of collegial models. Firstly, they are rather idealistic about what universities should or could be in terms of consensus and participation in decision-making processes. Secondly, they rely too much on consensus and deny the conflict lying behind it. This conflict frequently means long discussions are needed before any consensus can be reached, and that one group is prevalent over another. Thirdly, participation is limited within the normal operation of universities, and commonly only an excuse for calling for a reform.

By looking at the arguments of the collegial and the political models in parallel, we can distinguish a major difference between them. It is given by the notion of conflict and the way it is recognised and managed. The collegial and the political approach both recognise the presence of conflict in higher education coordination and governance, but suggest different ways of dealing with it. The collegial perspective emphasises the presence of academics as persons of reason whose concern is the development of knowledge. These characteristics encourage a particular manner of managing conflict between disciplinary perspectives in the way they reach consensus in an organisation of values (Becher, 1984). In higher education values normally influence actions rather than the opposite (Becher and Kogan, 1980). On the other hand, the political perspective emphasises the presence of groups with different political interests in the processes of decision and government in the university. Consensus for the operation and governance of higher education is not reached on the grounds of reason, but by means of a kind of balance of power where all parties in conflict will gain something and lose something. Conflict becomes a strategic stage in the organisation; a healthy stage for change (Baldridge, 1971).

However in this perspective of managing conflict in higher education, there coexist in the academic life a general academic culture of reason and scholarship, and a fragmented disciplinary culture (Clark,1983a, 1983b), related to the epistemology of the disciplines themselves (Becher, 1989). In Clark's view, both constitute the symbolic side of its organisation (Clark, 1982, 1983b).

Accordingly, we have the situation that the academic profession exists in relation to institutions of higher education whereas disciplines exist in relation to subjects or areas of knowledge which are inter-institutionally linked. The academic profession becomes, then, one that is fragmented by disciplines which are carried out by knowledge-bearing groups. These groups develop their own interests within the academic profession. According to this argument

"the interest group struggle, largely internal, is at the heart of the dynamics of the system" (Clark, 1982, 1984).

According to Clark, at the heart of the system academics belong to a discipline and to the academic profession at large. They belong both to a particular university or college and to the entire national and indeed international system. The discipline links parts of an institution as an enterprise, with parts of others. At the same time, disciplines fragment each institution and the academic profession within. Thus, for Clark, a national system of higher education "may be, and often is as much a set of disciplines and professions as it is a set of universities and colleges" (Clark, 1982). The crossing of these two lines of membership provides the 'master matrix' of the higher education system. In Clark's view, the very dynamic point of the system is the

struggle between the vested interests from different groups inside and outside the system. Profession and discipline form a crisscrossing matrix within higher education which is not the same everywhere and varies across and within national systems of higher education (Clark, 1982, 1984).

Whereas Clark's proposal is related to the constituency of higher education itself, and its mechanism of change and adaptation (Clark, 1982), the political model of Baldridge in his own, later opinion, is very much related to a particular university in a particular moment of crisis and change (Baldridge *et al,* 1978).

Both analyses meet each other to some extent by being concerned about the dynamics of change in higher education. Baldridge suggests conflict as a 'healthy stage' of change, whereas Clark suggests the core struggle in higher education as a 'built in' condition which leads higher education to new qualitative stages of coordination. On the other hand, the analyses differ about the essence of higher education conflict; while Baldridge considers it as a specific stage within particular circumstances, Clark considers the conflict between disciplines to be a constituent part of contemporary higher education systems. This view stresses a kind of "political nature" within higher education itself, as it identifies the struggle of vested interests at its very heart: the academic profession organised in a structure of work based on different perceptions of knowledge, with strong academic values, and disciplinary cultures which develop specific beliefs and vested interests, while sharing concern about knowledge and its development. Becher (1989) suggests that these differences among disciplinary cultures do not lie "merely in the differing social norms that mark off the members of one academic culture from another" (Becher, 1989 p. 5); in his view they emerge at least partially "from the epistemological characteristics

of the types of enterprise on which the academics in question are engaged" (Becher, 1989 p. 5).

2.6. A summary.

The account of major studies of contemporary higher education systems given in this chapter has distinguished a number of approaches to the analysis of its underlying dynamics. The relevance of higher education in contemporary societies, because of its strong link with knowledge and increasing complexity, has been discussed. It has been seen that the characteristics which enabled higher education systems to become relatively independent within contemporary societies, can be related to the sources of tension of its coordination: the Government, the Market, and Academia itself.

Three main approaches to the study of higher education coordination and governance have been distinguished: bureaucratic, consensual and political-conflictive. The consensual and the political-conflictive approaches both recognise the presence of conflict within higher education and show how the conflict can be related to its particular characteristics. These, in turn, were related to the collection of professions and disciplines which fragment the academic domain. At this point the specific political condition of higher education has been discussed in terms of a struggle of vested disciplinary interests at the core of the academic profession; the "political nature" of the dynamics of higher education.

We can now turn our attention to current discussion in educational planning, in order to relate it to the intrinsic characteristics of higher education.

2.7. Educational planning.

Social and economic planning, in its general form, is an old human activity. Specifically in education, it can be traced back as a normal activity of educational administrators making decisions on the size of the groups, the use of the buildings, the major contents of the curriculum, and similar educational issues (Coombs, 1970). However, it was in the 1950s and the 1960s when modern educational planning became very significant. The subject is not short of definitions, but a well known definition, by Coombs, spread widely through the IIEP-UNESCO in Paris, particularly towards developing countries, is illustrative of its emphasis.

"Educational planning, in its broadest generic sense, is the application of rational, systematic analysis to the process of educational development with the aim of making education more effective and efficient in responding to the needs and goals of its students and society" (Coombs, 1970, p. 13).

Educational planning has also been described as

"a continuous process concerned not only with where to go but with how to get there and by what best route" (Coombs, 1970 p. 14).

Purposes and hopes cultivated during the post war period in Europe and the United States on the one hand, and developmental aims held by independent -former colonial- countries on the other, had seen in educational planning a powerful tool for improving the performance of educational systems, and therefore, the contribution

of education to reconstruction and development. Planning decisions could improve the state of the art for educational decisions and policy; observers realised that planning is not "per se the maker of policies,[...] but the handmaiden to those who do it" (Coombs, 1970, pp. 14,15).

It was not very long before changes in the economic, social, and political environment modified assumptions and adjusted aspirations about change in society, and its promotion and management. Different needs and goals appeared which were difficult to cope with on the basis of a rational process of planning. Educational planning was unable to overcome increasingly obvious conflicts of interests when defining goals and means in educational policy formulation. Educational planning did not fully achieve the expected aims of contributing to the effective and efficient development of education, and pessimism followed the earlier hopes (Coombs, 1985).

The achievement of educational purposes supported by educational planning also differed from country to country, and a major difference appeared between the reconstruction aims of developed countries after the Second World War, and the developmental aims of the new developing countries. What developed countries achieved in fulfilling the need for skilled people in their existing productive structure could not be directly applied when such a productive infrastructure did not exist in developing countries; in that case similar educational outcomes of skilled people did not have the same impact on their country's economic structure, and therefore on their economic development as they had in Western Europe (Coombs, 1985, ILPES, 1975).

In addition to these different infrastructural and economic conditions, planning in the process of educational policy formulation resulted in a "complex amalgam of technocratic calculations" to be considered from different "professional bias, [...] philosophical convictions, [...] and political pressures" (Coombs, 1985 p. 30), in such a way that planning did not achieve that was expected of it. These experiences made reconsider the initial proposal of a planning notion and redefine it as:

"more an art than a science [since] educational decision-making in every country is, in the final analysis and inescapably, a political process of give and take" (Coombs, 1985 pp. 176-177).

Most Latin American Countries were influenced by these educational planning concerns of the IIEP-UNESCO programmes (De la Garza, 1990, Castrejón, 1981). Since the late 1950s and during the 1960s, there was the USA-promoted educational programme 'Alliance for Progress' (Alianza para el Progreso) directed to Latin American Countries, and which had been also directed by Coombs. Under the auspices of this Alliance for Progress, national programmes of literacy and basic education were promoted with the purpose of expanding these educational services for all the population (Cox Donoso, 1985).

One view is that Mexico has been particularly reactive to these external influences, mainly if they come from the USA as in the case of the Alliance for Progress (Benveniste, 1970, De la Garza, 1990). In an alternative view, a Mexican planner points out that in the second half of the sixties and during the seventies, planning in Latin America generally underwent a period of confusion and was inclined to copy experiences abroad (Castrejón, 1981 pp. 93-100). According to this alternative

view, from 1968 onwards the IIEP-UNESCO's conception of educational planning by Philip Coombs had a strong influence on the Mexican planners and on the educational reform of the time which was based in his thought. However, Castrejón claims that the introduction of disciplinary views and political considerations into the model made planning theoretically conflictive.

The stress on the rational aim of educational planning for policy decisions in education, and the political constraints it faces, have been widely discussed. After the changes and experiences of the early years, planners have been seen very much as technicians providing rational considerations, alternatives, and criteria for optimal solutions of educational problems by politicians. Planners could no longer 'be naive' (See Williams, 1983) about vested interests and political considerations in the decision-making process. Nevertheless, there is a view that they could still provide this process with more and more systematic information, or technical models - simple or complex - for dealing with educational problems and concerns. They would be able to better persuade the decision makers, on some perspectives of analysis and different consequences of taking particular decisions (e.g. Benveniste, 1970).

2.8. Planning. Widening a notion.

Recent elaboration of educational planning discussion has stressed its complexity as a social exercise attempting to provide objective knowledge of reality. Authors call on the need for extending its discourse and frame of discussion according to different expectations emerging from different social paradigms (Adams, 1988).

This formulation, by calling on present discussion of educational planning, shows how different definitions of planning reflect different trends in the discipline, but at the bottom they also reflect different conceptions of society and its dynamism and change. In earlier discussion of educational planning, these differences in its conception were mainly placed within an horizon limited at the extremes by the technical-rational and the political dimensions of educational planning respectively, with a tension between (e.g. Benveniste, 1970).

Different authors provide different definitions of planning for educational concerns, and some of them compile different sets of definitions, though these definitions and the sets of them are frequently ordered from the more technical-rational in one extreme of the set, to the less rational in the other extreme. One set of definitions of educational planning proposing a wider scope for its conception was recently set out by Adams, as follows, (Adams, 1988 p. 403)

1. planning is a process of making rational-technical choice,

2. planning is a matrix of interdependent and sequential series of systematically related decisions,

3. planning is the construction of maps of time, space, and causality in new settings,

4. planning is a strategy of decision making controlled by politics and the exercise of power,

5. planning is interaction and transaction with decisions reached as a result of dialogue,

6. planning is essentially a process of education or learning, and

7. planning is the organisation of hope.

In pointing out the difficulties of such a typology of different models and conceptions of planning, Adams suggests that the first three can be labelled as 'rational-technical', and the last three as 'interactive-transactive'. This selection gives scope in the middle for a conceptualisation of planning with elements of both, rationality and transaction (Adams, 1988).

The conceptualisation of planning in number 4 of the above list, also explicitly deals with elements of strategy and power, and points out politics as the controller of the decision making process. Such a definition is not essentially different from the one referred to in the preceding section, but Adams extends the discourse of educational planning to situate the paradigm of technical planning which is associated with objective knowledge.

Accordingly, in Figure 3 on the next page, there is the objective paradigm of technical planning in one extreme (on the right), and subjectivity on the other extreme (on the left) of the axis. These extremes of the axis correspond to technical and interactive characteristics of the policy-planning process. Four models of planning are situated respectively between the objective and subjective extremes.

Closer to the extreme of the objective paradigm (on the right   of Figure 3) is the ideal model of planning associated with this form of knowledge, which is labelled as technical. In turn, closer to the subjective extreme of the axis lies the unlabelled version of an incomplete model of planning (that is why the corresponding circle is incomplete). In Adams' view "the assumption is that [this] solipsist view of knowledge constitutes a rejection of planned change", since individual construction valid in itself provides no space for collective goals (Adams, 1988 p. 410).

Figure 3.

MODELS OF EDUCATIONAL PLANNING

Interactive   Technical

Unlabeled   Consensual   Political   Technical

Subjective   Objective

Source: Adams, 1988. p. 410
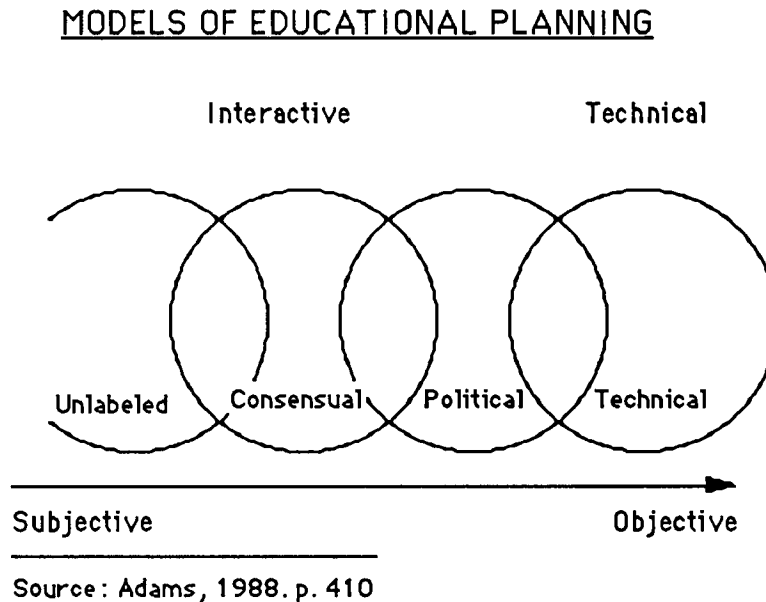
The consensual model focuses on participation; in this sense it is interconnected with the political model. The consensual model also indicates shared practice, so it is also interacting with the unlabelled/incomplete model of planning. In Adams' words the consensual model "breaks cleanly from the rational tradition" of [technical] planning (Adams, 1988 p. 410).

The political model, in its turn, interacts with the rational and consensual models; the political model includes both characteristics of planning: objective and interactive. Planners can identify political obstacles and supports, and locate them as inputs in a technical model. However, the assumption is that bargaining and negotiating in the process tend to invalidate its rational basis (the arrow in Figure 3 shows this trend) (Adams, 1988 p. 410).

The political model of planning gives scope to notions of 'political rationality' in educational planning where transaction interacts with technical justification; e.g. when the aim is to protect the survival of the institution and its institutionalised rules: the exercise of legitimated power (Adams, 1988. p. 405).

Following the scheme proposed by Adams the four models of planning described above can be seen in the following typology to facilitate our further discussion.

- Objective. (Technical characteristics of planning).
  1. Technical planning.
  2. Political planning.
  3. Consensual planning.
  4. Individualist (unlabelled by Adams).
- Subjective. (Interactive characteristics of planning).

In the typology above there is the objective paradigm associated with technical planning in the top extreme, and the subjective end at the bottom. These extremes, in turn, correspond to technical and interactive characteristics of the policy-planning process. The four planning models are situated between both extremes of the typology.

Starting from a different perspective of analysis from that of Adams, McGinn and Porter (1984) advance to a similar argument when rational-technical concerns have to deal with political constraints in educational planning. They suggest a notion of 'situational planning' which would deal with the rational and political dimensions of planning in particular sociopolitical circumstances.

Their argument accounts for an active participation of planners and their plans in the dynamism of the subject which is being planned. Therefore the subject itself is modified because of the action of planning, and a 'situational planning' perspective should aim to recognise this modification of the subject and include it in the process, in order to readapt the planning process to the now modified subject of planning. In Adams' view, as referred to above, this situation reflects the interaction of the political model with the technical one where political constraints become an input to the model, assuming a rational approach. Seen in this way Adams, and McGinn and Porter, continue to emphasise the objective side of the proposed typology referred to above.

Also within this perspective, and arguing that the planner's perspective is that of a 'technocrat' supported by rational considerations, Benveniste (1970) deliberates about the convenience of giving planners the power to implement the plans they have formulated. This would be to overcome political interferences in their process of implementation. Alternatively they may convince politicians about the good sense of the plans, having been rationally elaborated.

Benveniste's argument considers that the technical-rational issue in educational planning is difficult to achieve. He deals with two main problems: the limitation of the objective knowledge available to support full rationality in the process, and the participation of different views and interests in the process. He argues that the planner finally becomes a politician in the process.

Although a technician, the planner will argue in favour of some particular views and against others in a context where knowledge is necessarily limited and vested interests are competing for the same resources. The planner's own views will require support from the vested interests already established, or will need to create their own legitimate presence in the process.

Within this perspective, Benveniste's considerations are not too far from McGinn and Porter's argument whereby the planner becomes an active participant in the process of policy planning, able to adapt the planning process to changing situations in a condition of limited knowledge. However, a significant question arises, as to how far the active participation of the planner makes the planner a kind of politician in the decision making process. Alternatively how far the planner's participation gives technical justifications to the process of bargaining between vested interests.

Adams has already suggested that the technical model can include political considerations as inputs in a technical perspective; however, at this stage it seems plausible to argue the other way round: the political model can include technical justifications as inputs in the transaction of vested interests.

We are now a step further in our discussion. Although the presence of rational concerns and political constraints in the educational planning process is still there, our discussion has highlighted the interaction between them, rather than the assumption that political constraints invalidate the rational considerations of the planning process. This interaction also deals with the consideration that the rationality, is not the only rationality of the educational planning process.

Discussing the rational-political issue in educational planning from this perspective, Benveniste (1970) suggests that, given the limits of objective knowledge available there is space for vested interests to be explicit in the process. We have already mentioned that Adams (1988) also argues about the limits which objective knowledge has, and how this limitation constrains in its turn the aimed rationality of educational planning. The two arguments are essentially the same; they certainly arrive at similar conclusions about the nature of educational planning.

Lindblom (1980) also suggested that in the policy-making process successive choices are cumulative of experience and knowledge, and therefore later choices are made up of an increased knowledge of the matter. Seen in this way, this approach becomes similar to what was already mentioned by McGinn and Porter as 'situational planning'. However, Ham and Hill (1984) suggest that Lindblom was, later on, more critical about the cumulative process of increasing rationality of choice in social processes such as planning; both the limits of objective knowledge for planning, and its interactive/political conditions are still there as a matter of discussion.

2.9. An interim summary.

We thus arrive at the following considerations:

1. The political model interacts with the technical model in educational planning because of vested interests and the limits of objective knowledge.

2. Due to the limits of objective knowledge, the planning process provides the space for the different views and interests involved in it to be explicit. The

interaction of both technical and political dimensions emerges within the planning process.

3. While the political conditions may be an input to the technical model of educational planning, the reverse is also valid i.e. the technical conditions of educational planning can be considered as an input to the political model.

Present economic constraints and reduction of available funds for education have highlighted the emphasis in this discussion towards efficiency, effectiveness, and economy in education, and stressed the technical-rational concerns of its planning and policy making process. Contemporary developments in technology, and information management have also emphasised technical and rational concerns in educational planning, but what has been suggested as its political condition and rationality are still there (Adams, 1988).

2.10. Planning revisited.

Adams points out that the technical-rational approach to planning in the objective paradigm of his proposed typology, has three important implicit assumptions namely:

i) knowledge for planning is objective, cumulative, and can be expressed in abstract, codified language.

ii) planning with its technical formulations and language is suggested as a neutral efficient algorithm for change, and

iii) planning models and methods are of universal applicability.

These assumptions, he argues, have three corollaries:

i) change can be managed, so planning becomes the management of change

ii) planning becomes the prerogative of experts and professionals, and

iii) the planner becomes a change agent. In this way, rational planning as rational choice based upon technical considerations, he summarises, becomes essentially similar to what Habermas refers to as 'purposive rational action' (Adams, 1988).

At this stage the discussion about educational planning has identified technical and interactive characteristics in its conception and processes. Considerations about the limits of objective knowledge oblige the planning process to deal with conflict of interests because of the presence of different professional views, values, philosophical goals, and interests. These differences lay the stress on its interactive condition. However, the tension on the typology remains towards the objective paradigm (Section 2.8).

As was said, there is the consideration that the implications of the objective paradigm are similar to the Habermas' notion of planning as a purposive rational action. By advancing this notion of planning, the models of planning being used in our discussion may be reviewed.

Purposive rational action is, McCarthy suggests, a Weberian notion which was the inspiration of Habermas' scheme. It refers to the progressive process of modernisation by technological development which "Weber clearly regarded as irreversible" (McCarthy. 1978 p. 19).

In articulating this problem, by means of the concept of rationalisation Weber attempted to grasp the repercussions of scientific and technical progress and its effects on the institutional framework of traditional societies engaged in modernisation. Habermas considers that 'rationalisation' since Max Weber, is a process by which areas of society are increasingly subjected to the criteria of rational decision, the progress of industrialisation and its consequences. In that process social labour is industrialised and other areas of life are also affected as is urbanisation, technification of transport and communication (McCarthy, 1978, Habermas, 1971).

Weber distinguishes between social action and non-social action; he classifies social action into four types: purposive-rational, value-rational, affectual-emotional, and traditional. For him, purposive rational action is "determined by expectations as to the behaviour of external objects and of other men, and makes use of these expectations as conditions or means for rationally considered ends" (McCarthy, 1978 p. 28).

McCarthy suggests that "while Weber's non-social purposive-rational action is oriented solely to the behaviour of inanimate objects, Habermas' purposive-rational action apparently includes the application of technical knowledge to the control of human behaviour". Habermas includes in purposive-rational action the actions oriented towards other human beings. In this way, a subject involved in a relationship in which values can be 'communicatively validated', becomes apparently, an object subject to 'standards of technical appropriateness'; these criteria of an organisation's efficiency are not 'communicatively validated'. "Work or purposive-rational action refers to actions or systems of action in which elements of

rational decision and instrumentally efficient implementation of technical knowledge predominate. The orientation to technical control over objectified processes, natural or social is decisive" (McCarthy, 1978 pp. 28-29).

Habermas considers two main kinds of rationality, cognitive and practical rationality. The former deals with instrumental actions while the latter is concerned with critical argumentation. Purposive rational actions, like planning, belong to the latter category where action is governed by technical reason based on empirical knowledge and rational choice is governed by strategies based on analytic knowledge, where propositions are either correctly or incorrectly deduced according to value systems. Nevertheless, "in very rare cases practical questions are [completely] decided in this rational form", and when that happens, 'critical argumentation' needs to support the rational assessment of the approval of a procedure or the acceptance of a norm (Habermas, 1971 pp. 7, 91).

In a broader sense, purposive-rational action includes strategic action. The latter is bounded by consensual norms, 'the rules of the game', and transpires at the level of intersubjectivity. Intersubjectivity becomes complete when symbolic-interaction is achieved and work and moral/values - as of human beings - come to terms with each other (McCarthy, 1978).

McCarthy points out that the great problem, as Habermas argues, "is not technical reason as such but its universalisation, the forfeiture of a more comprehensive concept of reason in favour of the exclusive reality of scientific and technological thought, the reduction of praxis to techne, and the extension of purposive rational action to all spheres of life. The proper response, then, lies not in a radical break

with technical reason but in properly locating it with a comprehensive theory of rationality" (McCarthy, 1978 p. 22).

Habermas proposes two components which, "though interdependent in social practice, are nevertheless analytically distinguishable and mutually irreducible: labour or purposive-rational action, and social interaction or communicative action" (McCarthy, 1978 p. 22).

"While rationalisation in the dimension of instrumental action signifies the growth of productive forces and extension of technological control, rationalisation in the dimension of social interaction signifies the extension of communication free from domination" (McCarthy, 1978 p. 23).

Habermas contends that "a rational mediation between technical progress and the conduct of life", can be realised only through decision-making processes based on critical discussion "free from domination" (McCarthy, 1978 pp. 13, 14).

By following McCarthy's view, the extreme of the typology of planning models, opposite to the objective paradigm of technical reason (the top) may be viewed, according to Habermas' suggestion, as an alternative paradigm of symbolic-interaction (the bottom) which is bounded by consensual norms. It was said that in Adams' view subjectivity tended to solipsism, but, in this new perspective, inter-subjectivity (contrary to solipsism) becomes complete when symbolic-interaction is achieved and work and moral values come to terms. Accordingly the paradigm of symbolic-interaction, as an ideal type, replaces the subjective extreme of the typology of planning (on page 67), and the individualist-unlabelled model of

planning in Adams' consideration disappears since the revisited typology (below) acquires a new perspective by relating both paradigms: Objective and Symbolic-Interaction. The consensual model of planning in its ideal form becomes closer to the Symbolic-Interaction paradigm, and is located at the bottom end of the planning typology revisited, below:

- Objective. (Technical characteristics of planning).

  1. Technical planning,

  2. Political planning,

  3. Consensual planning.

- Symbolic-Interactive. (Interactive characteristics of planning).

In this way the planning typology revisited, above, maintains its relationship with the objective paradigm and the limits of objective knowledge which are associated with technical-rational planning. At the same time this revisited typology includes the constraints of Symbolic-Interaction as a paradigm of an alternative notion of rationality; as McCarthy claims: "it is painfully clear that the [appropriate] empirical conditions for the application of the model [Habermas' paradigm of Symbolic-Interaction] are absent" (1978 p. 16).

In this perspective however, the view is that the scheme facilitates comparisons, and identification of implications and "assumptions underlying the social constructs and the implicit commitments of the planner, a requisite for building planning theory and understanding planning practice" (Adams, 1988 p. 409). The purpose of Adams' discussion is related to the development of related theory (Adams, 1988 p. 412), whereas in our considerations the trend is to improve the understanding of the

process, *specifically in relation to the academic domain.* Although Adams' theoretical discussion is in the process of being further developed (Adams, 1988 pp. 409-410), his considerations facilitate our discussion on the particular characteristics and nature of planning in higher education.

2.11. A summary.

We are now able to summarise the former discussion and indicate the aspects most relevant to the present study.

1) The models of educational planning in Adams' perspective of analysis may be viewed as either related to an objective paradigm, or a symbolic-interactive one. Thus the political model of planning may be seen as a condition of the process of planning itself bringing out its limitations, an 'empirical condition' using McCarthy's expression (McCarthy, 1978).

2) This new perspective helps us to reframe the political condition of planning in education as a process of interaction with rational aims. According to this perspective, it also help us to point out a kind of second level characteristic of the planning process, which is to make different interests converge towards the planning process itself. In other words the political condition of the planning process is related to both a process of interaction as well as the convergence of different interests to the process. In this way the participation of different interests in the planning process may be also seen as an achievement of its political condition. In other words, the political condition of educational planning reflects the interaction of interests, but also the process of interaction itself, by making the different interests

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converge into the process. From this perspective, the process of give and take in educational planning should be seen not only as a limitation on the planning aims, but as part of the process itself.

This second level characteristic of planning suggests a kind of second level objective of the political rationality of planning suggested by Adams as the maintenance of legitimated institutional norms (Section 2.7). This second level objective is achieved by making different interests participate in the process of discussion, regardless of whether or not the norms are changed.

2.12. Planning in higher education.

In order to continue our analysis, we have to relate the previous discussion of educational planning trends with the higher education features of coordination and governance that have been analysed in the first part of this chapter. In brief, the account identified four approaches to the study of the coordination and governance of higher education: Collegial, Political, Bureaucratic, and Organised Anarchy, from which the Organised Anarchy approach was considered to be a variant of the collegial one. Therefore attention was concentrated on the first three approaches (Sections 2.5 and 2.6).

When we relate these three approaches to the three models of planning, we find:

i) the bureaucratic approach and its underlying rational basis fits with the technical one;

ii) both the political approach to higher education coordination, and the political model of planning concerned with the interaction of different interests fit with each other, and

iii) the collegial approach concerned with the participation and shared concerns of academics, fits with the consensual model of planning.

As has been said, the collegial and political approaches to higher education coordination recognise the presence of conflict, although the collegial one is concerned with the specific characteristics of conflict in higher education.

2.13. The nature of higher education.

The discussion has drawn in the notion of planning as a purposive rational action in order to explore the nature of educational planning in a wider context related to an alternative paradigm of planning. To be aware of the significance of "analytically correct propositions" (Adams, 1988 p. 412), an additional consideration, from the perspective of Critical Social Theory, can be illustrated if we also relate here that Habermas argues higher education 'should be the place for the exercise of reason' without putting any limiting conditions on its process of critical discussion Habermas, 1971).

Habermas claims that in the University only reason should have force, and for that purpose, reason should be free of the domination of vested interests when it supports an argument dealing with the choice reached through a decision making process; sciences owe their own progress to this type of critical argumentation. He adds that

this optimal objectivity in the process of knowledge, and only this one, will guarantee a rational approach to goals and to an optimal selection of means to achieve them. He then concludes that this condition of knowledge, has an 'immanent' relationship with the nature of the university (Habermas, 1971 pp. 7-10).

We have also discussed that what science claims as a condition for its own reason, is carried out in universities by professionals grouped in disciplines within the academic profession, developing vested interests which are supported by disciplinary academic discourse and beliefs which in their turn are, at least, partially originated in the epistemological considerations of disciplines (Becher, 1989). Clark (1982) argues that the origin of interests in society is not different from the interests which are present in the university, although universities as higher education institutions, are relatively independent within contemporary societies (Section 2.3 and 2.5).

We have then, a particular tension in the University in relation to these socially generated interests, which are specifically concerned with knowledge and expressed through the academic profession which, in its turn, is fragmented by disciplinary membership across institutions. This particular tension may be viewed as a kind of specific "political nature" of these institutions concerned with knowledge.

From this perspective, there is also the view, following Habermas, which suggests that higher education is rational but institutions of higher education do not necessarily have to behave rationally. Nevertheless, academics "can follow the path of instrumental reason or they can recover their true character as a modern polis, a site of developing communicative reason. As communities sharing a common but

critical discourse over ends, values and achievements, institutions of higher education can become a microcosm of the rational society, a reminder to society of what society itself might be" (Barnett, 1990. p. 121).

Habermas himself, identifies this tension in the University, between its 'instrumental use' and 'its true mission' as a place for critical discussion of knowledge. He also argues that politics do not belong to universities, although it is a place ideally suited for the discussion of politics, "to the extent that this discussion is fundamentally governed by the same rules of rationality within which scientific reflection takes place" (Habermas, 1971 pp. 9-11).

We have already said that McCarthy suggests the absence of empirical conditions for the existence of this paradigmatic symbolic-interaction of communicative rationality in its complete form, and we also related the limited conditions of knowledge of the objective paradigm of rationality (Section 2.10). In the degree that the universities are concerned with knowledge and the claimed rules of knowledge, they manifest particular characteristics. This study does not aim to discuss the rules for the advancement of knowledge or the necessary conditions for the existence of these two paradigms in their ideal form. We only suggest that this particular task of the university may be considered with regard to a specific rationality, different from the dominant sense of rationality (mostly related to the bureaucratic model) based on Weberian categories (Cohen and March, 1974, Ham and Hill, 1984). The "political nature" of the university stems from the tension between its concern for critical knowledge and the particular interests of the disciplinary groups in it.

2.14. The "political nature" of planning in higher education.

At this stage, the relation between the political model of educational planning and the conflictual model of coordination and governance of higher education, suggests a relationship between the particular rational process of higher education and the specificity of the "political nature" of planning in higher education.

We may now develop our argument a step further by examining this relationship. We earlier summarised the conflict of vested interests of discipline-bearing groups at the centre of the academic profession as a constituent dynamic of higher education. As discussed in Sections 2.5 and 2.6, *the specificity of this "political nature" of higher education emerges from the tension between the struggle of academic vested interests and its shared concern for knowledge.*

We have then two dimensions in higher education from the interaction of which this tension arises. The first is the specific nature of the struggle in higher education between the vested interests of disciplinary groups. The second is the academic discussion between the disciplines and the produced insights of this epistemological process of knowledge towards the development of a new consensus.

By following this perspective of the political condition of educational planning, the interaction between vested interests and technical views can be viewed differently in higher education. It acquires distinctive features as a specific process based on inter-disciplinary conflict or discussion, and within which higher education planning is included. The "political nature" of planning in higher education is thus

expressed through different disciplinary views, while the objective of higher education - its concern for knowledge - is shared.

The study of conflict in the analysis of higher education systems has, generally speaking, passed through two main stages (Teichler, 1988). At first attention was focussed on interest groups making alliances and pressing for their objectives in an analogous manner to what happens in society (see for example Baldridge, 1971, Baldridge *et al*, 1977). The second approach moved the focus of attention towards the participation of those who work in higher education and their particular disciplinary concerns (Becher, 1989) and characteristics, as Clark (1982) argues in his classical study of higher education systems. The latter view is closer to the argument of this study.

We can now relate our discussion to the main features of the structure of higher education. We will then do the same to the policy-planning issues involved in the empirical analysis.

2.15. Higher education. Structure and integration.

Three main elements have been distinguished in contemporary systems of higher education, i) the structure of work,ii) the beliefs of academic subcultures, and iii) authority as a way of concentrating and diffusing legitimate power within higher education (Clark, 1984, 1986).

We have already worked through them in our discussion when pointing out disciplines in the academic profession as structure of work, the presence of

discipline-based beliefs and vested interests, and the struggle among them; this third element deals with the control and coordination of the system. As an organisation, higher education develops its own pattern of legitimating and distributing power and authority, although there are variations between national systems.

Different analyses suggest different numbers and characteristics of levels of coordination in different systems of higher education. For example Becher and Kogan (1980) mention four in their model based on the English case: i) personal, ii) departmental, iii) institutional, and iv) central; and later on Becher (1987) adds a fifth one by dividing the central level of their model into two: central authorities and government.

In their comparative study of seven higher education systems, USA, UK, Germany, France, Japan, Italy, and Sweden, Van de Graaf, _et al_. (1978) propose six levels of higher education national systems: i) Federal Government, ii) state government, iii) multicampus, iv) single-campus, v) faculty-school, and vi) department.

According to Clark, in order to analyse their main organisation- structure features the levels of higher education systems can be essentially grouped in three:

1) Superstructure: national level,

ii) Structure: institutional level, and

iii) Understructure: Basic level.

Within them, the academic struggle coming from the 'crisscrossing matrix' between professions belonging to particular institutions, and disciplines related inter-

institutionally, take place and provide higher education with its particular dynamics (Becher, 1989. Clark, 1982).

The case of higher education in Mexico can be seen through these three main levels within which the institutional level has traditionally been the strongest. Since 1978, the federal/national level has strengthened its presence with the creation of the National System for Permanent Planning of Higher Education (SiNaPPES), and the Under Ministry of Higher Education and Scientific Research (SESIC), as detailed in Chapters 4 and 5. The operation of SiNaPPES, has been mostly concerned with the relationship between these two levels, national and institutional, as can be observed through the discussion of SiNaPPES in Chapter 6 and 7.

2.16. The interaction between the theoretical framework and the empirical analysis.

It has been said in the introduction that the theoretical research was carried out, to some extent, in parallel with the review of the main higher education-related policy issues in Mexico, in order to relate them to each other coherently. Accordingly, theoretical discussion was initially related to higher education particularities in Mexico, such as the importance of universities in Mexican society, and their concern for autonomy. It is now convenient to further relate our discussion at this stage to the characteristics of coordination of Mexican higher education. This will provide us with a coherent view of what has been suggested as the "political nature" of planning in higher education, in order to focus on the National System for Permanent Planning of Higher Education (SiNaPPES).

1. Studies of higher education and its contemporary features reviewed in this chapter, consider higher education institutions and universities as particular social institutions linked with knowledge, and therefore relatively independent within contemporary societies. These studies have recently focused on higher education through the analysis of single national systems seen in their national contexts, to analyse how they developed particular characteristics, rather than looking for a single pattern of development.

By discussing the consensual and political-conflictive approaches to higher education coordination and governance, higher education has been characterised by the interaction of disciplinary views and the struggle of vested interests among disciplinary groups within it. This struggle at the centre of the dynamic of higher education is carried on by the academic profession, and provides higher education with a "political nature". This "political nature" becomes specific to its processes because of the concern higher education has with knowledge.

2. Educational planning has been discussed within an extended discourse related to its objective paradigm in which the technical concerns co-exist with the political constraints of planning. Discussion led to the latter being highlighted as a constituent condition of the planning process itself. This co-existence is related with the limits of available objective knowledge, and therefore the interaction of different vested interests supported by technical justifications (Section 2.7.).

This political condition of planning was reframed by using a symbolic-interactive paradigm opposite (a kind of parallel sense of rationality) to the objective paradigm of planning. In this way the discussion also included some

elements with regard to planning as purposive rational action. From this new perspective, in relation to both paradigms, the political model of planning could be viewed as reflecting the technical and the interactive concerns of the planning models, rather than only as a limitation of technical planning (according to its technical-objective aim) (Section 2.11).

According to this view the political condition of planning also acquired a second level perspective dealing with the convergence of interests in the planning process, regardless of the optimal fulfilment of its technical or consensual concerns and hence full agreement on its decision-making processes. This second level perspective provides educational planning with a second level objective: to make different interests converge on the planning process (Section 2.12.).

3. Discussion led us to relate the political condition of educational planning with the political-conflictive approach to higher education coordination. There is a tension between its concern for knowledge and the struggle of vested interests among knowledge-bearing groups.

These theoretical angles provide a shape for the main connections to be established within the discussion of SiNaPPES as a mechanism of policy-planning in Mexican higher education.

1. The technical and interactive characteristics of higher education planning are significant elements in the discussion of the creation and establishment of SiNaPPES. It is then worthwhile to relate the discussion of the "political nature"

of higher education planning with the discussion of the rationale of this policy-planning mechanism.

The scope of SiNaPPES is concerned with the whole set of public universities in Mexico, nationally coordinated and with strong institutional-autonomous aims. This institutional autonomy became the condition of universities' partnership with the government in the national coordination of SiNaPPES.

This partnership of public autonomous universities with the government echoes, on the one hand, the relative independence of higher education coordination in contemporary societies which our theoretical discussion takes into consideration. Chapters 6 and 7 draw a perspective of Mexican universities in which this feature can be viewed in more detail, as can their influential presence in Mexican education and society.

On the other hand, the participation of academics behind this partnership, permits us to explore the "political nature" of higher education in Mexico in more detail in Chapters 7 and 8.

2. A number of views have claimed that SiNaPPES has been only partially successful in the planning of the development of higher education. However, the achievement of SiNaPPES in respecting the plurality and autonomy of Mexican higher education institutions has also been emphasised. These views support our discussion of the interactive and technical concerns of higher education planning, and also suggest a reflection of the different academic views, and presumably interests, in SiNaPPES.

3. A relationship may be established between the particular distinguishable features of higher education systems which are put forward in the major studies reviewed, and the Mexican case. Although most of these studies are mainly concerned with Western democracies in developed countries, which are not exactly parallel with Mexico, a developing country, the defined policy period of higher education in Mexico permits us to observe the dynamics and particularities in the coordination of higher education in our case study.

4. Our reconstruction of the process of SiNaPPES' creation contributes to our analysis of the characteristics of the policy planning process in higher education, and distinguishes its particularities in the case study (Chapters 5 to 8). Moreover it permits us to make more explicit the intended appropriate interaction of the subject under study with the theoretical framework, as it is mentioned in the Introduction.

5. Under the surface, there are two issues which the process of this study raises; firstly the particular process of diversification in Mexican higher education, and secondly an alternative view for its analysis.

In relation to the former the major changes seem to be the following: first the modification of UNAM's role in the guidance of Mexican higher education, and second the development of many middle sized universities all through the country; in short, a sector of higher education is in a process of diversification.

With regard to the latter issue (the period of analysis), the main point to be considered is if it is worthwhile studying higher education policy in Mexico in a timescale other than that of the six-year period of tenure of Mexican governments. A longer perspective should highlight the particular characteristics of higher education processes, if they are indeed distinguishable, rather than exclusively emphasising specific concerns of different governmental teams.

A study of this kind required a qualitative approach to carry it out; Chapter 3 provides more detail of this approach and its considerations in this research.

Chapter 3. **METHODOLOGY.**

Introduction.

As has been stated in the introduction the purpose of this research is to improve the understanding of the policy-planning process in contemporary Mexican higher education, rather than predict the course of its development. With this in mind, the research has been conducted by a theoretical discussion of higher education processes of coordination and policy formation, and by systematically reviewing major policy-planning trends in Mexican higher education, that are associated with the National System for Permanent Planning of Higher Education (SiNaPPES).

Both the particularities of the higher education policy processes and the specificities of the study led us to opt for a qualitative approach. This chapter reports the major considerations taken into account towards the 'methodological strategy' of this research (Walker, 1985). Methodological considerations draw upon major related issues of educational research with regard to educational policy and higher education; the advantages and constraints of a case study are also considered.

3.1. Purposes in educational research.

Burgess (1985) suggests that educational research should aim to contribute simultaneously to theory, policy and practice. Furthermore the purposes of research influence the choice of methodology, and this choice is a 'key decision' (Walker, 1985).

On discussing the expectations of the impact of research on educational policy, and the qualitative-ethnographic perspective in educational research, Shipman (1985,

pp. 273-280), points out three distinguishable purposes of researchers: i) affecting policy, ii) developing theory, and iii) conducting research for its own sake.

Different conditions usually appear in these three cases. In the first case research is facing: a) the demand for a stable model providing a dependable basis for prediction, b) expectations of confirmatory outcomes, and c) judgment by people outside the academia about usefulness, feasibility and cost.

In the second case, research is a) expected to challenge current paradigms and theoretical assumptions, and b) to be judged by academic peers as 'praiseworthy'.

In the third case, research is mainly conducted because of an urge to describe and to understand. In Shipman's view, the researcher in the third case has his own sufficient motive for researching. If it influences policy, "it is a bonus". "Social research, and particularly ethnography need not have relevance to policy or theory", although if research is "clearly written, topical and relevant", it will be meaningful for policy makers (Shipman, 1985 pp. 273, 280).

This discussion about the purposes of conducting educational research leads us to another issue which deals with the characteristics of educational policy and related educational research. "The debate about the impact of social research on policy is usually conducted as if there were a small group of policy makers who had clear objectives, who considered the available evidence on how to achieve them [...] and left the implementation to administrators and professionals. The role of the researcher in this process is to feed evidence" into the process. This 'rational and linear' model does not seem to exist. The claim is that in practice policy making is neither rational nor linear (Shipman, 1985. p. 273).

This issue is relevant for our study with regard to the participation of academics holding different disciplinary views and interests in the policy-planning process of higher education.

3.1.1. Educational research and professional perspectives.

The perspective mentioned deals with what Lindblom (1988) describes as the first of the ethical principles for undertaking social research of use for policy: impartiality or non-partisanship. In discussing this issue, Bruner notes how the role of the researcher as a neutral expert traces "its origin to Saint Simon who supported the view of neutrality of the expert in the light of reason, advising the best course to be followed" (Bruner, 1980. p. 23). In Bruner's view, arguments about the expected neutrality of the expert as a professional with a technical basis, have a contradiction since the basis itself is technically partial according to the scope of the profession and its interests. He suggests this partiality can be overcome through a process of allowing open information and increased participation of different professional views. In this way, different alternatives coming from different professional views should reduce partiality and provide a comprehensive solution (Bruner, 1980).

Within the same purpose of improving understanding and reducing partiality in the process of social research, Lindblom refers to this 'open information' as the researcher's acceptance that he should make explicit the basis and perspective of the research; a 'redefined partisan' participation in the process. This recognition of the professional and discipline boundaries in the researcher should produce a different research process in which other open professional attitudes would have room, therefore to improve the process (Lindblom, 1988). In fact, this view shows the movement of Lindblom from his original proposal of simple incrementalism to a

participative process of disjointed incrementalism, which seems to reflect an adjustment of his former view, to the complexity of the policy process and the research related to it (Ham and Hill, 1984).

3.1.2. Educational research and educational policy.

In fact, the influence of research in educational policy seems to be 'a bonus', but such an influence can also be related to particular circumstances which frequently go beyond the limits of educational research. Shipman provides an illustrative example of this issue when he mentions the problems he faced in publicising one of his ethnographic studies. The study was concerned with the distribution of teaching time among different subjects in an English Primary school, and the problem arose because the publication of the report's findings could possibly influence specific policy on the matter.

Difficulties emerged from two directions: on the one hand there was the consideration about the lack of accuracy of the study according to the affected teachers' views. On the other hand there was the consideration of the climate of public opinion towards short teaching time in some subjects - such as Maths - which the study in question seemed to provide evidence for. In the end the decision not to publicise the report was taken based upon the teachers' claim of lack of accuracy in the report. However it could also be considered that the practical reason for not publicising it was due to fear of the reaction of adverse public opinion to the report's results.

As has been said conducting research with the purpose of influencing educational policy influences the orientation of the research, although its success also depends on other factors. As Salter and Tapper suggest in the case of higher education expansion in Britain: "Although it is impossible to prove, it seems reasonable to assume that

the policy influence of the social scientists working in this field owed much to their ability to marry their moral commitment, (i.e. the desirability of increasing equality of educational opportunity) with the politically attractive proposition that schooling should serve the needs of the evolving industrial base" (Salter and Tapper, 1981 p. 15).

3.2. Educational research and policy in this study.

This study aims to understand a particular higher education policy-planning process rather than to influence policy or develop theory, although these possibilities have not been excluded since our subject of study is the higher education policy-planning process itself. Thus a theoretical analysis has been carried out in Chapter 2, whose aim is to be appropriate for the empirical analysis in the case study. The researcher's attitude in conducting this study aims to be impartial. At this stage, such an aim is similar to the redefined notion of partisanship in Lindblom's argument (1988), and the open participation of Bruner's. However this research is mainly academically oriented and, in this sense, can be seen in terms of Shipman's third purpose of doing research for its own sake. We still agree with the view that the researcher cannot be completely impartial. This point becomes explicit in the methodological approach selected, although in terms of our former discussion, if this research influences policy or develops theory, it will 'be a bonus'.

It has been mentioned that the process of policy formulation, is in practice not as rational-linear as has been frequently assumed when doing research intending to feed it. It has been also said that the study of these policy processes in education has, in general, received little attention from analysts and researchers (Howell and Brown, 1983). We agree with these views in general terms. Both views can be extended to the Mexican case; it seems to be the assumption that "it does not make any sense" to

carry out more analysis about higher education planning in Mexico, because "the planning process is always limited by politicians and politics, and nothing can be done without a major change in the style of decision-making" (CL29). What in fact we strongly suggest is that it is researching into the process which would tell us more about its characteristics and peculiarities of higher education where there are singular academic conditions of participation in it.

3.3. The Case Study.

The analysis is carried out through a wide ranging case study of SiNaPPES, which includes the national and institutional coordination levels of the system: the National Coordination for the Planning of Higher Education (CONPES), and the Institutional Planning Units (UIP) of autonomous universities. These two levels make sense together as the strategic points of integration and coherence of the system (ANUIES, 1979). The academic participation with regard to SiNaPPES has been a matter under particular attention behind the involvement of specific academically related bodies. That is why a wide-ranging case study is referred to, where relationships among the academics could be seen within the creation and functioning of the policy-planning mechanism.

The established period of higher education policy for the review: 1970-1986, has been restricted as an appropriate context to understand SiNaPPES. It was defined according to four major issues of Mexican higher education, and the policy formulation process with regard to them. These issues and the higher education policy of the period were both identified by systematically reviewing the documents of SiNaPPES, the National Plans of Higher Education (PNES), and other related documents from ANUIES, the Ministry, the National University and the coordinating committees of SiNaPPES. Contents, outcomes and impacts of the policy have been

useful in highlighting the creation of SiNaPPES and the process of planning and policy formation in higher education which is the central subject of our analysis.

The purposes and nature of this research on the one hand, and the particularities of SiNaPPES as a policy-planning mechanism in Mexican higher education on the other, were a strong consideration in the decision to base this research on a case study of SiNaPPES. This policy-planning mechanism has been so central to autonomous universities' planning and policy in contemporary Mexico that this choice allowed the analysis to be done in considerable more detail and depth.

3.3.1. Specificity and advantages of a case study.

A case study, which can be narrative, interpretative or hypothetical allows, to some extent, the reconstruction of subjects under study in such a way that specific processes can be observed and analysed in depth and detail. It becomes useful when qualitative analysis is looked for, although a case study becomes specific with regard to its subject, and therefore is rather difficult to generalise.

For example, Howell and Brown (1983) take into consideration the specificity of their study of policy-making in the Institute of Education, by asking themselves to what extent does this case study represent a specific type of system which has manifest rules of operation and properties not found in other classes of systems.

On similar considerations Baldridge suggests that his proposed "political model" (Baldridge, 1971), was appropriate to particular characteristics of New York University in specific conflictual circumstances. The 'normal' operation of higher education in the United States may be understood within a different perspective of analysis where conflictual circumstances are not, perhaps, the everyday conditions

of work in American higher education (Baldridge _et al_, 1978). Here the specificity of a case study is a limitation in subject, circumstances and time.

On the other hand Clark (1982), arguing about the existing conflict in higher education, suggests that the study of specific higher education systems provide the elements to construct general categories for the analysis of individual systems. In this perspective, similar elements from several case studies can be used to attempt the formulation of categories which, eventually, may be generalised to some extent. In either case, the point can be better seen by following Teichler's recent suggestion; he points out the difficulties which a single perspective of analysis [or a single case study] has in understanding the complexity of higher education systems in its completed form, taking into account the particularities they have in each case (Teichler, 1988).

The Mexican higher education process under our attention is not the case of a single university as in the case of Baldridge, but the policy-planning system of public autonomous universities in Mexico, within a specific focus of attention and a period of time which has been defined as the proper contextual circumstances in which to understand it. Our case study is then specific in focus, time and circumstances, and is wide ranging one because of the national scope of SiNaPPES.

For the purposes of this research, our case study has, then, some advantages and limitations. First, what it misses in generalisability, it gains in its configurative character of SiNaPPES. It helps, to some extent, to deal with its specific characteristics which could not be shared by similar subjects of research, although the subject is significant itself for Mexican universities and their policy-planning processes.

Secondly, it also helps to distinguish particular circumstances of Mexican higher education over a period of time, and in this way to approach some of its features historically developed (Baldridge *et al*,1978, Rangel Guerra, 1978).

Thirdly, it falls into the considerations about the singularities of national systems of higher education and policies formulated for them (Clark 1983b); and on the other hand, the less optimistic hopes of discovering a single tendency in higher education trends and therefore a single model for its future development (Teichler, 1988).

3.3.2. On the features of our case study.

The general analysis in the study includes two parts. The first deals with an account of the period of expansion in Mexican higher education leading to the creation of SiNaPPES, which is reported in Chapter 5. This period is defined as a plausible context in which to explain the creation and establishment of SiNaPPES. Major higher education policy issues of the period are used as boundaries within which the emphasis on planning and the interaction of the universities are highlighted, towards the analysis and discussion of SiNaPPES' process and its trends. In its turn this second part, the central one of the analysis, is presented in two alternative interpretations of SiNaPPES which are presented in Chapters 6 and 7.

The first consideration for the case study was to include policy-planners as academic actors in the contemporary scene of Mexican higher education. This would permit a 'reconstruction' of the creation of SiNaPPES and its processes in order to analyse its dynamism in a manner which could go well beyond the description of the written reports. The selection of academic policy-planners had the purpose of including the different academic views and interests in higher education, in order to obtain

information which would permit us to observe these actors through the reconstructed process, and analyse what happened in it.

The second consideration for the case study emerged from the observed higher education policy-planning process. Whether or not it was previously determined, or a result of the process itself, the creation of SiNaPPES in 1978, followed a period of higher education reform and expansion which began in the early 1970s. The main concern in the period was the innovation of higher education, and included the creation of some new universities. The newly created autonomous universities became legitimate partners of SiNaPPES, and their views needed to be taken into account. Some differences between universities are observed in relation to size and criteria for access, academic structure and organisation, pattern of funding, and concerns and involvement in higher education planning. The case study intends to include this diversity among universities' and academics' views. The newly created universities are considered as examples displaying the desired features of higher education policy for public autonomous universities at that time (Castrejón, 1980).

Data from the interviews confirmed this perspective. Information gathered supported the view that since the early 1970s, with the existence of new and enlarged universities, there was more and "new academic space to be in, apart from the National University" (CL29, PV31, PL38), and that several academics from this institutional diversity of autonomous universities had been participating in SiNaPPES (CL21, PV31, CV14, CL11). The lesson was that interviews to key informants with a kind of institutional representativeness provided information from different academic views; they should inform the case study with a balanced perspective.

An aim resulting from these considerations was the reconstruction of a process by including a diversity of views; the case study ought to include UNAM's long lasting influence, and that of some other universities including the younger ones. With this purpose in mind, interviews should include a diversity of views of the academic planners from the autonomous universities in SiNaPPES.

By reviewing the participation in SiNaPPES' processes, it was observed that the institutional diversity to which the participants belonged to, maintained the kind of representativeness we were seeking to include in the case study; this was also confirmed by the researcher's own experience.

The public autonomous university sector in Mexico consists of 38 institutions. All of them are participants in SiNaPPES, specifically through their Institutional Planning Units (UIP). There were then two alternatives for interviewing. The first one was to interview academics from all 38 universities at the institutional level throughout the country, plus some from CONPES, the national body of coordination of SiNaPPES. The other option was to select a smaller sample to be interviewed. The second option seemed more feasible for several reasons.

i) Institutional Planning Units have had a high rate of mobility among their members (Velázquez, 1982, López, 1982). Interviewing academics from 38 Universities with a high rate of mobility in their Planning Units could therefore considerably increase the number of both academics to be in touch with, and to be missed. A sample model might be appropriate, but

ii) The higher the rate of mobility, the larger the number of people to be interviewed, and the less the knowledge expected of them about the whole length of the policy-planning process under study.

iii) The experience of a former study about the functions of the Institutional Planning Units which was based on a survey model with a questionnaire applied through the mail, was unsuccessful. The study expected a 75% response, and had a response rate of less than 20%. In addition the information obtained was already known from other sources (López, 1982).

iv) Interviewing a manageable number of selected academics, who had participated in SiNaPPES, with expected better knowledge on the matter and significant information to obtain from (Fetterman, 1989), became a more feasible alternative for our case study model (Goetz and LeCompte, 1984).

This choice was considered appropriate to our case study' in accordance with the following criteria:

i) key informants accounting for continuous participation during the period of policy-planning under study,

ii) significant information expected from them about the process of policy-planning during the period of study, and

iii) representative diversity from public autonomous universities and academics' views although not a random sample of them.

A historical, organisational case study (Bogden and Biklen, 1982), has been built upon the information. The design of the study and the first reports produced were discussed with experienced academics on SiNaPPES' issues. This expert consultation provided additional discussion and comments, a sense of consistency and coherence

for the case study, and even more information. It also helped to balance the interviewer's own perceptions about SiNaPPES.

3.4. Methodology and methods.

Nowadays there is a large terminology of methods of educational research. Some major distinctions are pointed out between positivism and anti-positivism such as paradigms, normative and explicative theory, objective and subjective approaches, and quantitative and qualitative analysis.

These distinctions are usually referred to as quantitative and qualitative approaches and methodology, and to some extent qualitative analysis is identified in both senses with an ethnographic perspective. Although a quantitative approach in research would tend to use just quantitative methods, and qualitatively oriented research would use only qualitative techniques it is not always like that. Quantitative and qualitative techniques as methods for gathering data, can be -relatively speaking- qualitatively or quantitatively oriented as methodology for research. Methods in conjunction, as techniques for gathering data, do not have the same meaning as methodology as a whole; methodology is more than a collection of techniques (Burgess, 1985).

Within a different, but useful distinction, Wilson (1977) identifies three major categories or styles of research, namely: experimental style, survey style, and ethnographic style. From this perspective the ethnographic style is highlighted as useful for the study of groups in their natural settings in which the actions of the groups or their members can be studied with regard to their own context, given that any social group reflects beliefs which are difficult of capture by other formal methods of research.

On the other hand, this qualitative approach is very time consuming and laborious, and its outcomes are considered difficult to generalise, because of their typicality and difficulty to replicate them (Wilson, 1977, Cohen and Manion, 1989). Nevertheless, most views agree on the flexibility of this style for qualitatively oriented research (Goetz and LeCompte, 1984, Wilson, 1977, Cohen and Manion, 1989).

There is also the view that this style cannot easily establish a cause-effect relationship, as the experimental style does; but the establishment of that relationship is in itself difficult because social phenomena is frequently multi-caused, and extremely difficult to an experimental post-check (Wilson, 1977).

Methodology, which in the end is a matter of what strategy is used for doing research (Pelto and Pelto, 1970, Homan, 1949, Bogdan and Biklen, 1982, Walker, 1985), incorporates different methods taken into account their limitations when being used for specific research purposes. Consideration is taken about their advantages and disadvantages with regard to the information which is needed in a specific study and the best way of obtaining it.

3.5 Methods in this study.

Policy-planning in higher education as the matter of study itself becomes a qualitative issue given its characteristics because of the participation of academics as planners and policy-makers holding different professional views (Bruner, 1980, Benveniste, 1970), and also different interests because of their different disciplines. The personal views of participants in the process, and the circumstances

of the process in specific times are also conditions not to be neglected (Shipman, 1985).

Policy-planning issues in education are also considered as depending, at the end, on a peculiar process of give and take where rules are not clear enough (Coombs, 1985). But they involve not only decision making processes where rules could be, or claim to be, clearly specified; they are indeed a complex human activity within a form of social interaction (Adams, 1988), and academic struggle (Clark, 1983a, 1983b). Even where rules are established, there is always room for discretion by the decision maker. The matter here could be expressed by relating Adams' quotation to the specificities of higher education: "educational planning [and policy] must be concerned with the specific meanings, actions, and structures of relevance to people involved, or thinking about, [higher] education" (Adams, 1988 p. 414).

Following these views, the subject under analysis and therefore the type of information to be collected, are qualitative. The information is difficult to quantify as the attention lies on the dynamics of the process itself; actions, interests and relations of the academics as planners policy makers. In addition, the sample selected is small, as the research is looking for a detailed view on a qualitative perspective of analysis. The suggestion here is that the proposed methodology for this study is qualitative, and in this sense is borrowing features from ethnography, as a study designed to understand rather than to predict (Shipman, 1985, Agar, 1986). But the study itself does not aim to be a proper ethnography in the strict sense (Goetz and LeCompte, 1984, Fetterman, 1989, Agar, 1986). It intends rather to use a meaningful combination of techniques as a better research strategy (Walker, 1985).

Some particular techniques are identified with some types of educational research. Written sources from archives are related to historical research, and interviews,

generally speaking, with qualitative research. A combination of them, as strategy, constitutes the methodology of research. In our case, this research advocates a case study, in its turn compiled with information from written materials, edited or from archives, and interviews with key policy-makers concerned with the system and its processes under study. The research was then, seeking written evidence as well as interviews with key informants. To some extent quantitative data was also used to support the analysis.

It is often claimed that policy processes in Mexico are not as well documented as in other countries (Benveniste, 1970). Some analysts also see these processes in Mexico as having a flavour of secrecy (Villaseñor, 1989). Cheng (1987) suggests an analogous flavour in the case of Hong Kong. In relation to the Mexican case we agree with alternative views which have suggested that there is more room for participation in the process -therefore less secrecy- than has been assumed (Latapí, 1982). Again, true research in the process would provide us with more information about it.

In relation to the written papers available to document these processes, broadly speaking we share the view which claims that they were not always organised and therefore not available for consultation. With regard to our particular subject there were however exceptions in which archives could be reviewed. The combination of methods in our strategy for gathering information allowed us these problems to be at least partly overcome.

3.5.1. Written sources.

The operation of SiNaPPES has produced several written outputs of use for our study, particularly the publications including its proposal and the PNES between 1978 and

1986. These documents have been sources to define and analyse the policy period in Mexican higher education as contextual circumstances and conditions to our research focus: the creation and operation of SiNaPPES. Written sources from the archives of the CONPES and SiNaPPES, the National Association of Universities (ANUIES), and individual ones of some universities were revised as well. All of them had been useful for obtaining more detailed and reliable information related to the creation of SiNaPPES and some specific arrangements dealing with it. A separate list of the reviewed documents is included in the Bibliography.

Selected information issues collected from interviews could be crossed - triangulated in this sense - with other interviews and the information obtained from written sources, with the purpose of better sustaining evidence, and increasing the reliability of the study. An illustrative example of this case is the information related to individual academics belonging to disciplinary groups with regard to their prominent participation in SiNaPPES' processes. A similar experience is related by Kogan in his study of Educational policy making in England, "the interviews were essential, although they needed to be supplemented by carefully reading"dfwritten evidence (Kogan, 1975). In our case, the opposite process has also been proved to work; information collected from the interviews has been useful for establishing meaningful links between information from two or more written sources.

3.5.2. Semi-structured interviews.

Most views agree on the great possibilities interviews have to go deeply and extensively into obtaining information on the matter of study, the testing and suggestion of hypotheses, the checking of knowledge, thinking and attitudes of interviewees (e.g. Cohen and Manion, 1989). On the other hand, as a kind of dialogue between the interviewer and the interviewee closely related to specific matters, it is

very time consuming although its advantages can be very well used in small samples. What small samples miss on extension, they gain in the detail they provide, and interviews were a useful method to obtain information in our research.

For this study, although a time consuming tool of research (Cohen and Manion, 1989), the interviews were a valuable source of information for the size of the sample of the case study. In most cases they allowed us to maintain an open dialogue about our subject of study with the interviewees. As was said the reliability of this source was increased by choosing key informants, and 'triangulation' of the data. Reports produced of both SiNaPPES' creation, and the purpose of the research were also discussed with two prominent participants (CL29, CV16), and one external critic (PL30) as 'experts' about SiNaPPES. This discussion had the purpose of having a measure of control (Best and Kahn, 1989), and was useful to better locate SiNaPPES' operation within the defined period of policy-planning for higher education.

Thirty interviews were conducted. They included members of the CONPES (ANUIES and SESIC) and the UIPs. Between 1970 and 1986, the interviewees have participated in the policy-planning process both at different times and different levels. At the time of the interviews 15 of them were related to the institutional level and 15 to the national one. There was the opportunity to interview 6 of them in Europe between April and September 1990. Two of them were also met in Mexico for a second session. These two and the other 24 interviews were conducted between March and August 1991.

There is more than a grain of truth in the saying that 'policy-makers are busy people'; accordingly a short interview following a structured questionnaire seemed to be an appropriate mean of obtaining information. On the other hand, more valuable

information could be obtained through an unstructured talk with informed people. In the second case the trend lies in conducting the interview in order to keep the dialogue on the right track. In order to have some balance between these trends, semi-structured interviews were used in our case; in fact 'loosely semi-structured' interviews. The loosely structured part of them consisted of the major higher education issues identified in the period of policy: growth, development, funding, and particularly coordination and planning, in relation to the process of creation and operation of SiNaPPES.

In other words the structured component of the interview had the purpose of concentrating the attention of the interviewees on the higher education issues of our interest. Insofar as some of the SiNaPPES' events were relatively distant in time, these four higher education policy issues were used, when necessary, as boundaries in the dialogue to help the interviewees focus their attention on the particular period of analysis and the process of public autonomous universities and SiNaPPES. They were the 'catalytic' element for the unstructured part of the interview which was concentrated in the creation of SiNaPPES.

Simultaneously, the non-structured part of the interview allowed the interviewees to express their knowledge and thoughts on the matter openly, without too much pressure from more rigid guidelines (Cohen and Manion, 1989); that was particularly useful in relation to the major events and trends during the higher education policy period, defined as contextual to SiNaPPES.

The interviews showed the researcher that in some cases the interviewees initially developed a kind of mechanical attitude of 'self defence' and formality in their answers. These attitudes were their accustomed reactions to interviews mainly from journalists. It was helpful to allow them to express themselves more freely, by

changing the order of issues, the tone, and the way some indicative questions or comments were made during the interview. In addition to this it should be said that the use of anecdotes was a valuable technique to cope with this trend of formality. The interview could then be conducted as a conversation on specific issues; in a similar sense to what has been emphasised as useful participant observation (Walker, 1985), since the interviewer had also participated in SiNaPPES' functioning. A number of these experiences which occurred during the interviews are summarised in Appendix 5.

The non-structured part of the interviews was also used to control some points of the research design as follows:

i) to check the higher education policy period defined as contextual to SiNaPPES,

ii) to check the policy issues identified during the defined period,

iii) to asses interviewees' involvement and knowledge of the matters being analysed, and

iv) to check the list of key informants to be interviewed, in order to add some more if they were mentioned as important actors in the process under attention, or could provide valuable contextual information. The choice of key interviewees was confirmed, and a few academics were added.

Additionally, it is appropriate to mention that doing shorter interviews twice, when it had been possible, instead of having a single longer one helped in some ways:

i) it was possible for the interviewer to report immediately after each interview,

ii) it was possible to cross-check information between the first interview and the second one, and

iii) it helped to keep the interviewee interested in the dialogue of the interview.

Sixteen of the 30 interviews were conducted in single sessions. There were however 9 of the 30 cases in which the interviewee became very interested in SiNaPPES' issues. In such cases the interview lasted longer in both sessions. In all cases the interviewee was given an account of the interview. There were no major corrections to the interviews, but in 5 cases a third session was proposed for further comments on the matter. On average, each session lasted for 1 hr and 10 minutes, although the extremes were two cases in which the sessions lasted for 15 minutes, and 2 hours 30 minutes respectively.

It was mentioned in the introduction that the researcher had participated in both levels, institutional and national, of the policy-planning system. He has intended to be impartial in this academic study of SiNaPPES, since he has been 'standing- back' from that everyday experience (Ham and Hill, 1984), His aim of impartiality was reframed in the first sections of this Chapter.

The researcher's knowledge and views about the system, as participant-observer in both levels, on the one hand, and   the review and clarification of such a policy-planning process carried out while 'standing back' on the other, were also sources of information for the research. His previous knowledge of SiNaPPES' process and participants were useful for saving valuable time, for example to make a rapid contact with interviewees who were previously known.

The issue of 'political sensitivity' arose for a number of interviewees (Shipman, 1985), and was taken into consideration. There are real difficulties, even with confidentiality, in avoiding the identification of participants by a reader familiar with the process (Walker, 1985). The list of the 30 interviewees was thus codified

because of the confidentiality which was granted to the interviewees. The codified list of interviewees is included in Appendix 4, and the de-codified one is with the researcher and his supervisor.

Implications of this confidentiality granted to interviewees meant that some information, not itself central to the process under study, should not be directly referred to. This is for example the case of some anecdotes which being illustrative, involve personal life which has not direct relevance, "Compromise is essential" (Burgess, 1985a p. 175). The granting of confidentiality was fruitful in several interviews in which the interviewee asked that some anecdotes should not be quoted; in all cases these anecdotes did not produce extra information but provided contextual clarification to the dialogue of the interview.

3.6. Reporting and Discussion.

The main boundaries within which the report was formulated, were the border lines of the defined policy period of Mexican higher education and its central events such as the university reform and the creation, establishment and operation of SiNaPPES. A chronology of the process of SiNaPPES was of use; it was elaborated in accordance with the minutes of the meetings of CONPES from 1979 to 1982. It is included in Appendix 3.

Within these boundaries the game of academic interests in higher education with regard to its policy-planning process has been reconstructed and analysed: academics' views related to higher education planning, arguments and interests, linkages and differences within the process of policy formulation. This process took us to the formulation of two analytic perspectives of SiNaPPES: its formal history according mainly to the emphases of its written reports and documents; and the alternative

interpretation of SiNaPPES in which unpublished documents and interviews were essential sources of information. Both interpretations are seen in the light of the theoretical discussion of this thesis.

The creation and functioning of SiNaPPES becomes crucial in such a reconstruction as a planning mechanism for higher education policy-planning. Published and unpublished documents, and the minutes of the CONPES meetings were of help for this reconstruction. SiNaPPES seemed to be both the resultant of, and the mechanism for, the process itself. Apparently that was the easier part as "the main systematic difficulty was not in tracing the main policies, [...] It was rather in determining relationships between interest groups, [...] in identifying those who made the decisions; in short, the process of policy formation" (Kogan, 1975 p. 21).

In a similar perspective, Woods (1985) labels this stage as 'creativity', with regard to "the ability to perceive interconnections and associations among data, to provide explanation for them, and to see further ways forward". He adds that it is indeed a critical point "that falls as much within the communication of these ideas, as in their generation" (Woods, 1985 pp. 86,108. See also Saran, 1985).

Other views refer to this stage as being really painful, with an enormous amount of written notes in qualitative research. This study was certainly that. It was here that 'crossing and triangulation' of the information obtained from different sources was of help. As Kogan (1975 p. 21) pointed out, "the interviews were essential, although they needed to be supplemented by carefully reading" written evidence. In its turn, written evidence has been illuminated by the insights from the interviews.

The following Chapter provides a detailed account of the structural background of higher education in Mexico and the coordination of the universities.

Chapter 4. THE STRUCTURAL BACKGROUND OF HIGHER EDUCATION PLANNING IN MEXICO.

Introduction.

The objective of this chapter is to provide a general background of Mexico in order to understand its education and higher education institutions. The chapter gives an overview of Mexico's major features, and within this context, the pattern and provision of higher education in Mexico is detailed. Both conditions provide the frame to situate the processes of coordination and governance of Mexican higher education.

4.1. An outline of the country and its higher education.

Higher education processes in Mexico are similar to other higher education processes around the world, although they are unique with regard to Mexican specific conditions of development, culture and history with which higher education is concerned. In the Mexican case the Spanish Colony was established upon a local Indian civilisation, which was a developed one for its time. The Spanish dominance over the Indian culture lasted for three hundred years, and the mixture of both had much to do with Mexico as a nation. Early in the nineteenth century, Mexico became independent through a war which lasted from 1810 to 1821.

Later on, a wide struggle between, on the one hand, the interests of traditional ruling groups and, on the other, an alliance of middle class reformists and nationalist groups with emerging industrial and commercial groups, led to a civil war from 1910 to 1917: the Mexican Revolution. Discontent among groups of peasants who revolted, claiming land and freedom, was taken over by the groups allied against the

ruling class. After six years of bloody war the old army was defeated and the Constitution that still remains in force was promulgated.

The social outcomes of this social struggle provided Mexico with many of its modern features. During the 1950s and the 1960s 'the Mexican miracle' of high economic performance in the growth of the GDP shaped, to some extent, its economic performance towards the modern scene. Current economic and developmental issues in the Western scene, together with the recent Mexican economic policies, have again shaped its contemporary scene in relation to its external debt.

The alliance of interests, built up since the Revolution, has remained relatively stable until today. Economic problems such as the very high rate of inflation in the middle 1980s, and financial constraints with regard to Mexican external and internal debts put this alliance under stress though. Recently, further negotiations of the Mexican debt have again provided the country with a relatively steady period within which new conditions for development are intended to be settled (Aspe, 1992).

Higher education institutions have existed in Mexico since ancient times and within the developed Indian cultures even before the arrival of the Spaniards. In those times, ruling elites from the army, the priests and the local royalty were educated in selected schools (*Calmecac*), which were different to those for ordinary people (*Calpulli*). There were also some other special institutions for the development of the arts (*Cuicacali*). During Colonial times some higher education institutions were also created for the education of the local population (Osborn, 1976, Soberón, 1983), as an alternative to sending a distinguished few of them to study in Spain (De Ibarrola, 1986).

The University, as a Western idea (Altbach, 1979), appeared in Mexico early during those colonial times. The Royal and Pontifical University of Mexico was created in 1553 on the initiative of the Colonial Authorities, and concession from the King of Spain. The Constitutions of the University of _Salamanca_, Spain, were the model with some influence from Bologna, Paris and Prague, and with adjustments to Mexican education conditions (Soberón, 1983, Silva and Sontag 1973). This first model of the Royal and Pontifical University in Mexico, lasted until the second half of the nineteenth century when, disputed over by conservatives and liberals, it was formally closed in the late 1860s. However, by this time a number of higher education schools were in existence. These had been founded by the government as civil institutions distinct from the Royal and Pontifical University, and survived its closure. The National University was opened in 1910 and incorporated these schools in its structure and operation.

This university in Mexico was the first to be in operation in the 'New world' (Steager, 1974). It was founded at the same time as the University of _San Marcos_ in Lima (Peru), but started earlier its operation. Both were founded in the two Vice Royalties of The Spanish Empire in the Colonies. This ancient origin of the University of Mexico may be related to its influence in other institutions of higher education either in Mexico and other Latin American countries. This long existence has made universities develop recognisable social significance as centres of higher learning (Valadés 1981). They acquired particular features because of their concerns to be the centres of knowledge within a specific social environment and national conditions (Steager, 1974).

From 1910-1917 onwards higher education of modern Mexico has been shaped on this historical background. It was first developed during the period between the 1950s and the 1960s, after World War Two, under the influence of the Mexican

development at the time of the impressive economic performance of the country. Its provision had been further reshaped from the early 1970s onwards under the influence of modernisation aims. Nowadays higher education faces new trends regarding the present circumstances of the country.

4.2. The Country.

Three features are relevant for understanding Mexico today: firstly, a federal form of government with a particular style of centralisation; secondly, its demographic expansion and the concentration of population in some major urban areas; and thirdly, the present trends due to its economic performance and the level of the external debt.

4.2.1. Government and administration.

Mexico has a long tradition as a centralised administration. This can be traced back to the domination of the Aztecs in the century previous to the conquest by the Spaniards in 1521. The Aztec Emperor ruled the empire based upon the existence of smaller domains ruled in their turn by local *señores* who paid tribute to the Aztec Empire.

Behind the emperor's ruling, on the other hand, there was a game of alliances among the local *señores*, through which local differences to the Emperor's rule were managed. These local alliances of interests were efficiently used by the Spaniards in their conquest; their support was essential for the Spaniards in the struggle. On the other hand, the centralised rule of the Aztecs was a cultivated terrain for the very centralised administration the Spaniards established there with the Viceroys during the three centuries of Colonial governance.

A short time after the Independence War in 1821 a federation was established which, for several years, competed with a central form of republic, and the inherited practice of centralisation. However the strong belief in freedom and democracy based upon French liberal ideas, and the model of a federation of states cast by the United States of America, were too influential to be ignored. These influences and the practice of alliances of interests behind the centralised rule supported in the end the prevalence of a federal republic.

The federal form was finally reached by the 1860s, after some flirtations with a monarchical style. The Federal Government would exercise the sovereignty of the federation and, in their turn, the states 'original sources of political power' would exercise their own political autonomy through the states' governments until reaching the limits on which the federal sovereignty would start.

The current written constitution, which has been in force since 1917, designates the nation as the 'United Mexican States' meaning a 'representative, democratic and federal republic'. Under federal aims, several practices are centralised, and can be observed in Mexican administration. Governments at the states have local autonomy to levy their own taxes, to call the state for local elections, and to formulate their own state law and regulations. The general constitution of the country reserves for the Federal Government authority over areas such as commerce, banking, land use, public health, labour laws, corporations and licensing of professionals (Alisky, 1983).

Early in this century, social differences and political disagreement gave rise to a civil war, the Mexican Revolution, from 1910 to 1917. Subsequently, the political coalition grouped together in the National Revolutionary Party (PNR) which in the 1940s became the present Institutional Revolutionary Party (PRI). The coalition

has been ruling the country since 1929, and has never lost a presidential election, nor - until recently - a gubernatorial one. The PRI dominates the political life of the country and is formed by a coalition of three sectors: peasants, workers, and middle class providers and employees of services gathered in 'popular corporations'. Among the workers the unions of oil, electricity, mining industries, railwaymen, civil servants, and school teachers have been the most representative. A nationalist group of civil servants, and administrators and professionals from some industrial sectors, has traditionally been a source of leaders for the party.

Governmental power is divided among the executive, the legislative, and the judiciary, although the executive has became influential over the other two since the 1940s; particularly the presidential figure whose political influence reaches the ruling party. A general election is called every six years, and there are some who argue that the president selects all governors, and even his successor. What seems plausible for more political analysts is the influential presidential participation in the negotiations for selecting and supporting candidates to higher posts of government at federal and state level.

In reality, with the exception of six states, gubernatorial terms do not coincide with the presidential one. Each new President in fact inherits twenty five governors who were elected previously. Certainly, the candidate of the PRI aspiring to be president's successor, has usually been elected from among his cabinet ministers who are appointed by himself. However the selected candidate is 'the one most likely to hold together the Revolutionary coalition' (Alisky, 1983). This presidential feature together with one ruling party, constitute a peculiar combination. One-party dominance increases the possibilities for approval of choices made either directly by the president or by the revolutionary coalition.

The Federal Congress, in its turn, consists of a Senate and a Chamber of Deputies. There are 64 senators: two for each of the Mexican states and the Federal District where Mexico City, the capital, is sited. A senator's term runs for 6 years coinciding with the presidential term. The PRI has won almost every seat in every election, with the exception of one in 1976, and two in 1988.

The Chamber of Deputies has 400 members, of which 300 are elected according to regional districts based on the population. Until 1985, the PRI had never lost more than 8 seats in any of their elections. The remaining 100 places (for proportional representation), are for the other political parties, and are distributed according to the number of votes obtained by them. In 1985 six parties obtained seats in the Chamber. A Deputy's term runs for three years. Every other deputies' election runs together with the general election in the Country.

Concurrently the Federal Court System in Mexico deals with appeals in the last instance, but also has exclusive authority for all important civil legislation, leaving other cases for the Court System of each state. Also in criminal law federal courts handle major felonies, but murder cases are heard in courts at the states. Normally, cases heard in courts in the states can later appeal to regional courts, and to the federal one in the last instance.

The Federal Supreme Court has twenty six members: a chief justice and twenty five justices who divide into five divisions: penal, civil, labour, administrative and '*amparo*' appeal cases. All the justices are appointed by the president with the Senate confirmation.

The concentration of power in the executive and in the making of some main decisions in the Federal Government has resulted in a reinforcement of a centralised

administration which, in turn, along with a crumpled geography, constitute important factors in explaining the concentration of both the population and the economy. Decentralising the administration in order to improve both administrative efficiency and political legitimacy is nowadays an important issue facing the government.

4.2.2. Demographic expansion.

The second feature to be underlined is the high demographic expansion which has characterised the country in the past six to seven decades. In 1910, the year the revolutionary war began, the total population of the country was around 13 million and has increased more than six times since, in spite of the one million dead as a consequence of the Revolution. One half of the population occupies just 14 per cent of the whole area of the country,   which is eight times that of Great Britain, and Mexico City has become the largest metropolitan area in the world with about 20 million inhabitants. This city and the other two which follow it in size and number of inhabitants together account for about 26 per cent of the 80 million total population of Mexico today.

A decrease in the rate of mortality and a growth in life-expectancy are important factors for the rise in the rate of growth which reached 3.46 per cent per year by 1960 and remained at that level until the late seventies. The high rate of demographic expansion may be linked to health and welfare policies of post-revolutionary governments in Mexico. This growth in the population was tolerated as long as it did not conflict with the annual growth of the GDP that was maintained at around 6 per cent until 1975. The performance of the economy has not been as good since, and reducing the rate of population growth has been an important goal of the government (it was reduced to about 2 per cent by the eighties). Nevertheless, the

population is forecast to reach 120 million by the year 2000. An additional trend in this demographic expansion is that the pyramid of ages shows an extended base; more than half of the population is under 15 years of age.

A high proportion of young people, the performance of the economy, and the present financial constraints the country is facing, have become a challenge for the social-egalitarian aims of the Mexican state and its educational policy.

4.2.3. External debt.

The third feature is that Mexico came to be the second highest debtor in the world after its noticeable economic performance during the 1950s and 1960s. Its external debt amounts to about 100 billion dollars representing more than 60 per cent of the annual GDP in the middle 1980s. These facts seriously compromise the income of the country and the way it is spent. During the first nine months of 1986 interest payments alone were 64.6 per cent of total Federal Government expenditure and 116.9 per cent of income (Lloyds,1987).

The government was expecting to reduce these figures in order to be able to make strategic investments which could increase productivity and growth of the GDP. Further negotiations on the payment of the external debt have been relatively successful due to the recent economic strategies of the government (Aspe, 1992).

In fact, since 1970 the external debt had started to grow because the government had spent a great deal of money on investments trying to maintain and even increase the rate of growth in the Mexican economy which had lasted for one to two decades after the second world war (See Tello, 1978). The strategy did not succeed as expected, and from 1976 the government strongly linked the policy of economic development to

the exploitation of the oil-fields and borrowed money in such a way that the external debt grew from 14.5 billion dollars in 1975 to 100 billion dollars in 1985. The country was then able to considerably develop the oil and related industries and in 1980 became the fourth largest oil producer in the world with a production of 2.7 million barrels per day. This meant huge revenues for the country and the government had no difficulty in meeting the high interest rates or even borrowing more money, until 1981 when the international price of oil fell.

From 1982 the repayment of the debt has been a huge load for the government and until 1987 there had been no access to new money for investment through the international banks. The situation was aggravated by the movement abroad of large amounts of investment capital. The whole economy reached negative rates of growth of the GDP while the population was still expanding. For example in the period 1982-1986 the GDP rate of growth was negative: -0.6% (Lloyds,1987).

The late 1980s have been years of extensive internal and external negotiations, and radical changes in the Mexican economy. The governmental policy has brought about some stability through a fiscal reform, a financial reform, a programme of privatisation, renegotiation of the debt and trade liberalisation, and the establishment of new social spending programmes. The relative success of the policy is mostly demonstrated by comparing the rate of inflation of about 18 per cent in 1991 with the rate of more than 180 per cent in the middle 1980s; and the attraction of home and foreign investment (Aspe, 1992).

As a result of administrative style, population growth, and economic performance, which have been facing Mexico, the government has been forced to reduce public expenditure. Education, amongst other services, which is largely supported on public funds, has been affected by this measure. As a consequence, emphasis has been laid on

the accountability of education in general, and particularly of higher education. The improvement of its quality, and the efficiency of its coordination and performance have been encouraged and supported.

4.3. Education in Mexico.

Mexico shares with the majority of Latin American Countries several characteristics which have marked its educational system: a colonial experience and a religious tradition, which in the case of Mexico explains the lay character of public education, the influence of European thought especially in the nineteenth and early twentieth centuries, and contemporaneously, the influence from the United States. French thought through Positivism and encyclopedic views of knowledge are certainly important influences left by the liberal politicians in Mexican education. This, together with the state's right of provision, prevailed over conservative visions which claimed education as being the privilege of the family and the religious authorities.

In the social pact that concluded the Revolution, education was seen as the right of individuals, a condition for their development and for the integration of a new democratic nation. The aims of education, as formulated in the Constitution of 1917, can be grouped into three: the harmonious development of human beings, the preservation of national independence and the improvement of democracy as a lifestyle (CONPES, 1986).

Since the Mexican Revolution, the aim of education in Mexico has been to provide a social opportunity to which all citizens are entitled. Accordingly the government has held this aim from 1917 onwards, and has tried to expand educational services to cope with their demand. To provide all young people with guaranteed access to

primary education has been the central target of the educational policy of all post-revolutionary governmental teams in office.

Education was thought to be the route to follow in order to achieve the aimed-for welfare of the country. On the other hand, the aim of education was to provide people with the necessary skills which were needed to develop the productive structure of the country, and improve the national welfare. Primary education, and even vocational education to cope with the more specific needs of the productive organisation, had priority over higher education which would be a matter for attention at a later stage (Meneses, 1983).

Mexican education as established in the Constitution is secular, free and compulsory. The administration is still highly centralised, although since the early 1980s there has been a tendency towards leaving the complete responsibility for planning, programming and budgeting to the states. Responsibility for primary and secondary education has recently been devolved to the states, though the specification of the curriculum and assessment are still reserved for the Federal Government. Nevertheless, in 1984, 70 per cent of the total education expenditure was still met by the Federal Government, and the maintenance, equipping and building of schools is the responsibility of a national agency (Pescador, 1984).

The high rate of demographic growth became an additional pressure on the target of providing basic education for the entire population of schooling age, and kept this policy as a priority. Even recently, between 1940 and 1979, the population increased from 20 million to 60 million, and 40 per cent of people were of school age, between 5 and 19 years old, demanding education (Padua, 1981).

4.3.1. Educational structure.

The Mexican schooling system follows the pattern 6-3-3, which means six years of primary school, three of secondary, and three of *preparatoria* (higher secondary school leading to Bachelor's) or vocational studies. After that, four to five years reading for a professional degree in universities or Technological Institutions. Postgraduate studies come afterwards, usually for two to three years more at least, leading to Master and Doctoral degrees. Figure 4, on the next page, shows this pattern.

For primary and secondary education, there are both federal and state schools at each level, as well as a significant private sector which is mainly in primary education, although the curriculum is uniform throughout the country including private schools. The government provides free compulsory text-books for primary education whereas for secondary education, it only publishes a list of approved ones. Individual schools in secondary education may add books of their choice, though not excluding the ones contained in the list. The majority of secondary schools are comprehensive, but some technical and vocational ones were further developed during the 1960s, and recently again during the last decade. Both primary and secondary schools award certificates of completion. Technical secondary schools, in some cases, also award a certificate of technical training.

The educational level after secondary education has been administered either by public universities where it is called *preparatoria*, or by technological institutions where it is called vocational. Preparatory or vocational studies last for three years and at graduation the Bachelor's certificate in the former, and a professional one in the latter, are awarded.

Figure 4

THE STRUCTURE OF EDUCATION IN MEXICO.

Educational levels and Degrees	Age	#

Master and Doctoral Degrees	26 25 24 23	20 19 18 17

Open Systems	Professional Studies 'Licenciaturas'		22 21 20 19	16 15 14 13
	Teacher's Education	Preparatoria (Bachelor's)	18 17 16	12 11 10
Training	Secondary Education		15 14 13	9 8 7
Primary Education			12 11 10 9 8 7	6 5 4 3 2 1
Pre-School Education			6 5	
			4 3 2 1	

Source. SEP, 1985.

The *preparatoria* and vocational schools have been traditionally administered either by the universities or by technological institutions. In practice the Mexican school system has been working in two separate and in some ways disconnected components: on the one hand primary and secondary schools, and on the other the *preparatoria* linked to universities and the vocational linked to technological institutions.

Universities and technological institutions have been the two main sectors of Mexican higher education since the late 1930s (Solana,1982).

The origin of the relationship between preparatory and higher education may be related to a liberal reform of higher education during the late 1860s. By those years both civil institutions of professional studies, and the National Preparatory School (*Escuela Nacional Preparatoria*) were created by the government as distinct from the Royal and Pontifical University; both of them were linked for coordination, and have remained so since. In 1910, when the National University was founded, the *Escuela Nacional Preparatoria* was linked to the University for its coordination, as a former level to the professional studies. In its turn, the National Polytechnic Institute developed a dependent technical system of vocational schools since its creation in the late 1930s.

The relationship which both the National Autonomous University of Mexico and the National Polytechnic Institute have with their attached *preparatoria* and vocational schools as well as their curricula, have influenced the rest of the schools in the country. Several initiatives, developed in recent years outside this pattern of *preparatoria* and vocational schools, have provided more flexibility and variety in an attempt to diversify the curriculum at this level. Preparation for work, and applied studies which eventually might convert this post-secondary level into terminal studies, have been implemented.

Nevertheless, the prestigious part of this post secondary level has been, and still seems to be, the academic rather than the vocational or the technical ones; and the control of preparatory education by universities to a large extent, 'tends to reinforce its academic character' (Cowen and McLean, 1984).

4.3.2. Educational expansion.

The Mexican educational system has been expanded and developed considerably since 1960. The number of 5.2 million school students at all levels of education in those years has increased to 25.4 million by 1986. At present more than 35 per cent of the population benefits from formal education, and 4 million more are attending by means other than the schooling system (De la Madrid, 1987).

During the 1960s and 1970s, the major emphasis was placed on expanding primary and basic secondary education, notably primary education in the 1960s and secondary education in the 1970s. Subsequently higher education had its highest growth during the 1970s. The first half of the 1980s has seen, again, a considerable expansion of secondary education.

This remarkable expansion of the educational system responded both to the natural demand stemming from the increase in population in the country, and to a significant effort made by the government to provide education to a wider sector of the population. The achievements of the expansion in basic education during the 1960s increased the demand for higher education by the latter half of that decade. Higher education was in its turn expanded, and the proportions of the age group 20-24 years which was reading for degrees was increased from 2.6 per cent in 1960 to 5 per cent in 1970, and further on to approximately 13 per cent in 1980 (CONPES,1986, Martínez, 1983).

4.4. Aims and structure of higher education.

Within the educational aims of Mexico, three main functions, referred to as 'substantive' (*funciones substantivas*), have been traditionally attached to

universities, namely teaching (*docencia*), research (*investigación*), and the dissemination of culture (*extensión de la cultura*). In Mexico, universities have been thought of as institutions that are the 'consciousness of society', places where not only the culture of the country is kept, recreated and given back to society but also where the development of science and technology should take place and from which the results are spread to society. In addition, freedom of teaching and critical consciousness have traditionally been attributes of Mexican universities (CONPES, 1986, Steager, 1974).

From these three main functions, teaching takes the major part of the academic work in the faculties and schools, and has usually been separated from research which traditionally has been confined to Institutes and centres within higher education institutions. However, the National Council of Science and Technology (CONACYT) recently estimated that 46 per cent of the researchers in the country are working in institutions of higher education (CONPES, 1986).

The provision of higher education has been, and still is, mainly public. It has been largely supported by public funds through universities and technological institutions. There is however, also a small sector of private higher education institutions. A closer view of the Mexican system shows that by 1984 universities accounted for 70.5 per cent of the total of student enrolment in higher education, the technological institutes 14.2 per cent of this total, and the sector of private institutions 15.3 per cent. See table 1 (CONPES, 1986).

By considering only the enrolment in the public sector, universities had 83.2 per cent of the total, and the Institutes of Technology accounted for 16.8 per cent of it; see table 1 (CONPES, 1986).

Table 1

HIGHER EDUCATION ENROLMENT 1984
BY SECTOR

INSTITUTIONS	STUDENTS	% '	%"
UNIVERSITIES	662,170	70.5	83.2
TECHNOLOGICAL INSTITUTIONS	133,289	14.2	16.8
TOTAL PUBLIC	795,459		100
PRIVATE INSTITUTIONS	144,054	15.3	
TOTAL	939,513	100	

Source. CONPES, 1986.

Table 2

NUMBER OF HIGHER EDUCATION INSTITUTIONS
BY SECTOR 1984

INSTITUTIONS	PUBLIC	PRIVATE	TOTAL
UNIVERSITIES	38	54	92
TECH. INSTIT.	84	49	133
TOTAL	122	103	225

Source. CONPES, 1986.

The number of institutions, universities and technological institutes, do not reflect their participation in the enrolment of students. Table 2 shows that from a total of 235 higher education institutions by 1984, 40 per cent were universities and 60

per cent technological institutes. The high number of private institutions, 40 per cent of the total, does not reflect their lower share in the total enrolment of students (CONPES, 1986).

There is a fair geographic distribution in numbers of public higher education institutions throughout the country. Today there is one university and one Technological Institute in each state. Their figures of enrolment and consequently their size are not homogeneous though. Major enrolment figures in larger institutions reflect, in general, the concentration of the population in the urban areas of the country as well as institutional concentration of academic facilities (See table 3).

Table 3

DISTRIBUTION OF HIGHER EDUCATION ENROLMENT AND INSTITUTIONS 1984.

ENROLMENT(000)	UNIVERSITIES	TECH. INSTIT.	TOTAL
0- 1	2	59	61
1- 3	5	22	27
3- 5	7	1	8
5-10	9	1	10
10-20	7	-	7
20-30	1	-	1
30-40	2	-	2
40-50	1	-	1
50-60	2	1	3
60-70	1	-	1
70-≤	1	-	1
TOTAL	38	84	122

Source. ANUIES, 1984.

There is a significant concentration of students in Mexico City; institutions there account for 24.6 per cent of the total number of students in higher education. Both the largest university, the National Autonomous University of Mexico, and the largest Technological Institute, the National Polytechnic Institute, are sited in Mexico City, and they have more than 70,000 and 50,000 students respectively.

It was mentioned earlier how Mexican administration has developed a centralised practice in spite of the federal aims of the country. In their turn, within that administrative environment, higher education, but particularly universities, have developed decentralised coordination tendencies in parallel, under their aims for autonomy (See e.g. Levy, 1980, Rangel Guerra, 1978). On the other hand, the Institutes of Technology largely depend on the Ministry of Education (SEP) on a centralised basis.

With regard to this pattern universities deal on their own with academic concerns such as curricula, appointment of staff, selection of students, pursuing scholarship and research, and internal structure and governance. universities are managed through institutional autonomy within which there has been, to some extent, more space for negotiation between them and the Ministry of Education as it is in the case of funding issues.

From 1940 to 1960, the number of universities was increased from 7 to 20, and the increased number of institutions made their coordination a matter of concern for universities themselves. As a result they created the National Association of Universities and Higher Education Institutes (ANUIES) in 1950. ANUIES was supposed to deal with institutional development and academic improvement of universities in a participatory way. ANUIES' presence in the coordination of

universities has been noticeable by proposing advice and criteria for higher education policy (Valadés, 1981).

After the creation of the National Polytechnic Institute in the late 1930s, the number of technological institutes was also increased to 13 during the same period. A similar body to ANUIES, the National Council of Technical Education (COSNET), was established in the technological sector of higher education in the middle 1970s, with the purpose of giving advice to the Ministry about technological education concerns. However, its operation is related to the centralised pattern of coordination of this higher education sector.

The number of higher education institutions was again increased during the 1970s and, in 1978, two Under Ministries were created in the Ministry of Education (SEP) with responsibilities for higher education, its coordination and administration. These were the Under Ministry of Technological Education and Research (SEIT) for the Technological Institutes, and the Under Ministry of Higher Education and Scientific Research (SESIC) for the public autonomous universities.

A better picture of universities, and their influential role within Mexican higher education, may be drawn by considering in some detail major issues concerning these institutions in Mexico.

4.5. The public autonomous universities.

The provision of basic education was the central priority of governmental policy after the Mexican Revolution; however the schools of higher education already created kept higher education in the scene. In parallel the needs of the structure of

production, and the leadership of the country demanded highly skilled people to be trained and educated in higher education institutions.

Since their creation, the aim of the universities was to provide the country with adequate leadership. The priority given to basic educational needs of the majority of people, did not deny the necessity of higher education institutions working towards that aim. In this perspective, universities were at the apex of the educational structure.

During the period from 1910 to the early 1920s seven universities were created in the Mexican states based on professional schools founded during the preceding century. Two of them were created as autonomous universities: the University of *Michoacán* in 1917, and the University of *San Luis Potosí* in 1923. The presence of the National University was stronger, though (Valadés, 1981).

The National University was created in 1910, and began its operation in 1917 by joining under the same umbrella the schools and faculties which were already in existence in Mexico City: Medicine, Jurisprudence, Engineering, Arts, and the *Escuela Nacional Preparatoria*. As has been said, these professional schools and the Institutes of higher education in the states were created as civil institutions by the government during the late 1860s.

Aside from its origin, and the re-stated linkage between preparatory and higher education studies through the foundation of the National University in 1910, there is the fact that for those years there was not a proper Ministry of Education since this was created in 1921. After the Mexican Revolution the responsibility for public education lay with the Ministry of Justice and Public Instruction. However, one of the commitments of the Under Minister of Public Instruction was to be 'chief' of the

National University, together with the Rector of the University who was appointed by the President (Meneses, 1983, Valadés, 1981).

Despite this relationship with the University, the necessity for basic education in the country was so vast that higher education was an important issue but indeed "not the first priority" for the Under Ministry of Public Instruction. Higher education needed to wait its turn (Meneses, 1983).

As soon as the National University started to struggle for its autonomy, the University ended its relationship with the Under Ministry of Public Instruction and became directly linked to the Presidency through a Department of University and Fine Arts (Valadés, 1981).

The National University was released from this administrative relationship with the Presidency in 1933 and granted full autonomy; funds for its operation were granted in 1945. These conditions provided the National University with the space to make this structural pattern influential in higher education, particularly within the university sector.

The national policy to promote the industrialisation of Mexico by substituting importation, gave the country more than two decades of steady economic growth and prosperity from the late 1940s until the 1960s. People emerging from the educational system, mainly the people who graduated from higher education, had both the opportunity to exercise the developed skills and to contribute to the social and economic requirements of the country. As a consequence, the educational system became a privileged channel of social mobility for people gaining access to it.

As a result higher education was further expanded, and the number of universities in the states rose to twenty between 1940 and the early 1960s, though some of them remained single faculty institutions (King *et al*, 1970). Respectively, their enrolment of students increased from 19,654 in 1940 to 34,923 in 1960 (Padua, 1981 p. 131). Universities underwent a further process of development and their number went up again; so did their number of students. It could be said that they reached their present pattern during the late 1970s and the early 1980s.

4.5.1. Autonomy and institutional organisation of universities.

Autonomy as a predicate of higher education institutions is difficult to define as its meaning is frequently not related to a fixed and immutable condition, but rather claimed in relation to a previous circumstance. That is the case for example when autonomy is claimed in the face of the government's intervention in higher education institutions' academic and management concerns (CONPES, 1986).

Notwithstanding whether autonomy is granted to a higher education institution in order to manage its academic concerns by itself, there is still the issue of the provision of funds for its operation. In most cases public universities are largely supported by public funds provided by the government. That was the case of the National University in Mexico at the time it was granted full autonomy in 1933. The government was released from its funding responsibility and the UNAM found it difficult to survive economically; public funds for the operation of the National University were again normally provided, 'granted', from 1945 onwards.

Autonomy, then, has to do with freedom in the search for knowledge, which is the central concern of higher education institutions. Universities have developed

'hegemony' on this task and by so doing became social institutions 'relatively independent' in contemporary societies (Clark, 1982).

The exercise of autonomy in Mexican universities has common characteristics as follows:

i) self government, that is to say, the ability and right of institutions to appoint their own authorities and staff, to give themselves regulations and norms, and to determine their own forms of organisation;

ii) to grant diplomas and to decide on academic matters - "academic freedom", namely the selection of students, the laying down of curricula, the choice of teaching methods and that of the subject of research and scholarship. Under the former, the incorporation and validation of studies outside the university are included; and

iii) to manage their endowment and financial resources. In all these matters universities are accountable to nobody else but to themselves; they formally became institutions "decentralised from the government" (Rangel Guerra, 1979 pp. 15-16).

The National University has been influential within the pattern of autonomy of public universities, though it was not autonomous at the time of its creation. In fact, from the first seven universities founded between 1910 and 1920, only two were created with formal autonomy. The particular case of the National University illustrates some major features of this pattern in Mexican universities. This influential role of the UNAM may be related to its ancient origin; its opening in 1910 as National University and linked to the presidency for a short period during its early years; and

the one which had a long struggle with the Federal Government to become fully autonomous.

Autonomy as an aim for the National University can be traced back to the first proposal for its creation in 1881. It was not until after it began operation in 1917 that the National University initiated a long struggle with the Federal Government for its full autonomy which was achieved by progressive steps. At the time of its creation in 1910, its design included the Under Minister of Public Instruction as 'chief' of the University together with a Rector and a Council; and the Rector was appointed by the President of the Republic (Valadés, 1981).

As early as 1917 the Department of University and Fine Arts was created in the Presidency with responsibility for the National University. The National University was released from that Department in 1929 and granted autonomy for its academic concerns, but the Rector had to be elected from three candidates proposed by the President, and the government retained power of veto over the appointment of academic staff. Finally, autonomy for the National University (UNAM) was fully granted in 1933, and in 1945 the financial support for its operation was also assured (Valadés, 1981, Rangel Guerra, 1979).

The struggle for autonomy in the National University may also be seen as a struggle for influence over the universities in the states. Autonomy does not have the same historical conditions for all universities; some of them struggled for it, some were given autonomy, and some were created as autonomous institutions. These historical conditions through which universities became autonomous have to do with the local needs and interests in the states in relation to the former Institutes of Science, Arts and Literature, created in the Nineteenth Century; universities were founded on these grounds and, initially, their autonomy was not necessarily agreed in all cases.

In this way, the struggle of the National University for influence over the universities in the states has to do with the interest of academics to keep academic issues under their management.

The formal terms of autonomy and academic freedom with regard to universities are enshrined in most of their statutes; autonomy as a proper feature of higher education has been further included in the Mexican Constitution (Poder Ejecutivo Federal, 1980). Nowadays all universities in the states are autonomous in practical terms. However, a few of them are not formally autonomous and still keep an explicit relationship with the state governments. This relationship is different in each case, but is mainly related to consultation with the Governor about the appointment of the Rector. Nevertheless, the management of academic issues and its administration can be regarded as autonomous in practical terms.

As far as organisation is concerned, Mexican universities have common features in their structural pattern (Rangel Guerra, 1979). There are on the one hand schools and faculties whose primary aim is teaching, and on the other hand institutes and centres whose main responsibility is to undertake research. So teaching and research activities are with some exceptions separated. Teaching activities have been mainly undertaken by part time staff whereas full-time staff have been mainly concerned either with research or with administrative or directive functions in schools and faculties. The typical exceptions are the graduate programmes which incorporate full time staff who are mainly committed to research.

A kind of collegiate governance is exercised by the Council of each university in which faculty and students are represented. The University's Council is the ultimate authority in academic and other affairs and is presided over by the Rector, the

Directors of the Schools, Faculties, Centres, and Institutes as current members. Among its functions there is the establishment of internal regulations.

Within the schools and faculties there are Technical Councils concerned with local academic affairs and which are constructed in a similar way to that of the University's Council though related to a smaller academic domain.

At the highest level there is a Board of Government whose members are small in number consisting normally of top academics representing sectors and areas of knowledge. The functions of this board are to appoint the Rector and Directors of faculties, schools, centres and institutes. In most cases these appointments are made after a consultation process to the university's community. This board also acts as arbitrator in cases of conflict between collegiate bodies and officials. It is interesting to note that members of this board are excluded from participating in the other directive functions during the length of their appointment and a short time after with the purpose of maintaining impartiality in their judgments. In some universities the Board of Government's responsibilities are undertaken by the University's Council.

The financial affairs, mainly the management of the university's endowment, is in the hands of a Board of Trustees. The more the university is provided with public funds, the more the functions of this board are diminished. However, in spite of the public origin of university funding, the higher the university budget, the more significant the functions of the board.

The Rector is the executive concerning academic matters of the University's Council and the university's representative in legal matters. The ordinary functioning of each university relies on him and administrative affairs are delegated to a Secretary appointed by him.

The majority of public universities share the structure described above; the degree of collegiate decision-making varies though. Some of the newest universities have a different structure based on departments rather than schools and faculties, and these departments correspond to new epistemological categories for the organisation of knowledge (De la Garza, 1990). Nevertheless, on this alternative basis the rest of the structure is fairly similar.

4.5.2. The National University (UNAM).

It was mentioned earlier that the 1881 proposal for the creation of the National University of Mexico as a civil institution did not succeed until 1910, the time of the Mexican Revolution. This singular social movement affected the creation of the National University, and the evolution of educational institutions in Mexico.

The foundation of the National University had the purpose of creating a new institution of higher education for the country, 'without reminiscences' of the past: the Pontifical institution and its social colonial conditions. The National University should be committed to the cultural development and identity of Mexico, as its most relevant institution of higher studies (Steager, 1974, Meneses, 1983).

On the other hand, during the late twenties, the highest point of the movement which gave it autonomy, its leaders thought of the University as one still serving all the Spanish-speaking Latin American continent (De la Garza, 1990).

In fact the National University has been influential in Latin American higher education for a long time. Locally, it may be viewed as an acting Ministry of Higher Education in the beginning when it was related to the Under Ministry of Public Instruction. It become an influential university later on, as the National Autonomous

University of Mexico. The University developed academic guidance and, to some extent, control in higher education mainly through the recognition of the academic value of the degrees offered by its affiliated higher education institutions at preparatory and higher education levels.

Affiliated universities of the National University have been, by and large, the private higher education institutions offering studies at university level, as well as most of *preparatoria* schools, public and private. This affiliation has meant that the UNAM has had an influence in the formal configuration of the degrees as well as in the design of the curriculum. This influence of the National University has also reached the universities in the states, although the National University has not controlled these universities, which are also autonomous themselves.

With regard to the law, higher education in Mexico can be supplied by the Federal Government, the governments in the states, or by particular organisations so licensed. In fact, there was only one private higher education institution in the country legally allowed to do so from the late 1930s until the middle 1980s, when a few of them were also allowed to grant professional degrees by themselves. Most private institutions have been affiliates of the UNAM, and the degrees they offer academically recognised and supported by the National University (Rangel Guerra, 1979, See also Levy, 1986).

Universities in the states have not been affiliates of the National University although several of them had some of their degrees academically influenced by THE UNAM. In general this was the case of the smaller universities. The larger universities in the states have not been, in most of the cases, within this pattern. In their turn some of these universities in the states have also academically influenced smaller universities.

In relation to preparatory studies, many *preparatoria* schools, public and private, had been affiliates of either the National University or the universities in the states. However, the curricula of the UNAM for this level is still regarded as the most academic and well structured for its purpose.

Although the UNAM has a national character, it has rarely extended its physical presence beyond the metropolitan area of Mexico City. Nevertheless, as the oldest university the National University has played an exemplary role and some initiatives affecting the whole university sector still take place there (Carpizo, 1988). It is not only its participation in research, graduate programmes, organisational and academic initiatives, and undergraduate teaching but also the level of its funding which is considerable when compared with other universities (De la Garza, 1990). To some extent, many universities and higher education institutions have initially modelled their curricula, and also shaped their academic structure and organisation on its example.

During the process of higher education expansion in the 1970s, more universities entered the scene and most of them became enlarged and developed enough to offer a wider range of degrees. These new circumstances apparently have modified the influential role of the UNAM. There is, however, the view that the National University is still a prominent influence in public autonomous universities (e.g. De la Garza, 1990, Carpizo, 1988, Llarena, 1980).

4.5.3. The National Association of Universities (ANUIES).

As stated earlier the National Association of Universities and Higher Education Institutes (ANUIES) was created in 1950 to deal with the academic and coordination

concerns of public universities. ANUIES' membership has included since its creation all public universities, and a number of the Technological Institutes; it also includes most of the private universities (Rangel Guerra, 1979).

ANUIES has been another significant participant in the coordination of higher education in Mexico, and particularly universities. Although the strong participation of the National University towards its foundation (CV14, CV20), ANUIES has been an important source of support for universities in the states (PL17).

ANUIES has played a significant role mainly in two directions: the coordination of Mexican higher education and particularly autonomous universities; and the participation of autonomous universities in the coordination of Mexican higher education.

According to the statutes of ANUIES established since 1961 in their present form, the Association's main goals are as follows:

i) To study the academic and administrative problems of the national system of higher education in order better to integrate planning with the total system and to suggest to member institutions - and to educational authorities - the adoption of recommendations for the improvement of institutional performance.

ii) To support actions tending to improve the services assigned to member organisations.

iii) To encourage the exchange of personnel, information and services among members.

iv) To study the economic problems of higher education in general and of individual institutions in particular, and to undertake the steps necessary for their solution.

v) To promote the development of instruction, research, and cultural diffusion among its member institutions, in accordance with regional needs and within a concept of integrated national planning.

Congruent with its character, agreements from ANUIES' Assemblies are passed through its members as recommendations which, in their turn, are passed through their governing bodies for a final decision. ANUIES maintains full respect for institutional autonomy of its members (Rangel Guerra, 1978 p. 15).

National Assemblies of ANUIES are held once a year. It has been essential that higher education initiatives go through these meetings. The General Executive Secretariat of the Association carries out the agreements of the ANUIES' National Assemblies. The General Executive Secretary has to be a former university Rector, and its appointment lasts for three years, which can be extended for a further period in office. This top official of the General Executive Secretariat proposes to the ANUIES' National Assemblies the necessary appointments of personnel to carry out the normal operation of the Association.

Since its formation, ANUIES' suggestions have been taken into account for establishing criteria for the coordination, support and development of higher education. ANUIES' Assemblies have been considered the most important forum for the analysis of Mexican universities' issues, and ANUIES suggestions have been taken into account by both the federal and the state governments (Valadés, 1981).

4.6. Summary.

Three features characterised modern Mexico: a centralised style of administration within a federal form of government, high demographic expansion, and financial problems arising from external debt. The demographic expansion in Mexico together with the egalitarian aims of the governments led to the expansion of its educational system in the last few decades. However, the financial problems which Mexico is facing today are putting pressure on educational expenditure.

The centralised administrative style of the country is mainly reflected in a strong presidency and the election of a new president every six years. On the other hand, the rule of Mexican administration, through which the president 'holds together the political coalition', also permits negotiation practices which, in turn, maintain a space for the expression of dissent and the management of local interests.

Under these features of centralised administration and conditions for dissent and negotiation, universities have historically developed an autonomy which has been legally included in the highest authority of the country: the Mexican Constitution. The academic interests concerned with autonomy for universities have also influenced the development of an influential interinstitutional organisation. Autonomy is then both a strong value and an institutional characteristic of public universities. The National University has been a prominent exemplar of autonomy. In its case, autonomy was finally granted and public funds approved for its operation, after a long struggle with the Federal Government. This practice of autonomy and secure funding from the public purse was later extended to all public autonomous universities.

Universities have been the prestigious institutions in the Mexican higher education system within which the National University has been prominent in academic and

coordinating matters. The UNAM has been the academic body to grant the degrees offered by private higher education institutions which are, in this way, its affiliates. The National University also exercises academic guidance and managerial control of both private and public *preparatoria* schools.

From 1970 the provision of higher education in Mexico has developed and expanded. During this process of expansion, the autonomous universities have accommodated most of the total enrolment of students in higher education. Students number increased in public universities outside Mexico City where they were largely concentrated until the 1960s. One consequence of the expansion of higher education institutions was the creation of SiNaPPES in 1978. This period of higher education expansion and development, and the planning system, are matters for discussion in the following chapters.

Chapter 5. THE CONTEXT OF SiNaPPES. Expansion and coordination of the universities in the 1970s.

Introduction.

The definition of a period of policy for higher education undoubtedly reflects a perspective of the situation that public autonomous universities were passing through at that time. Its delimitation cannot be completely dissociated from preceding or subsequent circumstances either of higher education itself, or of the country in general. The preceding chapter has given a detailed view of the country and its system of education, and has situated higher education in this structural context; it is now necessary to draw a more dynamic picture of the recent expansion of the public autonomous universities from 1970 onwards which this study relates to the creation of SiNaPPES in 1978. This chapter is an attempt to outline this situation, that is to say: to provide a coherent perspective of the reform and coordination of the public universities in terms of the general policy at the time and its increasing concern for planning until 1978.

5.1. Educational planning and the universities.

At this stage it may be useful to provide a succinct account of planning in relation to the whole education system, and how it became a specific concern of autonomous universities in order to focus our attention on what is to be dealt with in the following chapters. The concern with planning in Mexican education can be traced back to 1959 to the formulation of the "Eleven Year Plan" for the expansion of Basic Education. Later on, in 1965, the National Commission for the Integral Planning of Education (CNPIE) was set up within the Ministry of Education with the aim of elaborating criteria to develop the whole education system; the general purpose was

to provide people with more educational opportunities. Although the emphasis was on basic and secondary education as a right for all the population, the regulation of the overall development of national education, and the promotion of a linkage between education, economic development and production needs, were also among the planning aims of the Commission (Rangel Guerra, 1979).

Since 1965 educational planning in Mexico had started to be a main feature of educational policy making, and it aimed to be comprehensive as was implied by the title of the 1965 National Commission. Two groups were created within this commission to study the quantitative and the qualitative aspects of education (De la Garza, 1990); their main targets were the following:

i) to evaluate both the diagnosis of the country's basic education needs forecast in 1959 (the Eleven Year Plan), and the achievement of the measures implemented to cope with that demand,

ii) to forecast the growth and demand of the whole education system until the 1980s,

iii) to estimate what was necessary to succeed in that purpose, and

iv) to establish criteria to orientate the whole educational policy.

By the mid 1960s planning concerns were explicit with regard to higher education; the 1965 Commission, which included representatives of universities, was emphatic about the importance of a close relationship between higher education, technological advancement, and the demand for qualified people from the national economy. In fact a third group was responsible of evaluating the results of the former two working

teams of the Commission, and to propose concrete action. The report of this third group included the following considerations which can be related to higher education: (Rangel Guerra, 1979 pp. 58-59)

i) Goals for the expansion of education should be established by considering: a) that the social demand for education correlates with levels of income and development, and b) that in turn the economic demand for highly trained personnel correlates both with the increase in the productive capacity of the economy and with the extent of the structural changes introduced by technology.

ii) To support the scientific, technological, economic and administrative aspects of education.

iii) To formulate policies for the coordination and steering of the scientific and technological development as a basis for an educational policy oriented to the improvement of the country.

iv) To restructure higher education levels to enable students to continue studies at higher levels as well as to acquire the qualifications which would permit them to obtain jobs in the productive structure.

However, the Commission considered that ANUIES was the right body to carry out the task of a more detailed proposal for higher education policy-planning for the modernisation of higher education (Méndez Nápoles, 1970, Flores de la Peña, 1970). In other words; higher education was a particular planning concern because of its supposed contribution to the socio-economic needs of the country and its development. Its autonomy and the existence of its own coordinating bodies were also important factors (Flores de la Peña, 1970). Higher education institutions should be

responsible for themselves, therefore planning concerns and recommendations should be addressed to them to be worked out in more detail (Méndez Nápoles, 1970, Solana, 1970).

Actually, as early as 1961 the aim of a higher education sector, comprehensively coordinated within the whole educational system, was already enshrined in the ANUIES' Constitution. Planning as a comprehensive process in Mexican higher education, was then seen in two dimensions: its relation with the whole educational system, and with higher education itself (Rangel Guerra, 1970).

In fact the preoccupations of universities with their coordination paralleled the concerns of this Commission, and were included on the agenda of the national assemblies of ANUIES during the later 1960s and the 1970s; a number of major actions were carried out accordingly. These actions of ANUIES and those of the universities, particularly the National University, paralleled a process of expansion and reform in public autonomous universities during most of the 1970s. Universities were enlarged and their number increased; their coordination became matter of concern for the government also. As a result new university-related bodies were created, and planning was promoted through them. These concerns of higher education planning reached their highest level with the creation of SiNaPPES in 1978.

5.2. The educational reform of the 1970s and higher education.

Higher education along with the whole educational system of the country has grown very fast in the last few decades. 76,000 students were enrolled in higher education in 1960, and this figure rose to a million by 1986, a nearly 15 fold increase. The highest rate of growth was experienced during the 1970s, however, when enrolment

in higher education increased by more than 300 per cent from 214,866 to 710,534 students.

On the other hand, by the 1970s the performance of the economy was not as good as it had been during the two preceding decades; the rate of economic growth was neither as high nor as stable as before, and a new policy of economic improvement and modernisation started to be implemented. Higher education was related to these policies and its expansion and improvement was supported. It was seen as very important, socially and economically, for the future of the country; its future growth and qualitative improvement therefore needed to be planned.

Under the aforementioned circumstances, the Federal Government began a wide ranging educational reform in 1970 which included higher education. A National Commission was in charge of the reform, and a special committee was formed with representatives of higher education institutions to deal with these issues. The aims of the reform formulated by this committee can be summarised as follows: (Ahuja y Carranza, 1976 pp. 86-88)

i) Expanding higher education to meet increased demand.

ii) Developing postgraduate studies, vocational and academic, to improve Science, Culture, and Technology.

iii) Developing a better relationship between theory and practice in the courses, and a balanced provision of technology and humanities in the programs of study.

iv) Developing the provision of a wider variety of degree courses by taking account of regional and local differences.e) Improving academic coordination among institutions through the establishment of 'academic credits'.

v) Improving academic coordination among institutions through the establishment of academic credits.

vi) Improving teaching methods in order to reduce the length of the _Licenciatura_ (the professional university degree), and the gap between the end of the thought courses and the final examination (thesis)

vii) Diversifying funding sources.

viii) Improving the performance of higher education institutions by promoting the optimal use of their physical facilities, the development of their process of coordination, and their efficient linkage with the productive sector.

These aims for modernisation mirrored what had already been expressed in different forums, and the proposals to reform public autonomous universities which are going to be reviewed in this Chapter. What was to some extent new was the stronger support to innovation in higher education by the Federal Government.

The period of expansion beginning in the early 1970s was also one of structural development. General policy supported this expansion with the purpose of diversifying the provision of higher education and improving its coordination. Additional funds were also provided to institutions for these purposes until economic and financial problems, starting from the late 1970s, forced a halt.

From 1970 to 1986, enrolment increased by more than 450 per cent, and the number of institutions also rose in both university and non-university sectors. The total enrolment figure was 1,016,487 in 1986 and represented an age (20-24) participation ratio of approximately 13 per cent, contrasting with 5 per cent in 1970 (CONPES, 1981, 1986). The number of Technological Institutes increased from 8 to 84 between 1970 and 1976. Public autonomous universities were enlarged and their number was also increased with the creation of 6 new ones to reach 38 by 1977. Universities accounted for a smaller proportion of the system in terms of the number of institutions, but managed to keep over 80 per cent of the total student enrolment in state supported institutions. This distribution by sector of higher education has not changed substantially during the last two decades (see table 4), in spite of an expressed desire for change since the 1970s (CONPES, 1979c); that was still being expressed by the Ministry of Education in the early 1980s: "universities will be a small, but an important sector, of this complex structure in the future" (Solana, 1982 p. 241).

Table 4

HIGHER EDUCATION ENROLMENT IN PUBLIC INSTITUTIONS

YEAR	UNIVERSITIES	%	TECH INST	%	TOTAL	%
1970-1971	164,649	77	50,217	23	214,866	100
1980-1981	577,019	81	133,515	19	710,534	100
* 1984-1985	662,170	83	133,289	17	795,459	100
# 1986-1987	843,684	83	172,803	17	1,016,487	100

Sources. CONPES 1981, *ANUIES, 1986, #1987.

However enrolment was successfully dispersed from institutions in Mexico City, particularly from the National University. The process of expansion permitted most universities in the states, old and new, to grow and develop academically. The extra funding enabled them to appoint more full time academics and teaching staff, to encourage research activities, to offer a wider range of degrees, and to increase their capacity. On the other hand, criteria were established in the National University to stop its enrolment growth by limiting the number of new students it admitted. These facts helped to discourage the very strong tendency to concentrate the enrolment of students in the institutions sited in Mexico City, and distribute them among autonomous universities in the states. As a result of this process, the enrolment of students in higher education institutions in Mexico City grew 121 per cent between 1970 and 1980, whereas the enrolment in the institutions in the states grew 359 per cent during the same period (Martínez, 1983). Consequently, the number of students enroled in universities in Mexico City represented more than 50 per cent of the total by the late sixties, and 44 per cent in 1970, whereas by the mid 1980s that number constituted 25.6 per cent. These changes can be seen in Table 5.

Table 5

GEOGRAPHICAL DISTRIBUTION OF ENROLMENT IN UNIVERSITIES.

UNIVERSITIES	*1970-71	%	+1984-85	%
MEXICO CITY	72,952	44	168,428	25.6
MEXICAN STATES	91,697	56	488,106	74.4
TOTAL	164,649	100	656,534	100

Sources. *CONPES 1981. (UNAM 100%)
+CONPES 1986. (UNAM 52.3%, UAM 19.1%, ENEPs 28.6%)

Current enrolment is dispersed in 38 public universities throughout the country as can be see in Table 6.

Table 6

ENROLMENT IN PUBLIC UNIVERSITIES. 1984-85.

Autonomous University of Aguascalientes	3,402
Autonomous University of Baja California	13,578
Autonomous University of Baja California Sur	1,336
University of Sudeste	1,716
Autonomous University of Ciudad del Carmen	355
Autonomous University of Coahuila	15,463
Autonomous Agricultural University 'Antonio Narro'	3,839
University of Colima	3,227
Autonomous University of Chiapas	5,553
Autonomous University of Chihuahua	10,112
Autonomous University of Ciudad Juarez	6,185
*National Autonomous University of Mexico (UNAM)	88,108
*UNAM's National School of Professional Studies	48,225
*Metropolitan Autonomous University	32,095
University of the Army and the Air Force	796
University 'Juarez' del Estado de Durango	5,276
Univesity of Guanajuato	4,947
Autonomous University of Guerrero	9,434
Autonomous University of Hidalgo	4,513
University of Guadalajara	66,637
Autonomous University of Estado de Mexico	18,993
Autonomous University of Chapingo	2,547
University Michoacana de San Nicolas de Hidalgo	24,686
Autonomous University of Estado de Morelos	5,903
Autonomous University of Nayarit	4,961
Autonomous University of Nuevo Leon	48,126
Autonomous University 'Benito Juarez' de Oaxaca	5,012
Autonomous University of Puebla	54,274
Autonomous University of Queretaro	4,006
Autonomous University of San Luis Potosi	14,689
Autonomous University of Sinaloa	36,829
University of Occidente	1,709
University of Sonora	15,684
Autonomous University 'Juarez ' de Tabasco	6,214
Autonomous University of Tamaulipas	14,751
Autonomous University of Tlaxcala	2,216
University Veracruzana	58,014
University of Yucatan	6,443
Autonomous University of Zacatecas	6,680
Total	656,534

* Universities in the metropolitan area of Mexico City.
Source. ANUIES, 1986.

In parallel with this process of enrolment in institutions outside Mexico City, the National Schools of Professional Studies (ENEP) were created in the National University, providing five new campuses to disperse the students of UNAM internally (Martínez, 1983, Llarena, 1980). Thus better balance of the distribution of student enrolment was pursued, and to some extent achieved. The National University, although still very important and large, is no longer the only influential one over the other public universities in the states.

The criterion underlying the expansion has been to give access to all qualified students wishing to follow higher studies. There are however different entry requirements for students to courses in different universities. In all cases a grade average of 7 or 8 on a scale of 10 from the *preparatoria* level (the higher secondary in Mexico) is required, but most of them have established a qualifying examination as an entry requirement, whereas some others accept the students wishing to enter them on a first come first served basis.

5.4. Innovating higher education.

As has already been said, the expansion of higher education was supported by policies encouraging its growth and structural development. The policy of the 1970s educational reform emphasised the importance of a close relationship between higher education and the productive sector because of the demand for qualified people from the national economy. It was also believed that an expanded higher education would encourage, and support, technological advance more generally. Higher education needed to be modernised if the country was to be modernised. Two influential innovations introduced during the early 1970s are illustrative of the aims of the policy: the reform in the National University, and the creation of new universities.

5.4.1. The reform of the National University,

In the late 1960s, with the aim of initiating the reform in the National University, several working parties were set up in order to formulate proposals for the reform of the UNAM and, in this way, to influence a general reform in higher education. The proposal which came out of this process was the creation of an alternative structure for universities: the College of Sciences and Humanities (*Colegio de Ciencias y Humanidades* - CCH). It was formally sustained by the Rectorate of the UNAM (Llarena, 1980) and began its operation in February, 1971 (Guzmán, 1985).

The College of Sciences and Humanities, CCH as a project for higher education reform, covered all levels of higher education: *preparatoria*, professional, and postgraduate studies. It was supposed to use the existing facilities of UNAM, but to make a "more effective and efficient use of them" (Bernal Sahagún, 1972 p.2). The main academic characteristics of this model included the following: (Bernal Sahagún, 1972)

> i) a research-oriented learning process, different from the teacher-centred one which was predominant at all higher education levels,
>
> ii) shorter programs of professional studies to be completed in four years, instead of five, which was the general practice,
>
> iii) the offer of short professional degrees, vocationally oriented, to be completed in three years,
>
> iv) vocationally oriented studies at *preparatoria* level, leading to a technical qualification.

The objective of the CCH model was to provide higher studies with a more "realistic, practical, social, and long term" approach (Bernal Sahagún, 1972 p.2), to fit them

into a changing reality. It aimed for a higher education which would contribute to the country's development into a more democratic, and developed society. The professional training to be provided would be more diversified, and the wastage of students reduced. It also included in parallel a vocational training -optional for students- from its early stages, to prepare students for the labour market needs at different levels (Bernal Sahagún, 1972) .

The CCH reform, which could have lead to the reform of autonomous universities throughout the country because of the UNAM's influence, was initially implemented in the *preparatoria* level of UNAM itself. The administration of the CCH was established separate from that of the *preparatorias*. However its further implementation did not occur either in the National University, or in the autonomous universities throughout the country. Although the project was not implemented in all higher education levels, its outcomes influenced several *preparatoria* schools in public and private education, mainly in the metropolitan area of Mexico City.

The CCH proposal, because of its magnitude and radicality, was central to the process of innovation in the UNAM. Nevertheless, the partial implementation of the CCH model did not end the process of renewal in UNAM. A program to disperse enrolment and renovate the operation of the UNAM was formulated and carried out from 1973 to 1977. This 'planned expansion' of UNAM targeted the creation of five National Schools of Professional Studies (ENEP) in five different campuses throughout the Metropolitan area of Mexico City (Llarena, 1980).

The design of the ENEPs included most objectives of the CCH proposal, but they were formulated for the professional and postgraduate levels of the university only. They can be summarised as follows:

i) A closer relationship between teaching and research.

ii) The improvement of teaching-learning methods.

iii) The diversification of the degrees offered by the university.

iv) The improvement of the linkage between the university and the productive

sector.

The ENEPs were designed to be based on academic departments from different areas of knowledge - to maintain an inter-disciplinary environment - and with academic staff committed to teaching and research. These ENEPs targeted a top limit of enrolment of 20,000 students each, and were administratively decentralised from the main campus of UNAM: the University City. The larger Schools and Faculties of the National University, which had the highest enrolment of students, were the first targets in this process of enrolment decentralisation (Llarena, 1980).

In the end, the CCH and the ENEPs have remained in the UNAM; the CCH model at the *preparatoria* level and the ENEPs at professional and postgraduate studies. Some commentators believe that the CCH proposal to reform higher education was not further implemented because of its democratic character, which was, in their views, contrary to the selective perspective of the government about higher education development (Guevara, 1981, Villaseñor, 1988).

An alternative view holds that the lack of support for the CCH proposal was not indeed related to its democratic -or undemocratic- character. The problem was that the CCH proposal still maintained the linkage between preparatory and professional studies in higher education; an 'old practice which needed to be modified or even suppressed for the academic improvement of both levels in higher education' (CV20). That is why the reform in the National University was re-directed to the creation of the ENEPs (CV13, CV16).

The second view, which relate the different views about the university reform to the academic realm, concurs with the perspective of this study. It is plausible to suggest the existence of different academic interests and views inside the institutions themselves, thus providing support to different proposals for the renovation and coordination of the universities, although the general aims of the reform may be shared by them; this seems to be the case of the National University. Different proposals of reform may also not be only related to the university and the government. Such a perspective tends to ignore the different views and interests of the academics themselves. In fact, the implementation of the ENEPs in 1973 was supported by a new Rectorate in the UNAM, different from that supporting the CCH in 1971. This issue is further analysed in Chapter 7. It is now convenient to review the other influential university reform of the 1970s.

5.4.2. The creation of new universities.

Early in the 1970s, a model of a new university was proposed through the National Association of Universities (ANUIES). The aim of the model was both to modernise and reform public autonomous universities, and to meet the increasing demand of students during the years to come. This proposal targeted the creation of middle sized universities, with no more than 15,000 students per campus, and including only professional and postgraduate levels of higher education (González, 1975, Castrejón, 1980). Its major academic features were as follows: (CV14, PV31, CL13, CL28)

i) to be supported by a larger percentage of full time (as opposed to part time) academic staff,

ii) to be developed on the basis of a closer relationship between research and teaching, and

iii) to be structured in departments.

With the features referred to above, the new universities should be able to:

i) improve the teaching-learning process,

ii) diversify the variety of degrees they would offer, and

iii) better meet the demands of the labour market for university graduates.

Six universities were created under these these aims, one in Mexico City - the Metropolitan University- and five throughout the country - *Aguascalientes, Ciudad Juarez, Chiapas, Baja California Sur,* and *Tlaxcala.* The model for these new universities, created between 1973 and 1976, was of particular significance because it was conceived and designed as a paradigm whose features would mirror what public autonomous universities could be (Castrejón, 1980).

In relation to the *preparatoria* level, the ANUIES proposal included a model for a new institution: The College of Bachelors (*Colegio de Bachilleres* - CB) which had fairly similar features to the CCH proposal. The College of Bachelors was not, however, linked to the professional level of higher education. It was not administratively linked to the universities either (Castrejón, 1980, Guzmán, 1985).

It may be noted that the aims of the university reform were fairly similar in both the UNAM and the ANUIES proposals, and were indeed little different from the aims of the general policy of the Federal Government for higher education, which has already been referred to earlier in this chapter. The three cases aimed at creating dynamic institutions of higher education, able to pursue academic excellence on the basis of a balance between teaching and research, a close relationship between technological development and research, an adequate range of degrees to obtain graduates better answering the country's needs, and the development of appropriate organisational

structures and efficient administrative procedures. The models from both initiatives of university reform were influential to the universities in the states.

Thus the general aims of higher education modernisation were shared by the universities and the government. Consequently public funds were provided to support the different proposals. The General Directorate of Educational Coordination (DGCE), created in the Ministry of Education in 1971 and whose existence lasted until 1976, was the financial channel of public funds for the enlargement and innovation of public universities (Castrejón, 1980, 1984). The general purpose was to encourage diversification within the university sector of higher education, and also a better balance among its institutions. Public universities would both expand and be renovated. Different areas of knowledge were included in order to improve research activities and to offer a wider range of academic and professional degrees. In the end, this diversification of autonomous universities increased the concern for their coordination and planning (ANUIES, 1979, Rangel Guerra, 1979, Castrejón, 1976). This also influenced their interinstitutional linkages as is reviewed in the following section.

5.4.3. Inter-university collaboration.

From 1969 to 1975, the agenda of the national assemblies of ANUIES expressed the preoccupations of autonomous universities about the coordination and planning of the reform in higher education; these concerns can be grouped into six main sets of issues, as follows. (Castrejón, 1976 p. 65)

1. Establishment of 'academic credits' in the university curriculum, with the purpose of inter-institutional academic exchange and coordination,

2. diversification of focus, number and structure of university degrees in order to improve the contribution of higher education to the productive sector and the social needs of the country,

3. promotion of departmental-based organisation in its affiliated universities.

4. encouragement and support for studies, analysis, and diagnosis at institutional level among its members,

5. the necessity of training teaching staff in universities to cope with the increasing enrolments, and

6. the establishment of a national agency to design materials for the training of teachers.

These issues in general correspond to the aims of the university reforms which have been demonstrated through the chapter; in fact the first three are directed to promoting and expanding innovation in the autonomous universities. Due to the diversity of institutional views, the extent to which these agreements were implemented differed greatly. The formal establishment of academic credits in the courses (new and old ones) of several universities was relatively successful but, for example, the subsequent exchange of students between different universities was not so mainly because of the different structure of the degrees, and also because the administrative procedures did not facilitate the exchange of students between universities (De la Garza, 1990). As far as the diversification in number and focus of professional degrees is concerned, broadly speaking this innovation was easier for the newly created universities than for the long established ones (CL13, CL29, PV31).

The General Executive Secretariat of ANUIES also carried out separate major actions in relation to the last three issues; these actions were specifically concerned with the academic improvement of universities and its planning: the design and implementation of the National Programme for the Training of University Teachers (PNFP), and the creation of the Centre for the National Planning of Higher Education (CPNES). The first is briefly summarised here, and the second later in this chapter.

The national assembly of ANUIES in 1971 approved the National Programme for the Training of University Teachers (PNFP), and it was launched with academic and technical support from the UNAM, which was essential to perform the task (De la Garza, 1990, King *et al*, 1971). The proposal for the PNFP was a result of the national diagnosis of higher education produced through the operation of the above-mentioned CPNES. The actions of the PNFP covered all public autonomous universities and its influence even reached several of the private institutions as well as a few of the technological institutes. This PNFP conducted several, short and long, courses, seminars, and workshops on teaching-related issues, and formulated a variety of teaching material according to the different areas of knowledge (De la Garza, 1990).

Based on the accumulated experience of the PNFP, participant academics from the National University developed a strong advisory role on these matters for the autonomous universities in the states; the influence of the UNAM was considerable in both the methodological approach and the administrative structure in which the academics participating in the PNFP were organised inside UNAM.

In general the size and prestige of the National University enabled UNAM to play a significant role in this process of innovation and reform. As well as providing

support for the National Programme for the Training of University Teachers, promoting a higher education reform on its own, and creating the Inter-university Programme for Academic Collaboration (PCAI) in 1976. This PCAI established academic agreements with all autonomous universities in the country within three years of its creation, and included the newly created universities which were provided with advice from UNAM, in some cases from their earliest stages (CL33).

The operation of PCAI was diverse in its academic support to universities in the states; it was specially concerned with planning although it covered a wider range of activities such as short and long secondments of academics, the training of teachers, postgraduate scholarships, and advice on various matters ranging from curriculum issues to the design of physical facilities.

5.5. Funding provision for universities.

Following these reforms and with substantial financial support, the decade of the seventies was a golden period for universities and higher education institutions in general. growth and development were encouraged, and fresh extra funds were provided. Quoting Wagner, this seems to have been a case when "money follows governmental rhetoric" (Wagner, 1989 p.157).

The financial support from the Federal Government was even more noticeable because in previous years funds for public autonomous universities were restricted. In the case of most universities in the states, their budgets had not been increased and had even been reduced in real terms (Méndez Nápoles, 1970). After this earlier period (1964-1970) of financial constraint, the provision of extra funds was a relief for universities. Although there is the view which suggests that this financial provision mainly recovered the former general tendency of university funding,

prior to the 1964-1970 period of scarcity (Latapí, 1982), from 1970 to 1976 university funds were increased substantially in real terms (See fig. 5).

Figure 5

FEDERAL PROVISION OF UNIVERSITY FUNDING
1970 - 1976. (Millions of Pesos)
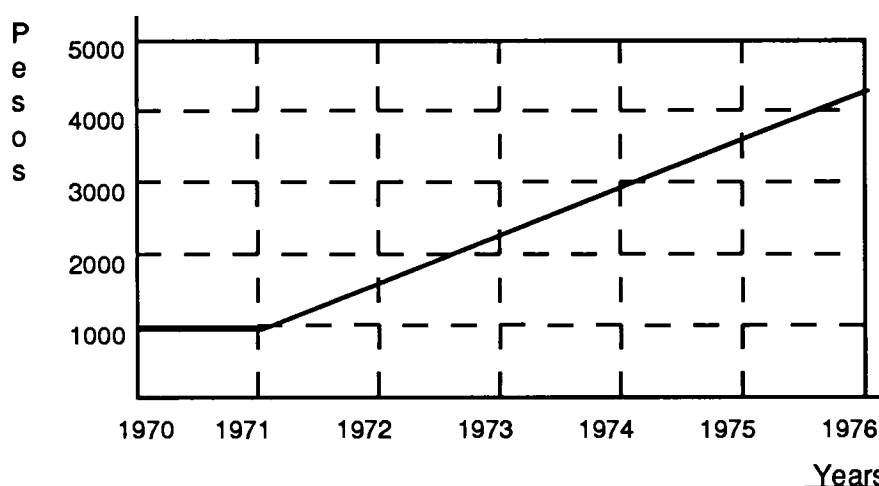
1970 Prices.
Source. Castrejon, 1976 pp. 167-176
        ANUIES, 1977. In Pescador, 1977 p. 59

These extra financial resources for universities were provided directly by the Federal Government, and managed through the General Directorate of Educational Coordination (DGCE) in the Ministry of Education (Latapí, 1982, Castrejón, 1976). The Federal Government, by increasing its percentage share of the total funding provided for the whole sector of public autonomous universities, also centralised its provision (See table 7). This pattern has not been significantly modified since. It is also important to note that the increased governmental funds for higher education were provided mainly through the Federal Government agencies despite the existence of the state agencies and funds already supplied to higher education institutions at

that level. Thus, in the words of a former Minister of Education, "the Federal Government is still funding [...] public education" (Solana, 1982 p. 10).

Table 7

FUNDING SOURCES OF AUTONOMOUS UNIVERSITIES
(Percentages of contribution)

FUNDING SOURCE	1966	1970	1976	1980
Federal Government to Institutions in Mexico City	70.7%	*72.5%	*82.4%	' 58.8%
Federal Government to Institutions in the States	13.4%	* 9.4%	* 2.7%	# 27.8%
State Governments to Institutions in the States	15.9%	+18.1%	+ 18.1%	#13.4%
Total	100 %	100 %	100 %	100 %

Percentages are only illustrative of a tendency because of the diversity
of Sources: ANUIES, 1966, in Benveniste, 1970.
* SEP, 1976, in Pescador, 1977.
+ ANUIES, 1976 in Latapi, 1980.
# ANUIES, 1982 in CONPES, 1982f.
' Banxico, 1989 in UNAM, 1990.

Most universities in the states were created jointly by the Federal and the state governments, although financial resources had to be negotiated through the latter, and not directly with the former. In fact, before 1970 there did not exist an office, either in the Ministry of Education or the Ministry of Finance, responsible for the provision of university funds. The funding procedures and negotiations were to be carried out in both Ministries, and even included a visit to the Secretariat of the Presidency (Rangel Guerra, 1979). Since the creation of the DGCE, both could be negotiated separately; the federal provision directly with the Ministry of Education,

and the state financial support with agencies of the state government. The latter became a smaller component of the university budget (See table 7).

There is more than a grain of truth in the view that often the provision of funds seems to be a key factor in orienting higher education practice (Lockwood and Prosser, 1980); it certainly seems to be the case in Mexico. However this guidance still seems to be carried out as a negotiation process peculiar to higher education (Becher and Kogan, 1980, Solana, 1982, Latapí, 1982. See also Levy, 1977a). In this case, strong historical precedents can be noted which can be traced back to the 1930s. When the National University was granted autonomy in 1933, it was also supported with secure funds for its normal operation after a long difficult struggle with the Federal Government (Valadés, 1981, Rangel Guerra, 1979)). During the 1970s the commitment of the Federal Government to innovation in higher education was shown by providing financial support to the various projects of university reform; to a great extent universities were left on their own for the process of reform. In the words of Latapí, a prominent Mexican educationist,

"the Federal Government did not use the public subsidy to universities as a planning instrument to impose specific policy directions [...thus...] although funding is certainly a constraint for university autonomy, it has been weaker than usually assumed" (Latapí, 1982 p. 193).

It is interesting to note that since early in the decade of the 1970s higher education policy has encouraged the diversification of funding sources. One of its emphasis was a scheme of students' fees which was introduced at institutional level, mainly through some of the newly created universities. In fact the scheme did not expand, and was not as successful as had been expected. A brief explanation of the funding issue will illustrate the conditions in Mexico.

There is no system of grants for students in higher education in Mexico, and universities do not provide inexpensive accommodation for them. Students and their families have to bear all expenses by themselves. On the other hand, most universities charge only nominal fees to their students, and in some cases no fees at all. An illustrative example of these low fees is the case of the National University whose fee for professional studies was $ 200 Mexican pesos per year in the 1960s, and increased to $ 250 in the early 1970s. At that time this amount was equivalent to $ 16.00 and $ 20.00 U.S. respectively whereas at present it is equivalent to just $ 0.06 (De la Garza, 1990).

The fees introduced during the early 1970s in two of the newly created universities were higher at that time: $ 8,000 Mexican pesos per year. This scheme has not been expanded within public autonomous universities, and as a funding source it does not represent a significant financial contribution to higher education funding. One of the universities which adopted the scheme, the Metropolitan Autonomous University, did not increase the fees and they became lower because of the process of inflation in the country during the late 1970s and 1980s. In the case of the Autonomous University of _Aguascalientes_ (UAA), also created in 1973, student fees were increased, although in a lower percentage than the rate of inflation, and have contributed to the budget of the UAA up to approximately 25 per cent of its annual figure in some years.

Notwithstanding that higher education policy has encouraged the diversification of sources of university funding, most public autonomous universities, even when asked to establish and increase their fees, reply that this would limit the number of students from low-income groups who could enter higher education. The view of most universities is that public funding should be guaranteed to them; "the efficient use of public resources is then a responsibility of higher education institutions" (Casillas, 1986a).

5.6. Coordination of higher education.

There were a number of changes in the pattern of higher education coordination during the period. The influential role of the National University during the preceding years to the creation of SiNaPPES, has already been highlighted earlier in this chapter; ANUIES played also a prominent role in the process of university coordination. However the expansion of higher education, and consequently the increased numbers, enlargement and development of universities brought about a new concern for their efficient administration and coordination. New bodies appeared in the coordination process, and planning was promoted through them.

The National University, in addition to its contribution to several qualitative aspects of university reform, also participated directly in the coordination of public universities. UNAM created the PCAI in 1976 and signed agreements of academic collaboration with all public autonomous universities. The planning concerns had a specific project in PCAI, including periodic meetings among planning-related academics from all public universities in the country. (CL34. CL21. CL33. CV19); the experiences of UNAM in institutional planning were widely promoted through them. Central to the promotion of planning was the experience of the planning body created in UNAM since the mid 1960s, and its systematic activities to support the academic reform of the National University (Llarena, 1980, Solana, 1970).

ANUIES, in its turn, designed and organised the national information system of higher education. Statistical information gathered through this system enabled ANUIES to forecast the growth and demand for higher education. In fact as early as 1969, the Centre for the National Planning of Higher Education (CPNES) was created in ANUIES and its first task was to set up the system of statistical information on universities

and to elaborate a preliminary diagnosis of higher education which was produced in 1970. This diagnosis included the proposal for the PNFP which was discussed earlier in the chapter. By identifying the main needs of universities, this diagnosis also provided basic data to design the model of university which inspired the creation of the new universities during the early 1970s. All these major planning actions of ANUIES were carried out under the agreements of its national assemblies from 1969 onwards, and reflected the coordination purposes of the universities' association.

5.6.1. ANUIES and the coordination of universities.

Academic development, and coordination and planning of universities constitute two of the main goals of ANUIES, as expressed in its Statutes:

i) To study the academic and administrative problems of the national system of higher education in order to better integrate planning with the total system and to suggest to member institutions and to educational authorities, the adoption of recommendations for the improvement of institutional performance.

ii) To promote the development of instruction, research, and cultural diffusion in its member institutions, in accordance with regional needs and within a concept of integrated national planning.

Major agreements of ANUIES' national assemblies concerned with the reform of the universities were mentioned earlier in this chapter. The preoccupations of ANUIES with the problem of coordination and the actions it took in planning also reflected the various agreements of its national assemblies up until the proposal for SiNaPPES; they can be summarised in the following chronology: (ANUIES, 1979. pp. 18-19, Llarena, 1990)

i) 1970: the Centre for National Planning of Higher Education produced: Preliminary diagnosis of higher education. This diagnosis primarily pointed out that the expansion of higher education provision needed trained university teachers to cope with it.

ii) 1970: ANUIES and UNAM published the proceedings of the National Seminar on University Planning, held in the National University. The seminar was attended by representatives of most universities in the states, and was mainly concerned with university issues such as academic reform and innovation, the funding requirements of this process, and its administration and planning.

iii) 1970: The CPNES 'Preliminary diagnosis of higher education' was included as the central item on the agenda of the ANUIES National Assembly.

iv) 1971: The ANUIES Assembly agreed that higher education had to be modernised. This would be essential for its future. Accordingly, several proposals were made for that target such as,

> a) developing a national system of academic credits for inter-institutional validation;
>
> b) the coordinated formulation of teaching material;
>
> c) the creation of a national examination mechanism;
>
> d) the accreditation of short-duration degrees, and technical qualifications;
>
> e) normative-legal modifications to the university code of practice to make these changes valid; and

f) the training of teachers. On the basis of what was proposed in the preliminary diagnosis of higher education, the PNFP began its operation this year.

v) 1972: ANUIES Assembly ratified the need for higher education reform, and the right of each university to carry it out. Consequently ANUIES formally proposed autonomy, as an essential feature of higher education, to be included in the Mexican Constitution. The proposal succeeded, and there is the view that there was even the presidential support for such an initiative (CV16).

vi) 1975: The main issues included in the agenda of the ANUIES' National Assembly were the following:

a) the forecast and analysis of student demand,

b) encouraging universities to elaborate diagnoses at institutional level,

c) the establishment of national programmes of development, and

d) the proposal of a model of growth for higher education expansion.

vii) 1977: ANUIES accepted the invitation of the Ministry of Education to contribute to a National Education Plan. The seventeenth National Assembly of ANUIES approved the document: Contribution of the National Association of Universities and Higher Education Institutes to the National Education Plan.

viii) 1978: the eighteenth National Assembly of ANUIES approved the proposal for SiNaPPES included in the document 'The Planning of Higher Education in Mexico'.

Two main issues may be highlighted from the list above. The first is that congruent with its character, the agreements from ANUIES' Assemblies were passed through to its institutions' members as recommendations which, in their turn were passed through to their governing bodies for a final decision. This procedure is in accordance with the ANUIES' 'full respect' for the institutional autonomy of its members (Rangel Guerra, 1978). As a result universities' involvement differed from institution to institution. Universities have developed institutional diversity with regard to ANUIES general agreements, while they have been in general involved in planning activities. This involvement includes both academic coordination and administrative support.

Examples of the general involvement of universities are planning activities themselves, such as the elaboration of institutional diagnoses and the national coordination of the training of teachers, operation of a statistical information mechanism, and the establishment of academic credits and standardised requirements for university degrees. Examples of institutional diversity are the development of shorter professional degrees and technical qualifications, the academic structure of universities organised in Departments or Faculties, the approval of internal norms and regulations, and the rejection of a national examination mechanism.

The second issue arising from the activities of ANUIES in the 1970s is the sense of a cumulative process of planning experiences which the account of ANUIES' agreements provides. This sense of progressive accumulation enabled ANUIES to contribute to the National Education Plan of the Ministry in 1977, and puts the creation of SiNaPPES in 1978 as the culmination of these planning efforts; this view is usually expressed in most of the written references (e.g. Arizmendi, 1990, ANUIES, 1978, CONPES, 1981d, 1982f, 1986, 1989), and also in several interviews (e.g. CV12, CV16, CL11, CL21).

The above-mentioned two issues: the cumulative process of planning and the interaction of different institutional views and concerns through the process, are matter of detailed analysis in Chapter 6 and 7.

5.6.2. SEP and the coordination of universities.

The coordination of autonomous universities was also a matter of concern of the government, and the creation of the DGCE in 1971 was related to this concern. As has been said this new office's main responsibility was the provision of additional funds to support the reform and university development; the university reform was a relevant issue for the government, thus the General Director of DGCE was in direct communication with the Minister and also the President (Latapí, 1980). In parallel to its funding concern, this office promoted widely educational research, and university planning.

Valades has claimed that "the ANUIES suggestions have been taken into account by the Federal Government as well as the state governments, and its national assemblies have been the most important forum for analysing the issues which concern the autonomous universities" (Valadés, 1981 p. 576). With the creation of the DGCE though, this office became a 'visible partner' to ANUIES in the role of policy advice and promoting funding criteria for universities (CL11, CL21).

The DGCE finished its operation in 1976 at the end of the governmental term (Castrejón, 1976). Subsequently in 1977 there was an attempt to coordinate all higher education institutions, public universities and technological institutes, through a single office in the Ministry of Education: the General Coordination of Higher Education and Scientific Research (CGESIC) (CL11). This office was created in the Ministry of Education to synthesize the experience achieved in both the DGCE

which was concerned with universities, and the General Directorate of Higher Education (DGES) (Rangel Guerra, 1979 pp.9-15). The latter was a former higher education office in the Ministry of Education, although only 'loosely related' (CL11, CV14) to the administration of technological institutions. The main concern of the new higher education coordinating body - CGESIC - was "to define ways in which higher education can be encouraged and directed, in order to improve its capacity for instruction and research and its internal efficiency, as well as to improve the efficiency of its participation in economic, social, technological and cultural development" (Rangel Guerra, 1979 p.15).

The attempt to establish this office for the single coordination of higher education institutions lasted less than a year, and in 1978 the Under Ministry of Higher Education and Scientific Research (SESIC) was created to cover the same functions, although specifically related to the autonomous sector of higher education: the universities. At the time of its creation the following were among the functions of SESIC: (Rangel Guerra, 1979 p. 68)

1. To promote communication and coordination between higher education institutions.

2. To channel federal funding.

3. To orientate the development of scientific research.

4. To study guidelines and to develop actions for the enhancement of the quality of teaching and staff.

5. To strengthen the professional and academic courses.

6. To encourage the setting up of scientific research and higher education units and centres.

It is worth noting that SESIC was created in parallel to the Under Ministry of Technological Education and Research - SEIT. In the case of SESIC, it was in fact the first Under Ministry specifically related to the coordination of universities, and their autonomous pattern of administration was respected to some extent. On the other hand the technological institutions remained centrally administered under the SEIT. This newly created Under Ministry for universities became the channel for funding. However the provision of funds itself remained in the power of the Ministry of Programming and Budgeting (SPP). The further partnership of SESIC with ANUIES in the national coordination of SiNaPPES united them to some extent in the process of negotiation of university funding with SPP (CV12, CV16, PL24).

A General Directorate of Higher Education (DGES) specifically related to planning and coordinating matters of autonomous universities was included in SESIC. In the same way a General Directorate of Institutes of Technology (DGIT) was created in SEIT. The National Council of Technical Education (COSNET), which was created in 1975 to provide advice on these matters to the Ministry, was also incorporated in SEIT. COSNET could be regarded as similar to ANUIES, but within the centralised administration of these institutes (Rangel Guerra, 1979).

In parallel with the above-mentioned coordination concerns, early in 1977 the Federal Government "announced its decision to formulate a National Education Plan", and ANUIES "was invited to contribute with the views and proposals of its members with regard to higher education" (ANUIES, 1979. p. 9).

ANUIES accepted the invitation of the Ministry, and its General Executive Secretary called together both the members of the Association, and the National Council of ANUIES. The agenda was to discuss the current issues and main trends of higher education. The purpose was the joint formulation of proposals for its planning. These

proposals were collected by the General Executive Secretariat of ANUIES, and coherently integrated in a document: ANUIES' contribution for the National Education Plan. The document was, in its turn, handed in to the National Assembly of ANUIES in May, 1977 for a final round of analysis and approval (ANUIES, 1979).

In an analogous perspective to what happened in the mid 1960s, this 1977 National Education Plan can also be seen as a general action of the Ministry within which universities, or their representative bodies, were called to make contributions to their own planning, and so they were invited to contribute. There is, however, the consideration that this time the Ministry called for the National Education Plan without including representatives from the universities, and invited them later on to join the initiative; thus there was possibly expressing a 'more interventionist attitude' of the government (CL28). In accordance to this consideration, the decision in ANUIES was for its National Council to present the document approved in the National Assembly directly to the President of Mexico (CL28). This was done at a special meeting called by the National Council of ANUIES on July 20, 1977 (ANUIES, 1979).

As their national association safeguarding the interests of the autonomous universities, ANUIES was concerned with maintaining its participation, and its participatory style, in the policy process. In other words the formulation of a National Education Plan was announced by the Ministry of Education, and ANUIES was able to maintain its participation in the process. This participation maintained the space of negotiation for the academic interests represented in the ANUIES; "this motivation may be glimpsed behind the ANUIES-President meeting" (CL28), and is further discussed in the following chapter.

The planning concerns of the period promoted further changes in the coordination of the university sector. The National system for Permanent Planning of Higher Education (SiNaPPES) was later created in 1978, and representatives of ANUIES and SESIC became partners in the national level of SiNaPPES: the National Coordination of Higher Education Planning, CONPES. Top officers from ANUIES (the General Secretary) and SESIC (the DGES' General Director) constituted the joint executive secretariat of the CONPES. Figure 6 provides a simplified graphic view of this general pattern of university coordination.

Figure 6

A VIEW OF THE COORDINATION OF UNIVERSITIES.
Including the National Coordination (CONPES) of SiNaPPES
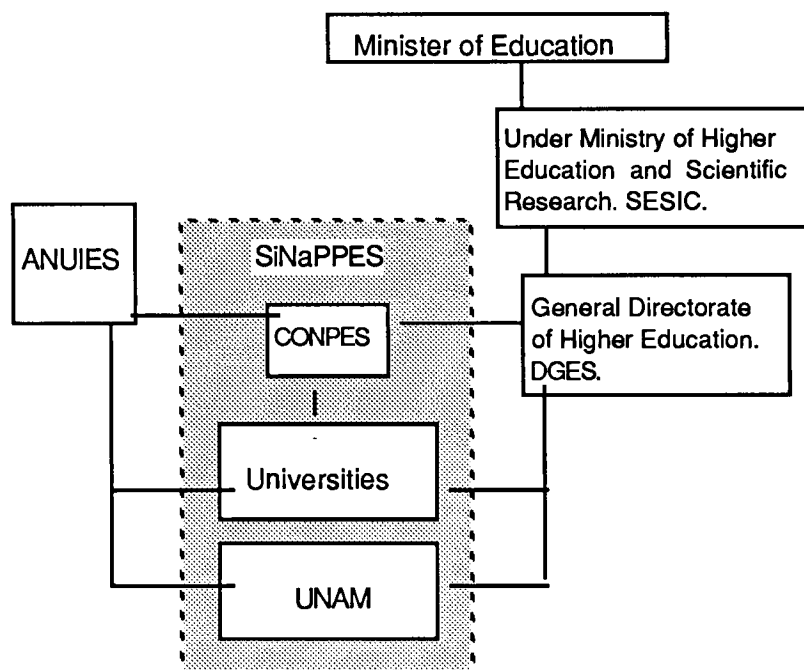
Formulation. Martínez, 1992

In this simplified diagram provided in Fig. 6, above, the National Autonomous University is highlighted because of its prominent role and influence in the processes of coordination of universities as has been reviewed through this chapter.

5.7. Influential policy-making bodies in universities.

It has been shown through the chapter that these changes introduced new participants into the process of higher education coordination. For example the advisory role of ANUIES to the government faced a strong partner in the DGCE because of the funding involvement of the latter. On the other side, ANUIES strengthened its position within the university sector because of the enlarged size of the sector itself, and because of its participation in the process of higher education reform. Its position was also reinforced later on within the whole higher education system, because of the prominent role of ANUIES in the operation of SiNaPPES.

The academic leadership exercised by the National University in higher education, was also prominent in coordination matters, mainly through the established PCAI. UNAM was also a strong supporter of the creation of ANUIES itself in the early 1950s, and was an essential participant in the major actions of ANUIES when expanding and developing higher education.

On the governmental side, the DGCE between 1971 and 1976 was the first step of a strengthened participation of the government in the coordination of higher education. Subsequent actions of the government can be observed following the establishment of that first office; first the short existence of the General Coordination of Higher Education and Scientific Research (CGESIC) in 1977, and finally the creation of the Under Secretariat of Higher Education and Scientific Research (SESIC). SESIC became the partner of ANUIES in the national coordination of SiNaPPES.

The autonomous pattern of the public universities can be seen in relation to their participation in higher education policy. During the period up until 1970 they were almost the only participants and the National University and ANUIES were the prominent actors. As was stated earlier, during that period a General Directorate of Higher Education (DGES) was in existence in the Ministry of Education, although it was an office 'loosely related' to the coordination of higher education institutions, but particularly the Technological Institutes (CV14).

From the early 1970s onwards the influence of new bodies in the policy process may be highlighted on the side of the Ministry of Education up until 1978 when SESIC was established. In the same year SiNaPPES was also created, and ANUIES and SESIC became partners in the national planning mechanism. As a result of these developments the prominent role of the National University in coordinating matters seemed to be diminished or at least its influence re-directed through ANUIES. These bodies influencing the policy process of autonomous universities can be seen in the simplified picture provided in Fig. 7.

Figure 7.

POLICY BODIES FOR AUTONOMOUS UNIVERSITIES.

SECTOR\YEAR	BEF. 1970	1971 - 1976	1977	1978 - 1986
MINISTRY OF EDUCATION	(DGES)	(DGES) DGCE	CGESIC	SESIC SiNaPPES
UNIVERSITY BODIES	UNAM ANUIES	UNAM ANUIES	UNAM ANUIES	ANUIES
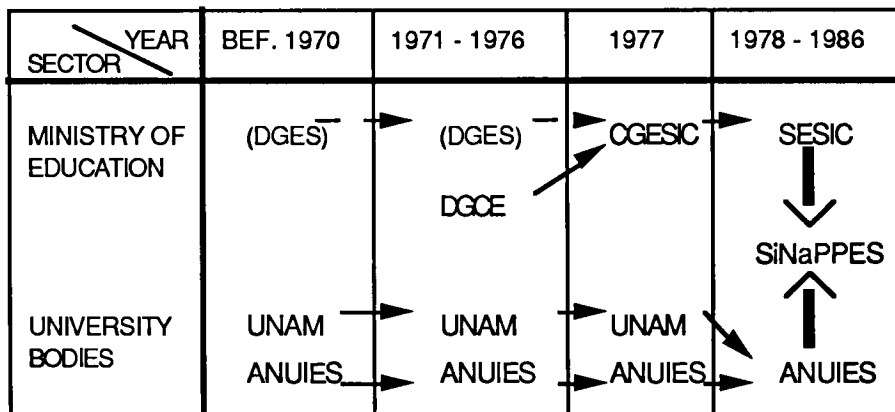
Sources. ANUIES, 1979, Rangel Guerra, 1979, CONPES, 1981d, 1986.
Formulation: Martínez 1992.

5.8. A summary.

From 1970 onwards, there was a period of expansion and development in higher education within which the autonomous universities, principally the UNAM, underwent extensive reforms. These were paralleled by wide ranging educational reform carried out by the Federal Government. The general policy of the period supported such processes with public funds which were provided by the government without imposing a specific direction to the process of university innovation.

As a result, the enrolment of students, which grew by approximately 500 per cent from 1970 to 1985, was largely accommodated by the universities. These institutions accounted for about 80 per cent of the total figure since the late 1970s. To cope with this enrolment, the number of universities was increased and their facilities enlarged.

The general aims of the higher education policy were widely shared by the leading participants in the university sector. ANUIES and the UNAM, in particular, supported the process of reforming higher education for its modernisation and planning. The presence of government in the coordination process was also strengthened during 1970-1978 and resulted in the creation of the DGCE from 1971 to 1976, the DGESIC in 1977 and SESIC in 1978.

Finally in 1978 SiNaPPES was created. The system incorporated the increased number of universities and their views and interests, and its national coordination was shared by representatives of ANUIES and SESIC. This planning system was conceived as the mechanism for the 'definition and exercise of higher education policy' (ANUIES, 1979, CONPES, 1986). How SiNaPPES dealt with the technical

aims of planning and the participatory goals of the universities is the theme of the next chapters.

Chapter 6. THE CREATION AND ESTABLISHMENT OF SiNaPPES.

Introduction.

This Chapter recounts the formal creation and establishment of SiNaPPES, and analyses how it was conceived as "a definition and exercise of educational policy" (ANUIES, 1979). Chapter 5 has provided an account of the expansion of public autonomous universities during the 1970s. The main higher education issues at the time were related to growth, development, and funding, and institutions were encouraged to plan as a key component of the policy of the period. Several planning actions carried out by individual universities, ANUIES, and the government led, in the end, to the establishment of SiNaPPES. A chronology is included in Appendix 1 at the end of this Chapter.

The analysis in this Chapter focuses on two consecutive stages:

i) 1970-1978 to describe and discuss the major planning activities of university sector bodies which can be related to the creation of SiNaPPES;

ii) 1978-1981, to analyse the formal creation of SiNaPPES, the establishment of its network and the starting of its operation: the formulation of the 1981 PNES.

The analysis of SiNaPPES through these stages provides a history of what may be called the 'formal history' of SiNaPPES. It is concerned with the technical characteristics of higher education planning that were analysed in Chapter 2.

6.1. The planning concern of the universities and the role of ANUIES.

The expansion and development of higher education after 1970, within which the number of universities was increased by creating new university models, led also to the enlargement and reform of most of them. From this arose the issue of the efficient coordination of the much larger and more numerous institutions (Fuentes, 1973, Arizmendi, 1990). From the perspective of ANUIES the institutional features and common aims of universities have been an important link between institutional autonomy and general coordination of the higher education system. ANUIES itself was formed, has been supported, and in the final analysis, mainly represents the interests of public autonomous universities.

This perspective has stressed the fact that between 1970 and 1978 ANUIES was explicitly concerned with the planning of higher education, and that universities had been the main participants in this process. Planning was related to the efficient academic coordination of a group of institutions for their operation as a system with common aims and understandings (Arizmendi, 1990, De la Garza, 1990, CONPES, 1981d, 1982f, 1986, Rangel Guerra, 1978, Castrejón, 1976. Also CL11, CL21, CV12, CV16, CV20).

The attention of this perspective is on the activities of ANUIES (e.g. ANUIES, 1979, CONPES, 1981d, 1986. Also CV12, CV16), and therefore does not account for the influential role of the National University (which may have been simply taken for granted) during the period of expansion and reform. Most authors do claim that the autonomous universities have been the pioneers of higher education planning rather than the government (e.g. De la Garza, 1990, CONPES, 1986). A prominent participant in the establishment of the planning mechanism points out that the universities themselves, individually and through their association

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"acted on several occasions towards the establishment of a basis for higher education planning." ... ..."some years later these actions became the basis of a systematic planning action" (Arizmendi, 1990. pp. 4-5).

Consequently, the contribution of ANUIES to the Government's National Education Plan in 1977, made evident the role of ANUIES, as a representative organisation of the public autonomous universities, with higher education planning. Early in 1977, the members of the National Council of ANUIES had a meeting with the Minister (of the new governmental team 1977-1982) to "discuss the basic problems and trends of higher education". After this encounter, the members of the Council also had a meeting with the President to emphasise the "day to day experience" of university representatives in ANUIES, and the convenience of "formally including its participation" in the preparation of the 1977 National Education Plan of SEP (ANUIES, 1977a pp. 1,4). In the meeting, ANUIES' Council produced an outline of the issues to be considered in its contribution to the PNE (ANUIES, 1977a pp. 2-3). On these bases ANUIES was invited to contribute to the 1977 PNE with respect to higher education (PL28). The major concerns of ANUIES at that time (ANUIES, 1977a, Villaseñor, 1988) can be grouped under the following five headings: (ANUIES, 1977b, 1979)

i) Strategic development:

   a) to consider the higher education prime concern with knowledge,

   b) to forecast demand for higher education in relation both to social demand and the needs of economic development in the country, and

   c) to encourage appropriate relations between university and industry.

ii) Institutional development:

    a) to develop selected universities as regional 'centres of excellence' in order to improve the research and teaching provision, and to disperse the enrolment of students from the institutions in Mexico City, and

    b) to create separate institutions of _preparatoria_ studies.

iii) Funding and budgeting:

    a) to establish criteria to assure the long term public funding of universities,

    b) to improve the budgeting process, and

    c) to develop new funding sources.

iv) Coordination and management:

    a) to improve the processes of planning and administration in universities, and

    b) to promote the appropriate participation of university staff in these processes.

v) Normative concerns:

    a) to formulate appropriate legislation in order to define and guarantee higher education concerns such as autonomy, public and private funding, accountability, and the provision of higher education services.

These concerns of the National Council of ANUIES reflected the diverse preoccupations of individual universities which had been expressed by their representatives through the national assemblies of ANUIES mostly during the first half of the 1970s. The issues that were stressed can be viewed as reflecting the achieved balance and compromise among the different institutional views of ANUIES'

membership. For example, whereas some universities like *Aguascalientes*, *Metropolitana*, and *Baja California*, established a qualifying examination entrance and proposed this for all universities as a policy for selective access (CL11); some others as *Puebla* and *Guerrero*, established a policy of open access and requested its general establishment (PL36). All of them, however, agreed on the need for further analysis of the issue in relation to both the dispersion of student enrolment outside Mexico City, and the impact of an entrance requirement for the access of students from low income families (ANUIES, 1977a, 1979).

A second example of different interests may be related to funding. The University of *Aguascalientes* supported the idea of the diversification of funding sources for autonomous universities establishing by itself a scheme of student fees, and the promotion of contracts for the provision of services between the university and the local industry (CL29, CL34). In their turn, the universities of *Sinaloa*, *Puebla* and *Guerrero* advocated totally free provision (PL36). In this case the different institutional views were reflected in a general proposal to assure public funding for universities to safeguard their autonomy, and to gradually promote other funding sources by taking into consideration different institutional views and circumstances (ANUIES, 1977a, 1977b, 1979).

ANUIES, as the association representing this diversity of institutional views, and its national assemblies as their meeting place, became the space, independent of the government, to negotiate the different views of universities, and to promote their convergence towards a general policy. Planning could then be the appropriate methodology to improve this convergence (Arizmendi, 1981, 1982b, 1990).

The contribution of ANUIES to the PNE in 1977 was approved by the seventeenth National Assembly of ANUIES in its general terms. Nevertheless, it was later

stressed by ANUIES that the document did not include either specific programmes or a mechanism for higher education planning (ANUIES, 1979 p. 10). By 1976-77, ANUIES was concerned with the modifications to be made in its organisation, and the reflection of these changes on its constitution and code of practice. Adjustments should be made to meet the needs of an increased number of universities and higher education institutions (ANUIES, 1979).

During the mid 1970s, the problems faced by higher education planning were catalogued by the General Secretary of ANUIES in the following summary: (Rangel Guerra, 1979 pp. 66-67)

The General Executive Secretary of ANUIES had referred to the absence of sufficient information and the lack of educational planning in the past. He mentioned that by the mid 1970s the problem had been partially overcome and this had allowed some sort of planning at institutional and national levels (Rangel Guerra, 1979, p. 57). However, notwithstanding the improvements achieved by ANUIES mainly in the annual collection of data and the promotion of information units in the institutions in order to deal with such a task, the absence of sufficient and reliable information was still a major obstacle for efficient planning in the mid 1970s. The lack of trained personnel in this area constituted an additional limitation (Rangel Guerra, 1979 pp. 55-56).

Rangel Guerra also highlighted the indicative character that planning in universities had so far acquired as a result of their strong institutional autonomy. In general the adoption of resolutions by the national assemblies of ANUIES was not compulsory and its members were obliged to implement them only if they met with the approval of their respective governing bodies. Planning had no effect when such an approval was not reached and therefore the resolutions of the assemblies of ANUIES were not

executed. In his view an illustrative example was the growth in students which left individual universities to their own devices, and therefore the influence of planning originating in national bodies was minimal (Rangel Guerra, 1979 p. 63).

Rangel Guerra claimed that the actions of ANUIES needed the funding support from the government; if planning was to be effective it had to be undertaken by those with responsibility for financial decisions. This would also parallel higher education planning with the general policy of the country and its current socio-economic trends, in order to consider a) the type of educational supply already offered, b) the socio-economic conditions, c) the professional job market, or d) the demand of either the services or the productive sectors (Rangel Guerra, 1979 p. 63-64).

In particular the process by which public funds were provided made autonomous universities face additional difficulties, and therefore it was a powerful constraint to their planning exercises. The General Secretary claimed that the funding procedure was far from being a process of communication and therefore it seriously constrained the ability of universities to carry out effective planning "despite huge increases in public expenditure in the sector" (Rangel Guerra, 1979 p. 72). The main drawbacks of the procedure were that funds were provided late in the current year and according to previous figures. The budgeting units in the institutions, namely departments, faculties or centres, estimated their budgets in accordance with social demand, and if their foreseen needs were not met by the governmental funding, they had to enter in a process of further negotiation after the funds had already been provided after considerable delay. That was aggravated by the process of inflation in the mid 1970s (Rangel Guerra, 1979 pp. 72-73).

Finally, the General Secretary indicated that the establishment of a number of new courses and degrees were the result of social demand, rather than planning by

considering more precisely the needs of the professional job market, and the demand

of the services and productive sectors (Rangel Guerra, 1979 p. 66). A sympathetic

response of the government to these planning preoccupations was to follow the

pronouncement of the General Secretary.

6.2. Developing an ANUIES-SEP partnership.

Early in 1978 a new Minister of Education was appointed, and he placed further

emphasis on higher education planning. Consequently, the National Council of ANUIES

met the President and the Minister in February (ANUIES, 1979). In accordance with

the records of ANUIES an outcome of these meetings was for its National Council to be

"aware of the government's concern for adequate planning in higher education

in relation to other sectors of Mexican society, and in accordance with

national development needs" ANUIES, 1979. p. 10).

These considerations encouraged the National Council of ANUIES to include higher

education planning as the central issue on the agenda for the forthcoming Eighteenth

National Assembly of ANUIES in 1978 (ANUIES, 1979 p. 10). The National Council

ratified the validity of ANUIES' contribution to the government's National Education

Plan being discussed in the agenda of the forthcoming national assembly. However

this time the agenda also included the issue of which planning model should be

designed (ANUIES, 1979).

The National Council of ANUIES agreed that the agenda of the forthcoming national

assembly of ANUIES, should be officially communicated to the Ministry of Education

(SEP) in another meeting. The meeting, held in May 1978, was attended by the

members of the National Council of ANUIES, the Rectors of its affiliated universities

and higher education institutions, as well as the Minister, and all the Under Ministers and top officials from the Ministry (ANUIES, 1979).

In this meeting government officials expressed their interest in ANUIES and in the rectors' concerns, and were sympathetic about the reorganisation of ANUIES to face the increased number of institutions, the changes in its constitution and its concerns about higher education planning. The Minister was, however, much more specific with regard to the third concern: the necessity to plan higher education. He emphasised his understanding of educational planning as a dynamic process, and pointed out that:

1. Higher education planning is a shared responsibility, because "the planning of education cannot, and should not, be carried out by the government without the participation of institutions of higher education and scientific research" (ANUIES, 1979. p. 10).

2. The convenience and importance of designing and establishing "permanent and dynamic mechanisms which would allow the institutions, autonomous of the State, to rationalise both the use of their resources, and the performance of their duties for better results" (ANUIES, 1979. p. 11).

He accordingly proposed "the creation of a special working team including representatives of ANUIES and SEP" (ANUIES, 1979. p. 11).

Some academics believed that this proposed partnership between the government and ANUIES was a governmental interference in university concerns. According to this view the governmental target was to regulate universities' performance and to make them functional to the socio-political establishment (e.g. Villaseñor, 1988). This

purpose was against the universities' identity, and their responsibilities in the area of critical exercise of thought (PL30, PL32). According to an alternative perspective, however, the partnership was established to legitimate the presence of the government in higher education coordination, but the interests and views of universities could be maintained through it (CL21). An example of this second view is the claim that the Minister's primary purpose was only to establish a single body for national coordination (CV16), other than the UNAM (CL21). National coordination was needed to cope with higher education diversification because of its expansion during the 1970s (CL21, CV16). In fact most written documents and ANUIES' reports highlight the advantage of the established partnership between ANUIES and the Federal Government for the planning of higher education; this partnership displayed convergence of their views and interests.

As a result of the agenda discussed in the ANUIES-SEP meeting referred to above, a working party was established jointly by ANUIES and SEP to prepare a detailed proposal for the planning of higher education. The ANUIES' document highlights how this ANUIES-SEP group devised the proposals"within an atmosphere of a clear attitude of collaboration and complete freedom to discuss all the necessary issues for higher education planning" ANUIES, 1979. p. 11).

Under these circumstances the team was allowed to produce a satisfactory proposal "to guide the analysis and dialogue" about the main concerns of the time with respect to higher education in Mexico (ANUIES, 1979. p. 11).

The proposals emerging from the working team were presented to a joint meeting of ANUIES and SEP representatives in July 1978 (Villaseñor, 1988 p. 12), and discussed again in order to integrate the recommendations. At the meeting ANUIES representatives raised the need for institutional participation (ANUIES, 1979 pp.

11-12), in order to include the institutional views about the proposal under discussion, and a process of consultation similar to the one carried out by ANUIES in 1977 was agreed. A participatory procedure with regional meetings and institutional consultation was agreed. Subsequently regional conferences attended by representatives of autonomous universities were organised to debate the planning proposals which had been prepared (ANUIES, 1979 p. 12).

Some difficulties emerged within the process because the participatory style of ANUIES representatives was different from the directive one of the Ministry. The latter tried to impose what had already been agreed at national level, while the former tried to raise more suggestions and to establish compromises about the matter (e.g. CL11, PV15). Some participants noted that it was necessary to call on the Minister to resolve the dispute (PV15), and that was successful because of his negotiating ability (CL11).

It can be argued that the autonomous universities and the government concurred with the emphasis on planning and partnership but for different reasons. The universities, through their association, considered planning as a way of assuring control of their own development (CL13); whereas the government was interested in planning as a way of establishing unified criteria and increasing control of the development of higher education (De la Garza, 1990). In relation to the process initiated by the ANUIES-SEP working team, that is to say that universities were accustomed to divergence between themselves while establishing general criteria (as was noted different universities requested different policies for access and funding). Whereas the representatives of the Ministry operated in a narrower range of divergence; their concern was to establish 'technical procedures formulated by them' to produce, for example, single policies on access and funding (PV15, PL24).

Further negotiations overcame the difficulties and, finally, the procedure was 'successfully' coordinated jointly by ANUIES and SESIC (CL11, CL21).

The report of the process included all those proposals upon which there was"significant consensus insofar as to be included as a general view of the institutions" (ANUIES, 1979. p. 12). The proposals collected through this procedure were compiled and synthesized by the General Executive Secretariat of ANUIES in order that the National Council of ANUIES could integrate them. "The resulting document - the proposal of SiNaPPES - was presented to ANUIES XVIII National Assembly for its final discussion and approval" (ANUIES, 1979. p. 12).

A perspective is shaping up according to this formal history of SiNaPPES, in which the universities, through a participatory process, reached consensus on several planning proposals for higher education. Although the partnership initiative formally came from the Federal Government (ANUIES, 1979), the earlier planning experiences and participatory style of the universities ensured the legitimacy of the process (Arizmendi, 1990). As was said there had been a widespread view that the intention of the Minister was exclusively to create a single coordinating body for higher education issues (CL21, CV16), whereas the universities were concerned with safeguarding their autonomy and institutional diversity. It was the reconciliation of these opposing interests and views that enabled SiNaPPES to be proposed (CV16, CV12).

In 1978, the Under Ministry of Higher Education and Scientific Research (SESIC) was created in the SEP. SESIC become a partner of ANUIES in the national coordination of SiNaPPES. To put it in other words, universities succeeded in maintaining their autonomy and participatory features within the emerging SESIC-

ANUIES partnership (CL11, PV27), whereas the presence of ANUIES permitted the "legitimation of the governmental presence in this partnership" (CL21).

A subsequent consideration may be raised here: by focusing on the partnership between the government and ANUIES as the conciliation of different interests in higher education, the institutional diversity of views of universities and their academic differences is implicitly located behind an academic consensual perspective *vis a vis* the government.

6.3. Partnership and participation in higher education planning.

The document presented to the eighteenth National Assembly of ANUIES in 1978, The Planning of Higher Education in Mexico, including the proposal to establish SiNaPPES, summarised the process of its formulation by highlighting four characteristics (ANUIES, 1979. pp. 12-13).

a) The initial proposal of the higher education planning system was devised by a "joint ANUIES-SEP team". in accordance with the agreement of the National Council of ANUIES, and "'parallel with a similar agreement of the Federal Government" (ANUIES, 1979. p. 12)

b) It was the first time that a "participatory mechanism" for the planning of higher education had been proposed in Mexico (ANUIES, 1979. p. 12).

c) The basic principles of university autonomy "were safeguarded" in accordance with the interests of autonomous universities and the objectives of ANUIES (ANUIES, 1979. p. 13).

d) The document emerged from a "wide, original and complete discussion among all institutions which are members of ANUIES" (ANUIES, 1979. p. 13).

These characteristics provided evidence about the significance of higher education, and how it would operate in relation to society and the government within the process of social change in Mexico. The document highlights three major considerations: (ANUIES, 1979. pp. 13-14)

First, the aim of using a participatory process of higher education institutions was already stated by ANUIES in its national assemblies from 1971 to 1975. The contribution of higher education institutions to social change and national development is important.

Second, higher education institutions accepted "their responsibility within the process of social change, but they also noted that such a process called on all sectors of society, including the state authority itself, to reach national aims". Therefore there was a need for "coordination between educational institutions and the Federal Government agencies" (ANUIES, 1979. p. 13).

Third, if there was a plan for national development with legitimate objectives such as freedom through knowledge and economic and technological independence, higher education should be its central structure, because of its contribution to

a) the training of human resources,

b) the formation of individuals to perform leadership roles,

c) the dissemination of scientific knowledge, cultural values, and technical and social assistance.

d) research in all areas of knowledge.

e) education by providing teachers and teachers for these teachers.

f) the preservation, development and expansion of national culture and universal values.

To do that, higher education needed freedom, stability and support, in order to preserve its process of critical thinking and its contribution to social dialogue including the government (ANUIES, 1979 p. 14).

Public autonomous universities, modelled on liberal values, have traditionally been both self-regulating institutions of higher education, and places for reasoned criticism of public policies and the centralised administrative pattern of the government. The permanency of autonomy would guarantee such a status. For some authors, since the 1920s Mexican universities have been a "sanctuary for governmental opposition whether of enlighted right or radical left" (De la Garza, 1990 pp. 49-50). As far as self-regulation is concerned, autonomy has been considered essential to support the different institutional views of universities in relation to academic planning issues such as teaching and research priorities, structure of degrees, access, and administration of funds (e.g. Rangel Guerra, 1979).

The different views of universities were also reflected in the proposal of SiNaPPES. The participation of the UNAM representatives was again influential; there is even one view claiming that SiNaPPES was in fact devised in the planning unit of the National University (CL33). An alternative view is that the proposal was really devised in ANUIES and supported by SESIC representatives (CV19). It is, however, arguable that participation of more universities was involved in the process, although the emphasis of ANUIES' reports is on the achieved consensus between them (CL11, CL21). The representatives of the University of _Aguascalientes_, for example,

requested more technical planning to increase administrative efficiency (Porter, 1988), and emphasised restricted access of students, diversification of funding, and improved effectiveness in the teaching-learning process (CL11). On a different perspective, the University of _Sinaloa_ made claims for a policy of open access to students, enough public funding and control of its own expenditure; its representatives supported, therefore, a process flexible enough to discuss the institutional views of universities (PL36).

The experience of the UNAM as an influential national institution stressed the need of national coordination, whereas the pioneer experience of its institutional planning unit also was used to emphasise the importance of institutional planning (CL33). In its turn, ANUIES requested regional coordination on planning matters because of the regional feature of its structure (CV16. Also ANUIES, 1979). On its side, the Ministry of Education was undergoing a process of decentralization of its decision-making, and this preoccupation was reflected in the state levels of coordination proposed to be included in SiNaPPES (CV16, CV19). There was then a measure of agreement between the individual universities on the one side, and ANUIES and SESIC on the other, that all these levels of planning should be included in SiNaPPES framework: institutional, national, regional and state.

As has been said the presence of ANUIES in the partnership legitimated SESIC. However, on the other hand, SiNaPPES' creation was viewed as the climax of a progressive process towards full-scale planning of higher education (ANUIES, 1979, Arizmendi, 1990). The activities carried out by the autonomous universities had been coordinated in such a way that they allowed higher education to function efficiently as a set of separate but coordinated institutions. In this perspective the role of ANUIES was strengthened as a partner, in order to safeguard the interests of autonomous universities in the process, and the role of SESIC in the partnership was

to improve the link between the planned actions by universities and the government's funding for them.

The achievement of ANUIES in bringing about this partnership in planning needs to be stressed in the formal perspective. On the one hand there was the participation of all public autonomous universities which was expected to enable them to reach consensus on planning matters. On the other hand there was their concern to safeguard university autonomy from the government's intervention which brought back memories of the struggle between the National University and the Federal Government during 1917-1933 through which the autonomy of the former was granted. Governmental intervention in universities' concerns has been seen as an intrusion in the collegiality of academics, which is considered as an important characteristic of universities (Villaseñor, 1988).

The formal history of the establishment of SiNaPPES related here, highlights the convergence of interests of universities as academic institutions, with the political interests of the government as an external domain (e.g. PL30). The efficient concerns of an incremental process of planning in universities became a valid expectation of this formal view; in other words technical-efficient planning could be expected where consensus of academic institutions could be reached, and their interests reconciled with those of the government (e.g. PL18).

According to this view of universities as a consensual domain, the purpose of safeguarding university autonomy, while designing the planning mechanism, was fully achieved (ANUIES, 1979). mostly because of the active participation of universities in the process, and because of a partnership which would guarantee these characteristics. (CV16, CV12, CL11). In this way the planning actions of the

universities "became the propitious framework to naturally develop the higher education planning model in 1978" (Arizmendi, 1990. p. 5).

6.4. The proposal to establish SiNaPPES: a policy-planning mechanism.

Following the participatory process of consultation to formulate consensual proposals for the planning of higher education within the joint coordination of ANUIES and SEP, a final document: "The planning of higher education in Mexico", was presented to the eighteenth National Assembly of ANUIES for its consideration and approval (ANUIES, 1979). The proposal highlights the coincidence of the planning concerns of ANUIES with those of the Ministry of Education that allowed the creation of SiNaPPES (ANUIES, 1979).

The document points out that from this perspective of policy-planning "To create a National System for Permanent Planning of Higher Education in Mexico means to define and to implement an educational policy" (ANUIES, 1979. p.16). This conception of higher education policy formulation was supported by three main premises: (ANUIES, 1979 pp. 17-18)

i) Higher education is valuable in itself because of its concern with knowledge, scientific and technological development, and culture, and because of its contribution to the formation of human resources.

ii) The existence of numerous institutions of higher education gives rise to the need for their coordination, according to recognised principles, strategies and policies, in order to define means to achieve higher education ends.

iii) The contribution of higher education to economic and social development needs to improve its linkage with Mexican society in general.

The formal goal of the proposal was the establishment of SiNaPPES to deal with the formulation of the National Plan of Higher Education (PNES). The PNES would express higher education aims and policy, and it would serve as a guideline to improve higher education itself, and to establish a link between higher education and the needs of Mexican society (ANUIES, 1979 p. 17). The PNES was defined as"the set of programmed actions to regulate the development of institutions of higher education, and scientific and humanistic research, in the short and long term" (ANUIES, 1979. p. 67). It was considered, however, that: no perfect foresight exists within a planning process; there is a diversity of higher education institutions to be coordinated; and the linkage between higher education and society also depends on the societal processes themselves (ANUIES, 1979. p. 67). Therefore, the Plan would be periodically updated through SiNaPPES, jointly coordinated by the ANUIES-SEP partnership.

According to the earlier discussion, the exercise of educational policy was seen as the coordinated expression of higher education interests and views, further coordinated with, and funded by, the government (CL11, CV16). Its general strategy was, therefore, based on four basic points: "coordination, collaboration, autonomy, and participation" (Arizmendi, R. 1990. p. 7).

The general strategy of policy-planning was reflected in the proposed planning mechanism. It included two basic levels of articulation for the system's operation: the institutional and the national. Planning at regional and state levels was also agreed. Higher education institutions were to participate in the process while preserving their individual autonomy. Their participation within the process, and

inter-institutional collaboration would be nationally coordinated (ANUIES, 1979 pp. 60-61). Since there was consensual agreement among autonomous universities through ANUIES, and conciliation of views and interests between ANUIES and the government in their turn, the planning proposal was launched.

6.5. The main features of the SiNaPPES' mechanism.

A detailed picture of The National System for Permanent Planning of Higher Education is useful here to clarify the partnership and participation in its conception. It is also useful as a graphic reference to follow the analysis of its processes. SiNaPPES is a national mechanism with coordinating planning points at national, regional, and state level, and with planning bodies at institutional level. These coordinating points consisted of planning committees of coordination, as follows: (ANUIES, p. 59)

- National Coordinating Committee of Higher Education Planning (CONPES).
- Regional Coordinating Committee of Higher Education Planning (CORPES).
- State Coordinating Committee of Higher Education Planning (COEPES).
- Institutional Planning Units (UIP).

It was designed with two main dynamic features for its operation:

i) Institutional formulation and implementation of policy plans.

ii) National coordination of the whole process.

Whereas participation at all levels has been thought necessary for its operation, the national and institutional levels provide the mechanism with its essential points of "articulation and coherence" between the basic constituent level: the universities,

and the whole direction of the system shared by ANUIES and SESIC (ANUIES, 1979 p. 62). Although this partnership between the universities and the government was also supposed to be practised at state and regional level since representatives of the universities and the state governments were supposed to participate in these committees; further consolidation of these bodies was left for a 'later stage' (López, 1982, CONPES, 1982f).

The National Coordination of Higher Education Planning (*Coordinación Nacional para la Planeación de la Educación Superior*, CONPES) is a committee chaired by the Minister of Education with a membership consisting of the rectors of the National Council of ANUIES, four under ministers and two general directors of the Ministry of Education; the under ministers of Higher Education and Scientific Research (SESIC), Technological Research and Education (SEIT), Culture (SCR), and Planning (SP) and the general directors of Higher Education, and Technological Institutes. The CONPES has an executive body, the Joint Secretariat in which the heads are the Executive General Secretary of ANUIES and the Director General of Higher Education of SESIC (CONPES, 1979a. p.3).

At the regional level, the committees were to be attended by the rectors of the universities in the region, as well as representatives from the state governments and the state offices of the SEP in the region. At the state level, the attendance would include the rector of the local university, and representatives from the state government and the state office of education (CONPES, 1979a)

In all cases, rectors of the universities were to be the head of the coordinating committees at regional and state levels. The participatory structure of ANUIES, and the presence of autonomous universities was thus assured in the operation of the

mechanism. The prominent presence of the universities was the "guarantee for preserving university autonomy" (CV16, CL11, CL21).

A simplified view of the coordinating committees and main features of partnership and participation of SiNaPPES can be seen in figure 8.

Figure 8

THE NETWORK OF SiNaPPES.
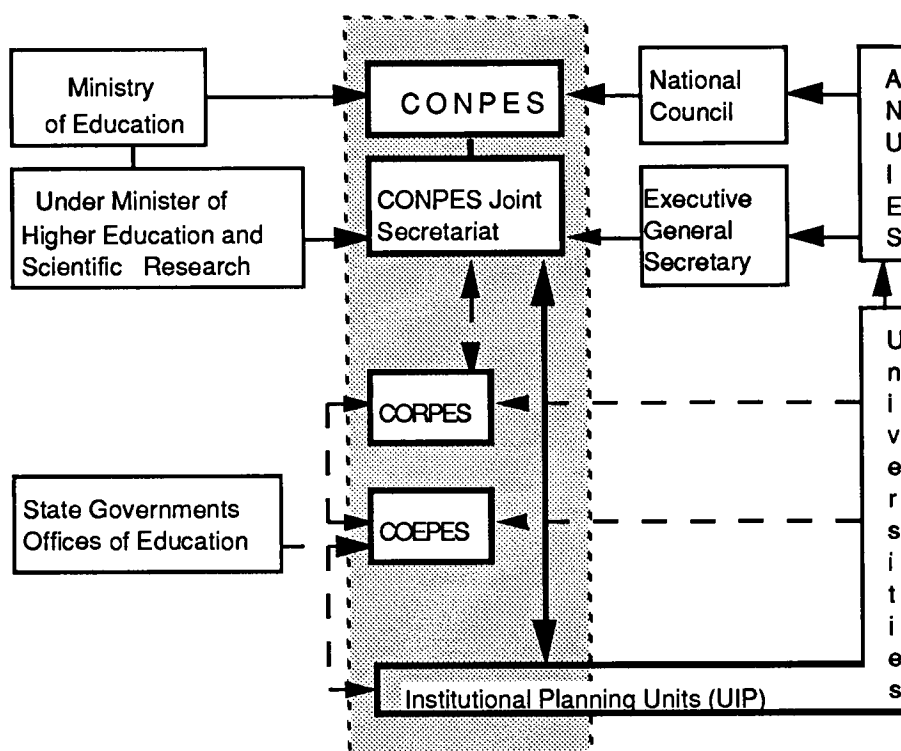
Formulation. Martínez, 1992.

In the centre of the figure above are the committees for the coordination of SiNaPPES which functions as a planning mechanism, among which the main interaction is

between the national level and the institutional one; a thick vertical arrow shows this relationship (CONPES, 1981d, 1986).

SiNaPPES is supposed to have a parallel coordinated relationship at state and regional levels which is shown with broken arrows. The offices of education of the states participate within this coordination as partners to the universities at the state level. Nevertheless as has been mentioned, committees at these regional and state levels of coordination were left for a further consolidation, and attention was concentrated on the national and institutional levels of SiNaPPES' structure (CONPES, 1981d, 1986).

The National Plan of Higher Education (PNES) is the general higher education policy guideline produced through the functioning of SiNaPPES. The PNES was supposed to be related at each of the levels of coordination of SiNaPPES. The role and interaction of the different coordinating planning levels within SiNaPPES has been described as:

"The process of higher education planning as defined by the SiNaPPES is iterative. That is to say that the national guidelines are permanently fed by both, the institutional contributions and the work of the state and regional commissions. At the same time, the national guidelines provide a framework for the development of higher education in the region, the state and the institutional level, in such a way that the very institutions, the COEPES and the CORPES, considering their nature, context and problems, propose alternative, complementary and supporting actions to those formulated at national level" (CONPES, 1986 p. 39).

The functioning of the SiNaPPES' mechanism required from the Institutional Planning Units (UIP) to produce the Institutional Plan of Higher Education (PIDE).

It is for the UIP to interact with the necessary bodies at institutional level to complete this duty (ANUIES, 1979 p. 60).

As far as the State Coordinating Committees of Higher Education Planning (COEPES) are concerned, their task in relation to the functioning of SiNaPPES was to produce State Indicative Plans of Higher Education (PEIDES) which would reflect the common issues of the institutional plans, and in this way to serve as a basis for coordinated policy and planning at state level. Thus the PEIDES were sought as a comprehensive policy-planning perspective at state level, rather than a collection of PIDES (CONPES, 1981a). An analogous task was sought for the Regional Coordinating Groups (CORPES) in the eight regions of ANUIES. They would produce Regional Indicative Plans (PRIDES) in a comprehensive regional perspective rather than a collection of state and institutional plans (ANUIES, 1979 pp. 60-61).

Finally, at federal level the CONPES was responsible for the formulation of the National Plan (PNES), in order to provide a coherent plan for the whole sector (ANUIES, 1979 pp. 61,67). As has been said the strategic link of the mechanism was between the institutional and the national level and so were their respective plans; that is to say that in this way the institutional autonomy of universities was fully accounted for through the devised policy-planning process for SiNaPPES.

Then, higher education plans were to be related to their particular scope, that is to say: national plan: PNES, regional plans: PRIDES, state plans: PEIDES, and institutional plans: PIDES. In a sense the PNES is the general policy guideline and also has particular formulations at the other three levels of SiNaPPES' structure (CONPES, 1986). The higher education plans and the four levels of coordination in SiNaPPES are schematized in figure 9, on the next page.

Figure 9.

THE NETWORK OF SiNaPPES AND THE PNES.

COORDINATION LEVEL   OUTCOMING PLAN

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┌─────────────────────────────┐      ┌─────────────────────────┐
│ CONPES: National Coordination│ ───▶ │ National Plan of Higher │
│ of Higher Education Planning │      │ Education PNES.         │
└─────────────────────────────┘      └─────────────────────────┘

┌─────────────────────────────┐      ┌─────────────────────────┐
│ CORPES: Regional Coordination│ ───▶ │ Regional Plan of Higher │
│ of Higher Education Planning │      │ Education PRIDES.       │
└─────────────────────────────┘      └─────────────────────────┘

┌─────────────────────────────┐      ┌─────────────────────────┐
│ COEPES: State Coordination  │ ───▶ │ State Plan of Higher    │
│ of Higher Education Planning │      │ Education PEIDES.       │
└─────────────────────────────┘      └─────────────────────────┘

┌─────────────────────────────┐      ┌─────────────────────────┐
│ UIP: Institutional Planning Unit│ ─▶│ Institutional Plan of   │
│                             │      │ Higher Education PIDES  │
└─────────────────────────────┘      └─────────────────────────┘
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Formulation. Martínez, 1992.

6.6. An interim summary.

Higher education planning was a continuing concern of ANUIES from its creation in 1950 - enshrined in its statutes in 1960 - in order to promote and coordinate the development of public autonomous universities. During the 1970s the planning activities of the universities and ANUIES on the one side; and the interest of the Federal Government in the other, brought about the proposal to create SiNaPPES. It was formally approved by the National Assembly of ANUIES in November 1978.

The proposal for the creation of SiNaPPES was formulated by a joint working party constituted by representatives of the Ministry of Education and ANUIES. This characteristic of the team made explicit a partnership between the public

autonomous universities and the Federal Government, towards higher education coordination. Since the higher education concerns were shared, and there was conciliation of interests between the autonomous universities and the government, SiNaPPES was launched.

The partnership in higher education policy-planning between the government and universities was considered to respect and guarantee the inter-institutional participation of universities in the process. It also reinforced the view that the participation of universities would safeguard their autonomy in the partnership with the government. The collegial feature of universities concerning academic matters, became the basis on which to expect efficiency from planning.

The definition and exercise of higher education policy was then assigned with some main features:

a) a participatory process of higher education institutions to define the policy for higher education,

b) the coordination between higher education institutions and the government, and

c) a concern for efficiency in the subsequently programmed actions.

Participation and consensus on the one hand, and partnership and conciliation of interests with the purpose of efficiency on the other, can be seen as the technical emphasis of the formal perspective of SiNaPPES' creation. Autonomous universities had been influential participants within this progressive process of higher education planning. The alternative interpretation of SiNaPPES explores in more detail this involvement of universities with regard to the participation of their academics in the policy-planning process.

6.7. The establishment of SiNaPPES.

SiNaPPES was devised as a mechanism to carry out higher education planning. This was described as a set of general, systematic, and coordinated actions, which should permit the coherent and balanced development of higher education. The ANUIES' report stated that the planning process was "one of the conditions which would make it possible to guide and regulate the appropriate improvement of higher education institutions, in order to achieve their development as a system" (ANUIES, 1979 p. 55). The main goals of such a process were both to achieve a balanced development of the basic functions of the universities (research, teaching and promotion of the culture), and to respect the plurality and variety of the autonomous universities without undermining the basic functions of planning.

In accordance with this perspective, the process of higher education planning that SiNaPPES would undertake was characterised as follows: (ANUIES, 1979 pp. 55-56)

i) Indicative; to establish general guidelines although permitting its adaptation to different institutions.

ii) Participatory; to guarantee the involvement of universities,

iii) Comprehensive (*integral*); to include all higher education functions and institutions.

iv) Iterative; able to adapt to changing circumstances.

v) Prospective; to promote change towards a desired future.

vi) Optional; to provide different alternatives of action in order to cope with different situations.

vii) Operational; to be able to be implemented.

As far as the functioning of SiNaPPES is concerned it is worth noting that:

i) notwithstanding the importance which was laid on the partnership between ANUIES and the government to carry out the planning process, the features of the process itself emphasised the participation of universities based on their institutional autonomy. The first three of these seven characteristics assigned to planning are concerned with ensuring the participation of universities.

ii) In relation to the remaining four characteristics, the general purpose of the planning process was both to formulate and to implement the higher education plan (1 & 7), in accordance with a desired future (5). The higher education plan should provide alternatives of action (6), and should be able to progressively adapt to new circumstances (4).

From the list above it is important to note that the last four characteristics reflect a notion of technical planning, whereas the participatory features assigned to planning (the first three of the list) reflect the interactive conditions during the process of university expansion and reform, prior to the creation of SiNaPPES. In the preceding chapter was shown how at that time government funding and actions did not give a specific direction to the process. In fact the universities themselves were the more prominent actors in the reform (Latapí, 1982). Summarising, this is to say that technical planning was to be promoted in autonomous universities, on a participatory basis through SiNaPPES, which was in essence a mechanism for national coordination through a shared partnership between ANUIES and SESIC.

In this perspective, the ANUIES-SEP partnership became an answer both to the ANUIES' concerns for the improvement of university planning (because of the

increased number and variety on these institutions), and to the preoccupations and functions of the newly created Under Ministry for the coordination of autonomous universities. The partnership of both in the CONPES should catalyse the planning process through the functioning of SiNaPPES, without undermining either the autonomy of the universities or the involvement of the government. It is convenient to remember that SiNaPPES had not been visualized as an entirely new body which would take over the role and functions of ANUIES and SESIC in the process of university coordination. It was a mechanism whose purpose was to make both of them converge in the management and direction of the planning process.

The participatory characteristic of planning is also reflected in the four coordinating levels of SiNaPPES: national, regional, state, and institutional. However the linkage between the national and the institutional levels was considered the basic strategy for its establishment and operation. In accordance with this strategy the CONPES, shared by ANUIES and SESIC, was first on the scene. The records of ANUIES report that the establishment of this coordination on a partnership basis was the successful outcome of the ANUIES-SESIC working teams. These had devised the proposal for SiNaPPES itself (ANUIES, 1979, CONPES, 1986). This share of experience of the representatives of both the universities and the Ministry, was highlighted by the Minister. He pointed out that it proved the feasibility and convenience of this partnership (CONPES, 1979a pp. 1-2). Furthermore, he emphasised in the meeting that a top coordinating body was already established for the technological institutions of higher education, whereas in the case of the universities such a measure had been left to these institutions because of their autonomous character (CONPES, 1979a p.2). In fact this feature of the universities was included in the Law of Higher Education Coordination approved by the National Congress on December 1978, after the approval of SiNaPPES by the national assembly of ANUIES (Poder Ejecutivo Federal, 1988).

At this stage it is useful to point out that this Law supported both the autonomy and the public funding of universities. The reasons for this were that university coordination is the responsibility of these autonomous institutions or their representative organisations (CONPES, 1979a p. 2, Poder Ejecutivo Federal, 1988). The Federal Government (its financial availability permitting) would provide them with funds for their normal operation. Funds would be provided in accordance with both the national priorities of development, and the established criteria for the development of science and technology in the country (Poder Ejecutivo Federal, 1988).

6.8. The national coordination - the CONPES.

In formal terms the CONPES was established in a meeting in January 1979, attended by representatives of the Ministry and ANUIES who were to participate as members in the CONPES. This marked the start of the operation of SiNaPPES. It happened soon after the approval of the latter by the assembly of ANUIES in November 1978. The purpose of the meeting was to start the operation of the planning machinery. In the Minister's words, they were "formally establishing the CONPES since the creation of SiNaPPES had been already approved" by ANUIES (CONPES, 1979a. p.1).

As has been noted earlier in this chapter, the CONPES was presided over by the Minister of Education as president of SiNaPPES. It included the members of the National Council of ANUIES, four under ministers of SEP, and the two general directors of both higher education sectors: universities (DGES), and technological institutes (DGIT). However, the Joint Secretariat of the CONPES which was created as its executive committee was to be constituted by the top officials of ANUIES (its General Executive Secretary), and the DGES (its Director General). This Joint

Secretariat of the CONPES was responsible for providing the necessary technical support for the establishment and functioning of SiNaPPES at all levels (CONPES, 1979a. p.3).

The main functions of the CONPES were also agreed at the meeting, and included the following: (ANUIES, 1979. p. 61)

i) To promote, integrate, and support a general policy for higher education.

ii) To link institutional planning with national development.

iii) To follow up and evaluate higher education plans by calling regional meetings.

iv) To support and provide technical assistance to institutional, state, and regional plans and programmes.

v) To promote the 'congruence' between higher education plans and national conditions of the country.

vi) To provide advice on institutional and regional planning matters within SiNaPPES.

This initial meeting of the CONPES was the first of nine meetings between January 1979 and August 1981. The main aim in this period was to produce the 1981 PNES. Within the first three meetings of the CONPES three priorities were agreed in order to establish SiNaPPES: (ANUIES, 1979, CONPES, 1979a, 1981d, 1984, 1986).

i) the creation of UIPs,

ii) the development of the National System of Higher Education Information, and

iii) the promotion of planning to formulate the PNES itself.

The planning activities of the CONPES and the other coordinating committees of SiNaPPES' network were financially supported by a special allocation of funds (CONPES, 1979c, 1981d, 1982f), which were to be managed by the Joint Secretariat of the CONPES (CV12, CV16, CL21, CV23). Nonetheless, the promotion of planning methodology to assure the operation of SiNaPPES quickly became the main priority. The establishment of UIPs and the rest of SiNaPPES network was also carried out (CL11, CL21, PL17, CV23).

According to the minutes from these meetings of the CONPES, a summary of CONPES' actions may be grouped under two main priorities, the establishment of the SiNaPPES network and the operation of SiNaPPES (CONPES, 1979a, 1979b, 1979c, 1979d, 1980a, 1980b,1981a, 1981b,1981c).

Related to the establishment of SiNaPPES' network:

i) The CONPES was formally established on January 17, 1979 (CONPES, 1979a).

ii) In May 1979 a model for the establishment of Institutional Planning Units in autonomous universities was approved. The UIPs, were to be the constituent parts of the mechanism of SiNaPPES (CONPES, 1979c).

iii) From May to July 1979, eight Regional Coordinating Committees - CORPES, were established in the eight regions into which ANUIES has been organised (CONPES, 1979d).

iv) In August 1979, a proposal for the integration of State Coordinating Committees - COEPES, was presented and approved. The 31 COEPES were

formally created in a special meeting in Mexico City in this month (CONPES, 1979d).

v) From September 1979 to June 1980 the COEPES were established in the 31 Mexican states (CONPES, 1979d, 1979e, 1980a, 1980b).

Related to the operation of SiNaPPES:

i) In May 1979, in parallel to the establishment of the UIPs a proposal for a "Planning methodology for institutional diagnosis" was approved for the universities. During 1980 a number of workshops on planning methods were organised to support the implementation of the UIPs (CONPES, 1979b, 1982).

ii) In August 1979 a proposal about the "methodological features of higher education plans" at state and regional levels was presented and approved to support the planning responsibilities of the CORPES and COEPES. Subsequently, the Joint Secretariat of the CONPES produced a guide for the "Structure, functioning, objectives, and guidelines for the formulation of State Indicative Plans of Higher Education Development (PEIDES)" (CONPES, 1979d).

The concerns of the Joint Secretariat of the CONPES were, in practice, related to the establishment of the SiNaPPES network, and the promotion of the method to make it operate. If we examine carefully the above list, it can be seen that the creation of the PNES seemed to have undermined the dynamic functioning of SiNaPPES' mechanism as devised at the time of its creation. From the creation of SiNaPPES onwards, planning became a rational culture to be promoted within universities. The promotion of this planning culture would guarantee the success of the planning mechanism, as it was the know-how to formulate plans (Velázquez, 1982, ANUIES,

1979, CONPES, 1979a, 1981d, 1984, 1986. also CL11, CL21, CV16, CV12, PL17). It can be seen that from the end of 1979 to the mid 1981, the preoccupations reflected in the agenda of the CONPES meetings were mainly concerned with:

i) the methodological features of the plans to be produced (Sixth meeting) (CONPES, 1980b),

ii) their planning horizon (Fifth meeting) (CONPES, 1980a),

iii) the institutional exchange of planning experiences (Fifth and seventh meetings) (CONPES, 1980a, 1981a), and

iv) the advancement in the formulation of higher education plans (Fifth to eighth meetings) (CONPES, 1980a, 1980b, 1981a, 1981b).

From 1979 onwards, the CONPES maintained this commitment towards the consolidation of both SiNaPPES' network and operation. Specifically the Joint Secretariat of the CONPES did so by calling together the autonomous universities to participate in the coordinating committees of planning at all levels of the planning mechanism.

The role of the CONPES within the network of SiNaPPES as a whole may be highlighted at this point; the CONPES became the catalytic element of SiNaPPES' establishment, apparently in a vertical top-down action which seems to be opposite to the participatory aims of the process. In fact, parallel to this consideration, it has been noted the view which claims that the real purpose of the Minister was to support the creation of a single body. This would coordinate nationally the otherwise dispersed actions of public autonomous universities (CV16, CL21). Such a role could be performed by the CONPES. Alternatively, it could be said that although ANUIES already shared the national coordination of SiNaPPES and its Joint Secretariat with SESIC, the Minister himself emphasised the necessary partnership in university

planning of both autonomous universities (ANUIES) and the government (SESIC), as reported in SiNaPPES proposal. (ANUIES, 1979 p. 11)

There was a discussion earlier in this chapter of an analogous claim of verticality that was raised at the time the proposal of SiNaPPES was being formulated. At that stage the directive-vertical feature was laid at the door of SEP representatives, in contradistinction to the participatory commitment of ANUIES representatives. It was noted that the disagreement was overcome because of the intervention of the Minister and his negotiating ability (CL11). In fact, what laid behind the vertical/participatory issue was, on the one hand the commitment to participation of ANUIES and its need to preserve this position in the partnership. On the other hand, and this is relevant to our discussion, there was a tension between a variety of perspectives from different universities within a planning process for a nationally coordinated policy. In other words, the participatory feature of the process, raised by ANUIES, was related to the means through which priority actions (if not single ones) could be agreed between the participants in the process. The emphasis on institutional participation and its strategic linkage with the national coordination shared in the CONPES, seemed to provide an answer to this issue.

The Joint Secretariat of the CONPES has been considered as the prominent actor in the process by which this agreement between different views has been achieved (CV12, CL11, CL21, CV16). There have been shared concerns and common understandings between its members. Both wished to promote planning as the convenient means of improving the coordinating process among universities. It is claimed that planning techniques would improve the efficiency of the coordinating process itself by facilitating the agreement of different views (CL11, PL18). However, in order to achieve this goal universities needed to be persuaded of using

planning techniques by participating in the process; since the CONPES was already in existence, it would catalyse the process (CL11).

6.9. The planning coordination on regions and states: the CORPES and COEPES.

The CONPES promoted, as one of its initial tasks, the establishment of the eight committees for Regional Coordination of Higher Education Planning (CORPES). These coordinating committees were formally established in August 1979. The CONPES also promoted the establishment of the 31 committees for the State Coordination of Higher Education Planning (COEPES). In this case the COEPES were formally established in a 'special meeting in Mexico City in August 1979. Subsequently, the COEPES were established in the 31 Mexican States between September 1979 and June 1980 (CONPES, 1979d).

As was said earlier in this chapter, at the regional level, the CORPES would be attended by the rectors of the universities in the region, as well as representatives from the state governments and the state offices of the SEP in the region. At the state level, the attendance would include the rector of the local university, and representatives from the state government and the state office of education (CONPES, 1979a). In all cases, the rectors of the universities would head the regional and state planning committees.

In practice, the performance of these coordinating committees at regional and state level has been erratic ever since shortly after their formal establishment during 1979 - 1980. After the completion of the 1981 PNES, their improvement was formally left for a further stage of development of the SiNaPPES network (CONPES, 1986). As far as the regional coordinating committees are concerned, what happened was that the CORPES hardly met again after their formal establishment. What is also

interesting to note is the previous existence of this regional organisation in SiNaPPES structure (ANUIES, 1979). It had been used by ANUIES mainly as a formal geographical division when calling for meetings of member-universities. Its further operation was minimal because these regions crossed through both the formal state boundaries of the Mexican Federation, and the practical matters of institutional autonomy of public universities in the states. Neither coordination practices, nor norms on the matter were established to facilitate their task within the network of SiNaPPES (CL21, PV15, PL18).

At the state level, the main constraint was the fact that the mechanism of coordination faced a single autonomous university in each state which had already established a practice of coordination with the state government. Therefore the state mechanism - COEPES - was too complicated to take over a practice already established (CV16). There is also the view that the aim of the universities was to integrate into SiNaPPES' processes all higher education institutions. However doing so was difficult given the centralised pattern of coordination of the technological institutes (CV16). Despite this aim of the universities, such a centralised practice could not be overcome (e.g. CL11, CV12, CV16).

It is however useful and illustrative to briefly analyse how the operation of these coordinating levels of planning of SiNaPPES was attempted. An instructive example which started at institutional/state level and reached regional scope (although it lasted only a short time) was the case of the University of *Aguascalientes*. This new university led higher education coordination in its region. This resulted in the production of studies related to policy-planning matters such as student demand, structures of academic organisation, and regional diagnoses of higher education. It also produced an initial outline for the proposal of regional coordination mechanisms among universities. These were to deal with access, merging and offer of degrees, and

inter-institutional exchange of research and teaching staff. The general purpose was to improve both the use of facilities and the available resources (CL34, CV16, CL33) .

According to some views policy-planning coordination was possible because of the goodwill of the universities' rectors and Institutional Planning Units' directors within the region at that time, and these actions were stopped when new personnel were appointed to such posts (Porter, 1988). There is however the alternative consideration which claims that the influence of the UAA in the region should be related to its planning achievements given its small size (CL29). This consideration also shows that the top-down directive style of its decision-making process, which attempted to operate in a rather technical-rational model of organisation, also helped (Porter, 1988 p. 65. Also CL11, CL21). When these characteristics expanded regionally, it was not long before the other involved universities reacted against the directive style of the UAA towards the other participant universities (Porter, 1988). It was, for example, not easy to establish criteria upon which to agree on the share of degrees to be offered by each university, which had to do with costs and fund allocation (CL21). In other words to offer degrees in Engineering and Physics was rather more expensive than to offer degrees in Law and Sociology, although the demand of students in the latter was higher than that in the former, and the allocation of funds was mainly related to enrolment figures. In the end each university was concerned to keep a balanced range of degrees in its own state. This also had to do with the specific needs and student demand of their states within the Mexican Federation (CL11, CL29).

Planning-related academics of the UAA have certainly claimed that the planning model of this university is a technical-rational and also adequate one for Mexican universities as a whole (Martínez Rizo *et al*, 1984). On the other hand, there is the

view which claims that this apparent success of technical planning in the UAA, as has been highlighted, has to be related to the size and recent creation of this university, rather than only to technical planning itself (CL29). That is to say that as a new small university the UAA did not have to include in its planning process either a wider diversity of views or the already existing vested interests of academics, which would "challenge the technical rationality" of planning (CL29). The experience of the University of *Aguascalientes* was, however, a matter of interest within the CONPES meetings during 1979, and was highlighted by the National University's representatives at that time as a matter of inter-institutional exchange because of its planning achievements (CONPES, 1979c). According to some analysts the reason was that planning-related academics of this university were active participants in the exchange of university planning experiences through the inter-university programme (PCAI) of the UNAM (CL33, PL36); and the prior concern of this programme was the promotion of the planning culture (Velázquez, 1982).

In a general perspective, however, as has already said that the coordinating committees of SiNaPPES at regional and state level were unstable since after their formal establishment and their improvement was left for a further stage (CONPES, 1986). Thus the institutional-national axis has sustained the network of SiNaPPES as strategic link for its operation, with little real involvement at regional and state levels (CL11, CL21, PL17, CV23).

6.10. The institutional participation - the UIPs.

The coordination of the process was already organised at national level by establishing the CONPES on a partnership basis between SESIC and ANUIES. Furthermore the CONPES -as has been said- was catalysing the whole process of SiNaPPES implementation. Thus at the institutional level the CONPES' proposal was

to establish Institutional Planning Units (UIP) to complete the strategic linkage of SiNaPPES' network as devised in its proposal (CONPES, 1979b). The policy process should start by formulating plans at institutional level and, in the end their further implementation was also to be carried out on an institutional basis (ANUIES, 1979). On the other hand the national level would provide coherence to the whole policy process in a comprehensive perspective, and look towards the further linkage of higher education planning with the national priorities of the country (CL11, CL21).

6.10.1. The model of the UIP.

An examination of the UIP model illustrates its main characteristics and concerns. It shows how the formulation of plans, a major emphasis developed by the CONPES, is highlighted through the objectives and functions of these institutional planning units (CONPES, 1979e).

The UIP model proposed by the CONPES included two objectives:

1. To encourage the planning process at institutional level, giving technical and methodological advice on the elaboration of plans and programmes, and coordinating the implementation process itself. The UIP should take special care of evaluation and funding concerns.

2. To establish institutional communication of planning matters at state, regional, and national level within SiNaPPES in order to support the whole process.

The five functions assigned to the UIP were the following:

1. Planning and studies. Coordinating all necessary activities for the elaboration of the Institutional Development Plan (PIDE). Contributing towards the definition of institutional objectives, and to the determination of the proper strategy for optimal performance.

2. Programming and budgeting. Coordinating the formulation of annual programmes in which the institutional development plan may be set; proposing the criteria for the budgeting process in accordance with the agreed programmes; and establishing the criteria for the further evaluation of this process.

3. Organisation and procedures. Making the structure and organisation suitable for the planning requirements of the plan and programmes of institutional development.

4. Information. Managing the required information for planning, and the design of programmes accordingly.

5. Adaptation of the normative institutional framework. Analysing the correspondence between institutional regulations and planning requirements, and proposing the necessary adjustments in the organisation.

The promotion of plans and planning know-how through the establishment of UIPs in all universities reflected the two main priorities taken into practice by the CONPES (CL11, CL21). These trends in planning actions at national and institutional levels were related to, as has been said, the formulation of the PNES; furthermore they were related to an explicit purpose of the process in the long term: the integration of

both planning and administration. The integration of planning into the normal administrative procedures of universities was the means to improve their efficiency (ANUIES, 1979, CONPES, 1982f). These technical concerns of planning are highlighted in the UIP model. The five functions of the UIP were related to the improvement of university administration and three of them (1, 2 & 4) were specifically related with the formulation of institutional and national plans.

In accordance with this approach the CONPES carried out a diagnosis of the UIPs in 1981, and reported the following: (CONPES, 1982f, López, 1982)

i) UIPs had been established in all universities,

ii) In 77 per cent of the cases the UIPs' functions were formally established either by the council, the statute, or the directorate of the university. There was no information in the other cases.

iii) In 45 per cent of the cases the UIPs were involved in the formulation of plans.

iv) In 65 per cent of the cases the UIPs were taking control of the planning process.

v) In 76 per cent of the cases the UIPs were involved in programming and budgeting of plans and programmes.

vi) In 76 per cent of the cases, the UIPs were giving technical-planning advice to the directorate of their universities.

vii) In 85 per cent of the cases the UIPs were coordinating the information processes and their management.

viii) Finally in 35 per cent of the cases the UIPs were involved in the formulation of normative proposals of institutional adjustment according to planning needs.

It is worth noting that by 1979, even before the SiNaPPES network was established (Martínez, 1983), most UIP were already in existence (López, 1982). In fact, up to 1981 a number of UIPs had already been in existence for nearly 15 years, and most of the others had been in operation for nearly 10 years (CONPES, 1981d). These circumstances do not necessarily invalidate the actions of the CONPES which surely reinforced the role and performance of the UIPs in both the universities and SiNaPPES itself (CL29). However, the existence of the UIPs prior to the establishment of SiNaPPES makes it convenient to look for plausible reasons for that. This previous existence of the UIPs could be related to the creation of a planning unit in the UNAM as early as 1965, and its promotion through the PCAI of the National University (within which planning was a priority). In the end, the actions of both the CONPES and the National University contributed to the establishment of the UIPs in the universities.

Notwithstanding that the UIPs were established in all universities and that their features were related to the   proposed model, the report of the CONPES in 1982 highlighted that the code of practice and the internal structure of the UIPs were diverse (CONPES, 1982f). This was because of both the different priorities they were assigned Velázquez, 1982), and the different organisational characteristics of the universities (López, 1982). Therefore, in the perspective of this report, this diversity of characteristics in the UIPs became an additional problem of coherence and control on the planning process which were limiting its success, and therefore the expected formulation of plans through SiNaPPES (CONPES, 1982f).

6.10.2. The characteristics of the UIPs.

There are some considerations about the planning characteristics developed by the UIPs when putting forward examples of them. For example the   University of

Aguascalientes (UAA) was widely viewed as the best in demonstrating the technical planning features (Porter, 1988). The UIP of this university had been able to systematically produce its PIDE with a 10 years planning horizon. It had systematically updated it every year since the late 1970s - shortly after its creation. As a result of both information management and planning, the UAA had been able to establish a policy of smaller enrolment and expansion to maintain a moderate size (PL18, CV16, CL34).

On the other hand, some analysts consider the University of _Sinaloa_ (UAS) as an example of non-achievement of technical planning (PL1, CL34). In this university information processes and their management were also improved and the PIDE was formulated; however, its enrolment figures were apparently increased (this is the claim) in order to better negotiate the funding provision (e.g. CL34). Nevertheless, this negotiation was based on enrolment figures and the forecast of the students demand; and both issues were formally included in the PIDE of the university. For these analysts the formulation of this PIDE became a mere formality to support open access (thus non-technical) when forecasting student demand and enrolment growth (CV12, CL18, CL34).

In the light of these considerations the case of the University of _Nuevo León_ (UANL) could be pointed out as the median example in these matters. This university has completed its PIDE as well as improving the management of its information processes. However the analysis is that the expected results of the planning process, in terms of a policy of limited access, were still conditioned by political factors such as student pressure for open access and large enrolment, because of the large size of this university (CL34, PL18, CL21, CL29).

From the above examples, different approaches to enrolment policies could be, in fact, distinguished among the three universities. The UAA was interested in preserving a small size (it had less than 6,000 students in 1985) and was therefore concerned with strict control of access and enrolment (CL34). The other two were already larger universities (with more than 45,000 students in 1985) interested in offering places for students wishing to enter (CONPES, 1986). There seems to be a reason for these different approaches, and it emerges from the local demand of higher education. In 1985, in the case of the larger universities, the UAS and the UANL, the age-participation ratio of higher education enrolment in their respective states was respectively 20.8 and 24.1 per cent (among the four highest in the country). In the case of the UAA the figure was only 8.5 per cent (CONPES, 1986). The enrolment policy of these three universities thus seems to incorporate as inevitable this pressure of student demand even though it was contained within apparently technical parameters of planning. It is worth noting, however, that the consideration of the planning achievements of the UAA tends to identify them with a policy of restricted access to higher education outcoming from optimal choice. Therefore, this view emphasises the necessity of improving this approach of planning (e.g. CL11, CV16, CV12), that is the claim, to rationalise the access of students to higher education (PL18). However, this claim is, in the end, using the argument of technical-optimal choice through planning to sustain a policy of an individual university.

As a result of these differences, for example, the 1986 PNES established as a policy for access that large universities should not grow, mid sized ones should keep their size, and small ones might try to grow on a rational basis (CONPES, 1986). Although these differences between universities existed, and they were expressed in both the PIDEs of the universities and the PNES. the underlying assumptions were that in formal terms most universities completed their institutional plans according to the

methodology promoted by the CONPES. Subsequently, the further exercise and improvement of planning would provide rational support to overcome these differences (PL17). Again the claim is that the improvement of the process consisted of the improvement of the rationality in technical planning to reach optimal choice. That is why, for some analysts, the promotion of a planning culture became a never-ending process of improvement (e.g. CV12, CV14, CV16, PL25,CL29, CL33, CL34).

If we look only at the planning concerns of both the CONPES and the UIPs in terms of their formal preoccupations, it could be said that the making of plans became the main indicator of planning achievement. In practical terms, it apparently became the prime aim of the CONPES and, subsequently, the same thing happened to the functions of the UIPs (CONPES, 1980a). An additional factor which reinforced this tendency was the financial support provided by the CONPES for the creation and operation of the UIPs in the universities (PL17). It can be noted in the case of the CONPES that during 1980 the need to lengthen the horizon of the plans, the formal progress in their formulation, and the formal characteristics to be included in its structure, (diagnosis, goals, targets, specific policies, selection of alternatives, programmed actions, resources and mechanisms of control) was still a significant concern in the agenda (CONPES, 1980a, 1980b). To make this comment is not to suggest that a plan does not need a structure, but the interesting point is the strong emphasis that the CONPES laid on the production of plans as a normative expression of technical planning.

It can still be argued that these concerns of the CONPES were previously taken into account in the strategy of the implementation of SiNaPPES (ANUIES, 1979). Nevertheless, for example even after the formulation and approval of the PNES in 1981, the agenda of CONPES' meetings in 1982 was still highlighting the need to complete a 1982 updated version of the PNES (CONPES, 1982a). In other words the

plans became a kind of protocol of policy in the process of being permanently updated. The emphasis apparently shifted to the normative characteristic of planning and the improvement of plans, so that these would be the indicators of technical improvement in the process.

Let us concede that this preoccupation of the CONPES with the production of plans can be related to the target of producing the PNES in two years. Nevertheless, what is interesting to observe, is how the concerns with the formulation of the plan overtook the dynamism of participation, within which planning was to be promoted. The dynamic characteristic aimed for SiNaPPES was undermined by the concerns of producing and updating 'static plans' (opposite to what was stated in the formal creation of SiNaPPES) (ANUIES, 1979 p. 11).

6.11. The establishment of SiNaPPES and the PNES.

SiNaPPES having been established, the formulation of the 1981 PNES was carried out during the second half of 1980 and the first half of 1981 (CONPES 1981a, 1981b). In fact, in parallel with the establishment of the SiNaPPES network, most higher education issues concerning planning and development were also discussed by the universities. With the purpose of collecting and discussing the proposals of the universities, the CONPES called them together to 6 national meetings, in order to produce the PNES (CONPES, 1980a, 1980b). These meetings were organised according to the regions in which the network of SiNaPPES was formally organised, and covered the following issues:

i) information,

ii) planning and administration,

iii) research,

iv) postgraduate studies,

v) promotion of culture,

vi) normative concerns.

The proposals emerging from these meetings were summarised by the CONPES and incorporated into the proposal for the PNES (CONPES, 1981a, 1981b). The 1981 PNES was produced as a policy guideline for the forthcoming decade and approved by the twentieth National Assembly of ANUIES (CONPES, 1981d, 1982f). Its structure included the following: (CONPES, 1981d , pp. 155-171)

First, a review of the 'state of the art' of higher education planning and the functioning of SiNaPPES. The report of the CONPES highlighted two achievements related to the normative and coordinating issues: the publication of the Law of Higher Education Coordination in 1978, and the enshrining of the principle of university autonomy in the Mexican Constitution in 1980 (CONPES, 1981d, pp. 30-31).

Second, an overview of the main socio-economic circumstances of Mexican society and how they influence and challenge the contribution of higher education, namely: i) demographic growth, ii) economic development, iii) socio-cultural needs, and iv) development of science and technology.

Third, a perspective of higher education trends which highlighted: i) the increasing demand to higher education and its impact on the provision, ii) the improvement of research and postgraduate studies, iii) the promotion of the culture, and iv) the innovation of the academic-administrative structure.

Fourth, a view of higher education for the following decade which laid emphasis on:

i) The basic principles of higher education: a) its concern with knowledge, b) the autonomy of its institutions, c) the improving of their coordination based on the universities-government partnership.

ii) The prospective trends of higher education:

a) university-society linkage: promoting a closer relationship in order to develop science and technology, to attend the production needs, and to reduce technological dependence. This should strengthen national values while understanding international plurality.

b) innovation: promoting change and reform while maintaining respect for institutional autonomy and diversity.

c) quality: the improvement of teaching, research, facilities, access of students, and administration. Higher education should promote creativity and critical thinking on individuals and society.

d) growth; to face the increasing demand through institutions of optimal size,

e) Functioning; to increase efficiency, planning, norms, and funding allocation and procedures.

As a policy guideline, the central purpose of the PNES was synthesized as: "To guide the formulation and development of programmes at institutional, state, regional and national levels, for the improvement of higher education. This improvement should

both account for, and contribute to, the dynamic requirements of the country"
(CONPES, 1981d , p. 155). For the formal history of SiNaPPES, the production of
the PNES in 1981 was highly significant because it showed the achievement of
SiNaPPES implementation (e.g. CV12, CV19, CL21). Although a number of
improvements had yet to be made, the view was that the production of the Plan
enabled the process both to support the development of higher education, and to
further improve the process itself   (e.g. CL11, CV16).

The proposal of SiNaPPES noted that the PNES would be the set of programmed
actions to regulate the development of institutions of higher education in both the
short and the long term (ANUIES, 1979 p. 67). The higher education issues
discussed through the assemblies of ANUIES since its creation, and mainly from the
1960s onwards, were the precedents of the PNES. These higher education issues
were included in the contribution of ANUIES to the National Education Plan in 1977.
Between 1978 and 1981, while the network of SiNaPPES was being established,
these higher education issues were matters of intense discussion between
universities, and systematically structured into five areas (ANUIES, 1979 pp. 74-
76, CONPES, 1981d).

i) Operation of the substantive (the main functions of higher education: teaching,
   research, promotion of the culture).

ii) Normative concerns.

iii) Coordination.

iv) Development.

v) Funding.

Since 1981, the PNES has made it explicit that the programmed actions of the last
four areas should converge to support the area of the 'operation of the substantive'

which included the basic functions of higher education, namely teaching, research, and promotion of culture (CONPES, 1981d, p. 33). Although this area of the 'operation of the substantive' included 22 of the 32 sets of higher education issues (CONPES, 1981d, p. 34), a number of the 22 sets of higher education concerns also reflected an emphasis on planning and coordinating issues (ANUIES, 1979 pp. 74-76, CONPES, 1981d, pp. 29-39). The list of these set of issues, and a simplified view of the similarities and differences in the contents of the PNES in 1983 and 1986 can be seen in relation to those of 1981 in Appendix 2 at the end of this Chapter. Broadly speaking both the sets of issues and the areas grouping them in the contents of the PNES have been fairly similar in 1981, 1983 and 1986. There have been, however, some differences in the process of formulation of the Plan and the emphases of its versions. These are matter of analysis in Chapter 8 in the perspective of the two interpretations of SiNaPPES.

6.12. An appraisal of SiNaPPES creation and establishment.

A formal perspective of the aims, creation, and establishment of SiNaPPES has been shown. This perspective interprets the period of analysis as a progressive process of planning in higher education towards a coherent end which was the creation of SiNaPPES. The operation of the mechanism was intended to consolidate the systematic process of planning which was started by universities. In this way this perspective coherently reconstructs the major planning actions of universities from 1970 onwards, namely:

i) the preliminary diagnosis produced by the Centre for National Planning of Higher Education (CNPES) of ANUIES in 1970,

ii) the contribution of ANUIES to the National Education Plan of the Ministry in 1977, on behalf of the interests of the universities,

iii) the creation of SiNaPPES in 1978, and

iv) the establishment of SiNaPPES during 1979-1981 and the production of the PNES in 1981.

The aim of SiNaPPES in the long term, according to this perspective, was the integration of planning into the administration of the universities, in order to improve their efficiency. Planning became the know-how or, as was said, the culture to be promoted within autonomous universities. The promotion of planning techniques, the planning culture, would guarantee the correct functioning of the policy-planning mechanism and the appropriateness of its outcomes. In this sense this perspective is concerned with the technical characteristics of planning.

The formal history of SiNaPPES highlights the smooth partnership between the universities and the government in the creation of SiNaPPES and its national coordination. Autonomous universities contributed to this partnership by emphasising participation in order to safeguard their autonomy. The underlying assumption has been that this participatory style of universities would allow them to reach consensus on their academic concerns through the CONPES partnership.

In this perspective, if we relate the claims of the General Executive Secretary of ANUIES in the mid 1970s about: i) the indicative character of planning and its gap with decision-making, ii) the gap between planning and funding, and iii) the absence of implementation (Rangel Guerra, 1979); the features of SiNaPPES provided:

i) a partnership between ANUIES and SESIC that should eliminate the gap between both decision-making and planning, and funding provision and planning;

ii) a planning process to produce plans on a participatory basis, to assure their further implementation; and

iii) the incorporation of planning into the administration of the universities.

The CONPES catalysed the process of SiNaPPES' implementation by establishing and supporting the other coordinating levels of the mechanism at institutional, state, and regional levels. However, the institutional-national axis constituted the strategic link in a kind of bottom-up, top-down, bottom-up process (e.g. Sizer, 1987a, 1987b), and has sustained the operation of SiNaPPES since. By participating in SiNaPPES, universities were to be persuaded of the convenience of planning in order to improve their processes of coordination and policy formation.

During the process referred to above, the CONPES became particularly concerned with both the implementation of SiNaPPES, and the dissemination of planning methodology to produce higher education plans. In this way the normative-formal characteristics of planning became prominent through the process of implementation of SiNaPPES. The achievement and improvement of the planning process was thus transferred to the formulation and improvement of plans.

In 1982 the CONPES reviewed the establishment of SiNaPPES and the achievements of the process. This assessment was optimistic according to six indicators of achievement as follows: (CONPES, 1982f. pp. 14-6)

1) the establishment of SiNaPPES itself.

2) the formulation of basic understandings, and general policies for higher education.

3) the formulation of the 1981 PNES, as a general policy guideline of higher education for the forthcoming decade which included:

4) the definition of programmes and priorities,

5) the demand forecast of students and graduates, and

6) the definition of normative issues for higher education.

This assessment of the CONPES highlighted the consideration that the establishment of SiNaPPES' network made possible the formulation of plans for higher education through a participatory process (CONPES, 1982f. pp. 53-57). The formulation of the 1981 PNES was considered "the culmination of the initial stage within a continuous process" of higher education planning (CONPES, 1982f. p. 13). It is considered in this way that the "analysis of higher education in Mexico is the analysis of its planning", and that the functioning of SiNaPPES was the definition and exercise of higher education policy" (CONPES, 1982f. p. 14).

The participation of universities in SiNaPPES, however, maintained to some extent the indicative character of planning because of their institutional autonomy. Nevertheless, in the perspective of the formal history, the further promotion of planning methods and techniques within the universities will overcome this limitation. In this way, notwithstanding its achievements, the functioning of SiNaPPES was viewed by the 1982 report of the CONPES as a kind of intermediate stage within an "un-finished process" of higher education planning (CL11, CV16, CV12); thus the process still needed to be improved. It was claimed that the UIPs were still not functioning according to the CONPES' model. The UIPs were also facing specific technical problems such as lack of information and trained personnel (CONPES, 1982f. pp. 81-82). Therefore several PIDEs were not methodologically

well formulated and implemented (CONPES, 1981d. p. 23). Hence the promotion of the planning culture was still a necessity in order to improve the performance of SiNaPPES. (CL11, CV16).

By following the main emphases of the formal history, the process of SiNaPPES creation could be seen as being the stages of a policy process (See e.g. Jennings, 1977). The need to create SiNaPPES was raised, the issue was discussed, proposals were integrated, and the creation of SiNaPPES was approved; thence SiNaPPES was established and the PNES produced through its functioning. However, for the formal history the view is that planning had still not been completely successful mainly because of the variety of views to manage in order to obtain optimal choices. It could be said that the national plans were too general and leave the variety of institutions too much space for individual application of the general guideline. However, this institutional space, which made planning indicative, was the outcome of the respect for the autonomy of individual institutions, and this was also a purpose of SiNaPPES. The participation of this variety of institutional views in the process, in fact echoes the interaction of institutions and academics; this issue moves the analysis to the alternative interpretation of SiNaPPES which is matter of the following chapter.

6.13. A summary.

The analysis in this chapter has shown the creation and establishment of SiNaPPES in relation to the technical concerns of its formal history. This is to say that SiNaPPES was the coherent end-point of a progressive planning process in higher education, and that its establishment would also permit the formulation and implementation of the PNES. This National Plan was to be a set of actions previously determined according to a predicted future. This perspective highlights the following:

1. Planning was to be promoted in autonomous universities by their participation in SiNaPPES. In this way they would be persuaded of the convenience of planning as a technical-rational means of improving their coordination and policy process. Universities would then act according to plans, in their turn formulated with regard to a previously agreed vision of society.

2. Prominent emphasis was laid on the formulation of plans and they became the formal indicator of achievement of the planning process. The underlying assumption was that a plan would express the rational-technical agreement of the participants in the policy process, and was to be implemented on this basis. Furthermore, the assumption seemed to consider that the improvement of the PNES would demonstrate the improvement of the process itself. Therefore the achievement of the ends and targets established in the PNES would depend on the formal-technical production of the National Plan.

3. There was, on the one hand, the agreement of the universities to participate in the policy-planning process within SiNaPPES. On the other hand, there was the compromise established between the autonomous universities and the Federal Government through the SESIC-ANUIES partnership in the national coordination of SiNaPPES.

4. The autonomy of the institutions participating in SiNaPPES was to be respected. The variety of views of universities within this participation, however, was seen as a constraint for the technical concerns of planning in the policy process. This variety constituted a limitation to the optimal-rational choices expected for the plans and their implementation.

5. In order to face these constraints challenging the success of the process, the formal history of SiNaPPES stresses the further promotion of the 'planning culture' in autonomous universities. This would improve the operation of SiNaPPES and the production of the PNES.

THE DEVELOPMENT OF THE UNIVERSITIES AND THE CREATION OF SiNaPPES (1970-1986).

YEAR	UNAM	ANUIES	SEP
+1965/69	*UIP. Institutional Planning Unit	*National Assemblies.	*National Committee of comprehensive educational planning CNPIE.
	*Commission of New Teaching Methods. CNME. & Centre of Didactics. CD. => Centre of Research and Services in Education. CISE	*Centre for National Planning of Higher Education. CPNES.	
1970	*Reform of The UNAM.	*Preliminary Diagnosis of Higher Education. *1970 National Seminar of University Planning.*	*Educational Reform.
1971	*College of Sciences and Humanities. CCH	*National Programme for the Training of University. Teachers. PNFP.	*General Directorate of Higher Education Coordination DGCE.
1973/4	*National Schools of Professional Studies. ENEP *Metropolitan Autonomous University. UAM* *Autonomous University of Aguascalientes.UAA*		
1976	*Inter-University Programme of Academic Collaboration. PCAI		
1977		* Contribution to PNE.	*National Plan of Education. PNE
1978			*Under Ministry of Higher Education and Scientific Research. SESIC

YEAR	UNAM	ANUIES	SEP
1978		*National System for Permanent Planning of Higher Education. SiNaPPES.*	
1979		*National Coordination of Higher Education Planning. CONPES*	
1979/80		*Institutional (UIP), State (COEPES), and Regional (CORPES) Coordinating Committees*	
1981		*1981 PNES is produced through SiNaPPES.*	
1983		*1983 PNES is produced through SiNaPPES.*	
1986		*1986 PNES is produced through SiNaPPES.*	

Notes. + The plus sign between dashed lines shows a period in which several actions were taken in both the UNAM and ANUIES. These actions are considered and referred to in the analysis, in regard with the major actions at the starting point of the period of analysis (1970).
* One asterisk denotes a major action related to the body on the head of the column.
* *Two asterisks on the extremes denotes a shared action related to more than one body.

A SIMPLIFIED VIEW OF THE PNES' CONTENTS, 1981-1986.

Higher education issues	1981	1983	1986
• Operation of the substantive.			
1. Improving the relationship between the structure of the degrees and the needs of the productive structure.	√	√	√
2. Improving the educational guidance and careers advice.	√		√
3. Establishing new degrees according to both the development of science and technology and the needs of the productive structure.	√	√	√
4. Regional development of educational research.	√		
5. Developing the higher education curriculum.	√	√	√
6. Developing higher education alternatives.	√		√
7. Training of academic staff.	√	√	√
8. Production and dissemination of teaching material.	√		
9. Fostering of librarian services.	√	√	√
10. Improving the social service of students.	√		
11. Unification of the curriculum of 'preparatoria' studies.	√	√	√
12. Developing short degrees vocationally oriented.	√	√	
13. Improving and diversifying funding sources for students.	√		
14. Coordinating and planning research activities.	√	√	√
15. Establishing a national network of research information.	√	√	√
16. Promoting, on a regional basis, a national network of centres of excellence on teaching and research.	√	√	

17. Promoting the establishment of scientific and humanistic associations. √

18. Improving and diversifying the promotion of culture as a function of universities. √ √ √

19. Training of cultural staff. √ √

20. Supporting and developing extra-mural activities. √

21. Improving the management and coordination of cultural activities. √ √ √

22. Developing sport and social (voluntary) activities. √

• Normative.

23. Inter-institutional agreements of university collaboration, and improvement of its normative aspects. √ √

• Coordination and management.

24. Improving the National System of Higher Education Information. √ √ √

25. Improving the UIPs. √ √

26. Improving the efficiency of university administration. √ √ √

27. Training of administrative staff. √ √ √

28. Promoting a national code of practice for administrative staff. √

• Development.

29. Improvement in the formulation of diagnosis, plans and programmes. √ √

30. Improving the linkage of higher education with state and regional development. √ √ √

• Budgeting and funding.

31. Establishing criteria and procedures for both the allocation and the management of public funding to universities. √ √ √

32. Promoting the diversification of university funding sources.	√	√

Source. ANUIES, 1979, CONPES ,1981d, 1983, 1986.

Chapter 7. AN ALTERNATIVE INTERPRETATION OF SINAPPES.
Participation of the academics.

Introduction.

The formal creation of SiNaPPES, was supported by a proposal produced by a joint commission including representatives from SESIC and ANUIES, and was approved by the National Assembly of ANUIES in 1978 (ANUIES, 1979). At the same time, the constitution of SiNaPPES was given legal support by the Law for Coordination of Higher Education enacted in 1978, soon after SiNaPPES' approval (De la Garza, 1990).

SiNaPPES represented a step towards a balanced development of both the institutions and their basic functions. It sought first to bring about a national network that would permit coordinated policy planning machinery shared by the multiplicity of. institutions of the Mexican higher education system (ANUIES,1979). National Plans for Higher Education (PNES) to guide its development would be outcomes of this policy-planning mechanism (CONPES, 1986). Thus SiNaPPES and the PNES "could be seen in formal terms as the most comprehensive planning effort in the history of national education" (Latapí, 1980 p. 69).

Following the creation of SiNaPPES, the National Plan of Higher Education (PNES) was completed in 1981. This national plan was to be the general guideline for the period 1981-1991 (CONPES, 1986). The written history of SiNaPPES highlights these stages and the above-mentioned features of policy-planning in higher education. SiNaPPES is viewed as the outcome of a cumulative process of planning. The goal of planning was the increase in efficiency of universities in order to obtain 'better

outcomes from given resources' (ANUIES, 1979). The coordination of the process is shared by ANUIES representing the universities, and SESIC representing the government; efficiency was to be supported by the consensual participation of the universities in the process.

This history was the subject matter of Chapter Six and we may call it the 'formal history' as opposed to an alternative interpretation, the 'alternative history', being told in the present chapter. The purpose of this distinction is to suggest that there are different perspectives of analysis, different lenses, through which the same planning mechanism for higher education can be viewed. Different perspectives concentrate their attention on different aspects of the phenomenon under analysis and, in the end, should improve our understanding of the subject (Allison, 1971).

In fact, the proposal of a system for the planning of higher education had already been articulated in 1970 by academics participating in the National Seminar on University Planning, organised by UNAM and ANUIES (Solana, 1970). In the same 1970 Seminar the formulation of a national plan of higher education was also proposed by the participants (Rangel Guerra, 1970). The written history of SiNaPPES takes notice of this Seminar as a planning precedent. Nonetheless it is presented there only as another planning action of ANUIES between the late 1960s and 1970s.

The participation of academics in the creation and establishment of SiNaPPES is relevant, we will argue, for a better understanding of the process of its creation and its rationale. The conceptual base of SiNaPPES appeared in the 1970 National Seminar, and it is possible to establish that the academics who proposed the system of planning were, later on, prominent participants in the process of its creation and

establishment. That is why the 1970 National Seminar becomes a relevant precedent in an alternative analysis of SiNaPPES. Subsequently, from the moment of its creation in 1978 onwards academics have been able to maintain their influence in the coordination and performance of the policy-planning mechanism to produce the PNES in 1981.

These considerations deal with the reconstruction of SiNaPPES' creation from a different viewpoint: its alternative interpretation. This narrative moves the perspective of analysis; it focuses on the interaction of academics in SiNaPPES in more detail, through both the participant bodies and the partnership of these bodies. Accordingly, this alternative interpretation of SiNaPPES is less concerned with the systematic and cumulative way in which planning actions were supposedly devised and performed according to previously determined purposes. Therefore the underlying consideration is that there are ends which are by-products of interactions in the policy process in higher education which are not brought about deliberately.

Discussion of this interpretation leads to the formulation of a different kind of rationale for SiNaPPES based on the interactive characteristics of higher education planning, its "political nature". This alternative interpretation of SiNaPPES is discussed in relation to its dynamic conception, and the way it reflects these interactive characteristics of higher education policy-planning. In the light of the information collected, the participation of academics between 1970 and 1981 is observed through the National University, two of the newly created universities, the General Directorate of Educational Coordination (DGCE) in the Ministry of Education, and through SiNaPPES itself.

7.1. The conception of SiNaPPES. Re-setting the scene.

The 1970 National Seminar on University Planning was jointly organised by ANUIES and the National University, and was attended by representatives of most autonomous universities in the states. The central concern on the agenda was the increasing student demand for higher education, and the consequent expansion of the system.

The discussion in the Seminar emphasised that there was a need for higher education to be updated and reformed if the country itself was to be modernised. In the face of these conditions, the issue was raised that academics have to consider the pattern of development of their universities in accordance with the aims they should formulate for the size and quality of their academic institutions (Solana, 1970). The underlying consideration could be seen that the contemporary process of expansion and modernisation of higher education was to be managed by academics themselves (e.g. Solana, 1970, Rangel Guerra, 1970), and it was expected that this process was to be financially supported by public funds provided through the government (e.g. Méndez Nápoles, 1970).

It was stated in the Seminar that notwithstanding the fact that higher education was not the origin of economic development in any country, its relation with national economic development in Mexico could be observed. Hence, its provision needed to be improved for the prosperity of the nation (Flores de la Peña, 1970). On the other hand, there was an increased student demand for higher studies, and the provision of educational opportunities for most people remained a goal of Mexican society as it had been from the time of the Mexican Revolution (González Casanova, 1970).

In accordance with the papers delivered in the 1970 National Seminar, higher education institutions should coordinate their expansion in the same way they should improve their provision. These were necessities to face the challenges of modernisation of both the country and higher education itself (e.g. Flores de la Peña, 1970, Solana, 1970). Therefore, the proposal was to design a national system of higher education planning (Solana, 1970). There was a parallel proposal by the academics of ANUIES which requested the formulation of a national plan for higher education. Such a plan was to be the set of policies to lead both the development of higher education and the contribution of these institutions towards the progress of the country (Rangel Guerra, 1970).

The report of the 1970 Seminar does not specify the structural characteristics of the proposed planning system as a dynamic mechanism of university planning. The report indicates, however, four major requirements to assure the success of planning in higher education: (Solana, 1970)

  i) technical skills,

  ii) administrative fitness,

  iii) political conditions, and

  iv) financial support.

A summary of the basic features of these four requirements is useful in order to relate them to our analysis in this chapter:

  i) the technical requirement was related with the expertise needed for both the management of the planning process and the formulation of a plan;

ii) subsequently, administrative fitness was viewed as the organisational adjustments that planning would need to establish in higher education institutions.

iii) In its turn, the 'political requirement' was concerned with the necessary conditions to coordinate and manage the different interests involved in higher education planning which "could emerge during the process" (Solana, 1970 p. 13).

iv) Finally, the financial requirement was dependent on the funding provision. Increased funds for universities would be necessary to support the actions planed to expand and develop the higher education provision. However this financial support for the implementation of universities' plans was an issue concerning external bodies which were beyond the academic domain. It mainly required agreement between the views and interests of autonomous universities and those of the government since public universities were mostly financed by public sources (Solana, 1970. pp. 13-14).

These higher education planning requirements can be related to the conditions and trends of higher education at the time. It was shown in Chapter 5 that during most of the 1960s the subsidies for universities, mainly the universities in the states, were frozen while student demand was increasing. On the other hand, it is relevant for our analysis to point out here that the 'political requirement' of higher education planning, as reported in the procedures of the 1970 National Seminar, does not clarify whether the different interests on higher education planning were internal to higher education. However this can be assumed, as it was clarified in the 1970 Seminar's papers, that funding was a requirement which was external to the realm of

higher education. Furthermore, it is worth remembering that in the early 1970s the National University itself was undergoing a process of reform and that different groups of academics supported different proposals to promote the reform of the UNAM. This interaction of different academic views and interests was on the agenda of the UNAM at the time of the 1970 National Seminar. The 'political requirement' of university planning can certainly be related to these circumstances.

Alternatively, it is still possible to relate the 'political requirement' of planning with both the internal and the external conditions of the higher education domain. Nevertheless, as has been said, the concern of this study focuses on the academic characteristics and conditions of the process: the coordination and management of different interests within the academic domain. In fact, during the decade of the 1970s, the considerable increase of public funding for universities supported their expansion and reform, and the government did not establish specific priorities for the allocation of university funds. As has been already stated, the coordination of the process of reform was left to a great extent to the universities themselves and their academics (Latapí, 1982). Therefore, the 'political requirement' of planning should be explored in relation to the different views and interests of academics inside higher education. It is possible to analyse how these points of view interacted with one another and were managed by the academics through the process of university reform. It can also be seen how this interaction is related to the creation of SiNaPPES.

7.2. Higher education reform and coordination. The participation of academics.

It can be said that academics shared the general goals of this process of modernisation in order to update and expand higher education. On the whole, provision needed to be

improved in its organisation, teaching methods, research, services, and administration. Nevertheless there were some differences in relation to the priorities and strategy for promoting and implementing the necessary improvements.

The proposals to reform the National University were prominent in the university sector, particularly the model of the College of Sciences and Humanities (CCH) and the National Schools of Professional Studies (ENEP). In parallel with this influential role of the UNAM, some of its academics even proposed that the National University should be the channel of public funds for the university sector because of its influential role, academic performance, and prestige (PL26).

There was, however, another major proposal for university reform during the 1970s: the design of an alternative model to orient the creation of new universities with an academic structure and pattern, different from those of the UNAM. This proposal was formulated through ANUIES, and two illustrative examples of these new institutions are the Metropolitan Autonomous University (UAM), and the Autonomous University of *Aguascalientes* (UAA).

These major proposals for reform referred to above, were paralleled by the enlargement and renovation of most public universities in the states. All of the proposals aimed to bring about innovation in public autonomous universities. However, for the autonomous universities in the states the involvement of the DGCE - the university funding office in the Ministry - was also relevant. By looking at the three cases in some detail, it is possible to distinguish the participation of academics in the university reform, and relate this participation with the analysis of SiNaPPES' creation.

7.3. The reform of the National University.

Academics in the National University were aware of the characteristics of higher education in the 1970s and the need for its reform and innovation. During the 1960s the enrolment figure of the UNAM still comprised more than half of the total number of students. The number of academics, the allocation of financial resources, and the dimension of facilities in the UNAM were similarly concentrated. According to some analysts, on the other hand, the autonomous universities in the states have been influenced by the academic developments of the UNAM, and also by the characteristics of its academic organisation (e.g. CL34). The UNAM, in its turn, was interested in providing the autonomous universities with academic advice and support (PL36, CL21, CL29).

In these circumstances, there was the suggestion that the National University itself should be reformed (e.g. PV31). A further consideration was that starting the reform in the UNAM should encourage a similar process in the autonomous universities, because of the influential role of the National University (CV14). Subsequently, a number of different academic proposals emerged through the process of consultation for the reform of the UNAM. They ranged from the creation of a new university, the complete renovation of the academic structure and organisation of the UNAM, the academic and administrative separation of professional and *preparatoria* levels in higher education; to the establishment of an open university and the reduction in the structure and length of the degree courses (e.g. Castrejón, 1980).

As an outcome of this process, in 1971 the design of The College of Sciences and Humanities (CCH) began to be implemented as an alternative form of higher education (CV14), formally incorporated in the reform by the new directorate of the UNAM

appointed this year (CL33). As has been observed in Chapter 5, the CCH proposal was "a comprehensive and very well elaborated project of innovation for higher education" (PL30, PL40) which would begin in the *preparatoria* level and was to be extended to the other levels of higher education. Its main characteristics included i) a close relationship between teaching and research, ii) shorter professional degrees, iii) *preparatoria* studies including a technical qualification, and iv) a more intensive use of the physical facilities of the UNAM.

Although these features mostly reflected the aims of higher education reform in the decade, the CCH model was, however, only partially established. This partial implementation of the College of Sciences and Humanities, limited to the *preparatoria* level, has been debated, and the claim is that there is not yet a plausible explanation, nor a single answer (Meneses, 1983). It has been frequently related to the Federal Government's failure to support the project financially. One view is that a number of top officials in the government were not sympathetic with a further expansion of the National University, and this point of view was shared by the Minister himself at that time (CV14, CL28). The reason was that, despite the 'Polytechnic origin' of the Minister (CL28), the UNAM was already a massive institution, and therefore it was not worth starting the higher education reform in the National University. In fact, it seems plausible to conclude that an expanded higher education provision in Mexico following the former pattern of enrolment, would lead to even more concentration of students in the National University. In this way the UNAM would perhaps be even more influential, but that would make the institution too large, too administratively complicated, and, it was supposed, increasingly expensive.

A related view was that the National University was an institution difficult to change, and a process of this kind would make it worse (Díaz de Cossío, 1970). Furthermore,

the above conditions could have produced a closer relationship between the National University and the Federal Government because of the dimensions of the task itself, and academics "were not happy with that trend" (CV14, CL13, CV20, PV31,PL18, PL24). In this perspective it is convenient to remember (as observed in Chapter 4) that the National University was under the direct dependence of the Presidency when it was struggling for its autonomy in 1917, and was released from that condition when autonomy was granted.

Alternatively, it is important to realise that the limitation in the further implementation of the CCH proposal can be related to a change in the priorities of reform in the UNAM, due to the differences between academics themselves with regard to the CCH project. In fact, as was said, there were a number of proposals to reform the UNAM and they were supported by different academic working teams. It was reported in the interviews that, because of this process of interaction and negotiation between academics, even the first coordinator of the College of Sciences and Humanities "came from an academic group which sustained the creation of an open university"; a different proposal to reform the UNAM (CV14, PL40).

Another issue which was relevant in relation to the CCH matter was the academic linkage between *preparatoria* schools and professional faculties in the National University. Although the CCH model maintained the academic linkage of these two levels of higher education, this position was not shared by other academics. Their analysis pointed out that this linkage "was too complicated for the UNAM" (CV20), and was, in the end, an obstacle "for the academic development of both" levels of higher education (CL13, PV31, PL18). It is worth noting that the subsequent reform proposal implemented in the National University (the creation of the ENEPs) did not

include in its scope the *preparatoria* studies (CV20). This was also the case of the alternative model proposed by ANUIES for the new universities to be created (PL18).

In fact, this shift between priorities for the reform of the UNAM can be related to the changes in the directorate of the National University at that time. The 1971 Directorate, which was integrated by academics from disciplines related to Social sciences, resigned in 1972, and new academics were appointed. There is the view that the support for the ENEPs in order to reform the UNAM, was not the only change of perspective by the academics in the new directorate. They went even further and considered that postgraduate studies should be strongly linked to research and constitute a separate level of higher education. A 'City of Research' was projected to be built within the main campus of the National University, and both the institutes of research and of postgraduate studies were to be located in this area of the UNAM (CL33, CL21, CV20, CV14). Academics from Biology and Health related disciplines who held these views were in this directorate appointed in 1972, and their views were shared by academics related to hard-pure (Becher, 1989) disciplines such as Physics (CL33). From these posts they supported a further development of these ideas at the time of the ENEP proposal. In the end, both projects remained in the UNAM; the CCH at *preparatoria* level, and the ENEPs at professional and postgraduate ones.

7.3.1. Innovation and planning concerns in the reform of the UNAM.

The qualitative concern of the National University reform also dealt with the creation of both the Centre for the study of Didactics (CD), and the Commission for the Study of New Teaching Methods (CNME). They were respectively related to the CCH and the Open University proposals (De la Garza, 1990). Over time, academics of these two

bodies developed different approaches to the teaching-learning issue. Academics in the Commission of New Teaching Methods became mainly concerned with the technical improvement of teaching methods to make them more individually efficient, and therefore able to cope with an expanded provision of higher education services. On the other hand, academics in the Centre of Didactics became mainly concerned with the analysis of the factors affecting the teaching-learning processes. These were viewed as mostly socially originated and could not be understood, in their view, through a technical approach only (PV27). By the mid 1970s, academics holding both approaches were encouraged - and provided with space - to integrate into a single body: the Centre of Educational Research and Services (CISE), a forum in which they could productively share their perspectives. (CL33). It is not clear whether these different views further developed a kind of interdisciplinary approach to the teaching-learning issue. It seems that the CISE maintained both approaches in its research projects, as well as in the services it offered throughout the University. However, several academics who were concerned with the socio-economic conditions affecting the teaching-learning process left the CISE later on (PV27, CL33).

Notwithstanding the fact that there were two main approaches on the teaching-learning issue, both were influential for the universities in the states. On the one hand most of these academics participated in the National Programme for the Training of University Teachers (PNFP) which was in operation from 1970 to 1976 coordinated by ANUIES (De la Garza, 1990). On the other hand, the influence of the UNAM was in both directions: the creation of academic bodies analogous to the CD, the CNME, and the CISE, and the extension of the academic discussion about the teaching-learning issue through the autonomous universities in the states (PV27, PL36). According to a number of analysts, this process can be viewed as an illustrative example of the academic dynamic of the National University when influencing the

autonomous universities. It usually reflects the interaction of the academics in the UNAM and was, therefore, a multi-faceted approach which did not make, in practice, autonomous universities in the states into simple copies of the National University (PL31, CL13, CL33, CL29, PL35, PL36).

The process of reform in the UNAM also included planning concerns. They can be seen in the creation of a planning unit in the mid 1960s. It had the main purpose of managing information and conducting strategic studies (*estudios especiales*) to support systematically the actions of the reform in accordance with the aims of the University (Solana, 1970). This planning commission was set up along with some other bodies related to funding and budgeting, norms and regulations, administrative reform, and qualitative academic issues (Llarena, 1980).

The establishment of a planning body in the UNAM was significant because of its influence on university planning generally. It was the first reported instance of an Institutional Planning Unit (UIP) in the university sector (Llarena, 1980, Velázquez, 1982), and its characteristics were disseminated through the Interinstitutional Programme of Academic Collaboration (PCAI) of the UNAM (CL33). An idea of Institutional Planning Units was incorporated as a constituent part of SiNaPPES' mechanism at an institutional level. The main tasks (information management and special studies) of the UIP in the UNAM can also be seen behind the functions of the UIP model later promoted by the CONPES,which has been reported in the preceding chapter.

The planning unit of the UNAM was first created in the Division of Scientific Research (*Coordinación de la Investigación Científica*) in the University in the mid 1960s. This Division is related to hard-pure and hard-applied disciplines such as Physics,

Maths, Biology, and Engineering. However, the studies produced by the planning unit were also used by the Division of Research in Humanities (_Coordinación de la Investigación en Humanidades_). In this sense, the academics of both divisions were supporting the existence and functions of this unit (CL33). A planning unit was later incorporated in the directorate of the UNAM in the first half of the 1970s, and the formation of planning bodies was, afterwards, encouraged all throughout the large National University during the second half of the 1970s and the 1980s (CL33).

At the time the planning unit was established in the UNAM's directorate, its members included three senior academic staff, "two of them holding a PhD in Systems and the other one a PhD in Sociology" (CL33). There were also twelve junior staff from disciplines related to Maths, Actuarial Studies, Public Administration, Psychology, Political Science and Sociology. A similar "inter-disciplinary membership in the UIP" (CL33) has been maintained in the planning body since that time.

More generally, the UIP, has been influential in the National University, mainly in relation to both the process of information management and the production of strategic studies (CL33). However, the influence and priorities of the UIP have fluctuated over time, and this could be related to the disciplinary approaches and priorities of the academics appointed to the UNAM directorate. For example, in the second half of the 1960s the UIP contribution to the organisation of university information into a systematic process was a priority. An important outcome of this was the forecasting of student demand which universities were to face during the 1970s. This study was provided to the different academic teams participating in the reform of the university, for consideration in preparing their proposals. The work of the UIP was largely supported by the directorate of the University (academics related to Engineering) (CL33).

The presence of the UIP was not so noticeable during 1971 and 1972; in those years planning activities were concentrated on the General Secretariat of the UNAM because of its role in the implementation of the CCH proposal. However the UIP became stronger again after 1972, and it was very much involved in the process of implementation of the ENEPs. Most of the detailed work of this project, such as the forecast of student demand, the structure and range of degrees to be offered, and the stages of implementation of the ENEPs, was carried out in the UIP (Llarena, 1980).

This strengthened involvement of the UIP in the first half of the 1970s can be related to the appointment of academics from the Division of Scientific Research to the directorate of the UNAM in 1972. They had earlier supported the creation of the UIP in that Division, and established the UIP in the directorate of the UNAM, where it has remained since. The UIP was to support their proposal for the creation of the ENEPs (CL33).

An issue to be highlighted at this stage is the one concerned with the different perspectives of the academics and their priorities in the reform of the National University. Most of their views supported the creation - and were in turn supported by - the Institutional Planning Unit (UIP) rather than a normative 'static plan' (Solana, 1970). It is now useful to review how similar processes of academic participation, have occurred in the new universities and how planning concerns have emerged there.

7.4. University reform and the new universities.

Six new universities were created between 1973 and 1975, one in Mexico City and five throughout the rest of the country. They were given characteristics which

attempted to create a model of university - different from that of the UNAM - with the purpose of modifying the higher education institutional pattern (CV14) and the concentration of its provision (PL18), improving the quality of its services (CL13, CV16), and making innovations in its operation (PV31, PL38), in order to improve the contribution of autonomous universities to the needs of Mexican society, as well as to increase the efficiency of university administration (CL34).

These goals of university reform and expansion were, for the academics in the universities, an opportunity to extend and increase their numbers and their accumulated experience (CONPES, 1981d). The newly created universities represented an opportunity for both managing innovation and further developing an academic career (e.g. CL13). A number of academics were involved in the process. The main features of this participation of academics in the new universities can be viewed through the examination of two of them, the Metropolitan Autonomous University (UAM) in Mexico City, and the Autonomous University of *Aguascalientes* (UAA) in the State of *Aguascalientes*. There is a widely held view that these are the best examples illustrating the aims of the Mexican higher education reform at that time (Castrejón, 1976, Guevara, 1985, González & Marquiz, 1984).

For the academics of the UNAM, whose aims were to contribute to university reform, the creation of new universities, mainly the one in Mexico City became a central aim. A number of analysts consider that the establishment of the new universities was supported by the National University in that the authorities of the UNAM agreed not to increase its enrolment nor to enlarge its main campus: the University City. The purpose in the creation of the ENEPs was to disperse the UNAM' students from the University City; this "should also be seen as the contribution of the UNAM to the creation of the Metropolitan Autonomous University in Mexico City (Llarena, 1980).

Due to different academic views, "this agreement was changed" later on, and the National University still increased its enrolment a little more" (CV20); this was done by accepting new students in the newly created ENEPs. Nonetheless, between the late 1960s and the 1980s, the National University's participation in the total enrolment of students decreased from more than 50 per cent to less than 25 per cent respectively, which also reflected the enlargement of the universities in the states.

7.4.1. The Metropolitan Autonomous University.

The Metropolitan University (UAM) was created in Mexico City in 1974 as a consequence of the aims of the higher education reform in the 1970s. It foundation as an autonomous institution was decreed by the National Congress (COPLAN, 1975).

Since academic interdiscipline was an aim of the model of the Metropolitan University, it structure was organised on the basis of academic departments which would be, in turn, grouped into four academic divisions according to a 'new epistemological definition of areas of knowledge' (De La Garza, 1990). The attempt was to improve the experience of isolated faculties such as those of the National University (PL38). These four divisions were: i) Basic Sciences and Engineering, ii) Social Sciences and Humanities, iii) Sciences and Arts for Design, and iv) Biological and Health related Sciences. The operation of the four divisions was to be organised in three campuses: *Azcapotzalco*, *Iztapalapa*, and *Xochimilco*; each one comprising three of the four academic divisions "to maintain an inter-disciplinary balance" (CL13). There are a Rector and an Academic Council (*Consejo Académico*) for each campus and a General Rector and a Senate (*Colegio Académico*) for the University on the whole (Barquín & González, 1983).

The Metropolitan University was intended to be largely staffed by full time academics committed to research and teaching, instead of having a majority of part time teachers, and a minority of full time researchers, usually isolated from each other, which was the experience of most Mexican universities (PL38). The successful development of the UAM model required the participation of experienced academics to coordinate and manage the new institution. Several efforts were made to make the project attractive to these academics (CV14). The new university in Mexico City should provide an expanded academic forum which in the National University was already occupied by academics who had been there for a long time (CL13, PV31, PL38).

Notwithstanding the fact that the actual proposal for the creation of the UAM was formally presented by ANUIES, the design of the Metropolitan University can be plausibly related to the proposal for a new university which emerged within the process of reform in the UNAM. In fact, the participation of academics from the National University in the design of the Metropolitan University was significant (CL13, PV31, PL38, CL28). For these academics the UAM was an opportunity to further develop an academic career. The personal versions of three interviewed academics about these circumstances are illustrative:

"You had to wait until the old professor died or retired, in order to be able to do something in your own, even similar to what the old professor was doing. The Metropolitan University was an opportunity for our academic careers and development" (PV31).

"You know how academic groups are formed on the basis of different disciplines and interests in the universities, and how they respect each other.

You have to be in one of them if you want to pursue a career in your field; the UAM was the golden opportunity for some of us who had already closed these opportunities in the UNAM" (PL38).

It was the opportunity to design a new model of university which in the bureaucratic UNAM had been shown as practically impossible" (CL13, PV31, PL38).

Academics and professionals from the DGCE in the Ministry strongly supported the idea of a new model of university, and also participated in the process of designing the UAM. Nevertheless, "its implementation was left in the hands of the academics who were going to be there and manage the Metropolitan University, rather than being given to a group of professionals of the DGCE" (CL28). The prominent academics who participated in the creation of the UAM from the beginning were related to both the Institute of Engineering and the Division of Postgraduate Studies of the Faculty of Engineering of the National University. They were joined almost immediately by academics related with both the Institute of Physics and the Mexican Society of Physics; and later followed by academics from Health Sciences and related to the Panamerican Health Organisation (CL13, CV14, PL38).

It may be noted that not all the academics who were invited to join the project of the UAM were strongly convinced about the future academic performance of the Metropolitan University, nor about the convenience of moving their academic careers away from the National University. "In some cases it was very difficult to convince some of the most reputable academics, such as those in Humanities, that it was worthwhile to join the UAM" (CV14). This mainly happened when they already had a stable, and some times promising, academic career in the National University. On the

other hand, in some cases it was possible to integrate a complete group of young researchers in the UAM. This, for example, was the case of a group of approximately fifteen research staff from the Faculty of Chemical Engineering of the UNAM who considered the UAM an academic challenge. They went to *Iztapalapa*, as the Engineers who initiated the project concentrated in *Azcapotzalco*.In their turn, Health related academics concentrated in *Xochimilco* (CL13, PV31).

The academic divisions of the new university held, to some extent, their academic/disciplinary interests and, despite the expected balance among the areas of knowledge corresponding to the academic divisions of the UAM, one campus became stronger in Engineering, another in Basic Sciences, and the third one in Health related Sciences. In the words of one interviewee, "that was the balance achieved among academics of different fields of study, which sometimes is difficult to maintain" (CL13. Also PL38). Thus, in terms of academic interaction, it can be said that the creation of the Metropolitan University was coordinated by academics belonging to disciplinary groups already in existence, most of them coming from the National University. In the end they seem to have kept the balance between their views and interests by concentrating in different campuses of the UAM.

One success of the Metropolitan University in relation to the autonomous universities in the states has been that of providing 'another academic institution as a reference, rather than the influential UNAM alone on the scene' (CL29, CL34, PL36). Its presence increased the "inter-institutional collaboration of universities in Mexico City with the universities in the states" (CL29). The academic features of the Metropolitan University became influential in the new universities which were created at that time (CL29). According to some views this is the case of the

Autonomous University of _Aguascalientes_ (UAA) which was not an exception despite its claims to originality (Porter, 1988).

7.4.2. The Autonomous University of _Aguascalientes_.

The University of _Aguascalientes_, in the state of the same name, was created in 1974, also with the aim of modernisation in terms of the criteria of the university reform in the 1970s. It was created as an autonomous institution by a decree of the Congress of this state. The model for this university was designed by scholars and professionals who had graduated in the former local Institute of Science and Technology. Most of these academics and professionals had followed postgraduate studies at the National University. The scholars also held academic credentials from institutions abroad, whereas the local professionals were "linked to local groups of interests" to which the success of the university, might be also related (Porter, 1988). Academics of this university claim they searched for "alternative and meaningful university experiences, even outside the country, to select and design the model of the university" (CL34). At the same time, local professionals met the President to ask for financial support for the project to create the new university (Ornelas, 1984).

The UAA was organised in a single campus, under an analogous departmental pattern to that of the Metropolitan University. In this case, however, there was not a clear interaction of academic groups already in existence. Under these circumstances it has been claimed that the authorities of the university have been able to maintain a common view about the aims of the UAA. This has provided this university with a favourable environment for its stable development (PL18). It is thought that this stability has enabled the UAA to claim having a "normative-rational model of higher education planning" which is formally included in its constitution (CL11).

Alternatively, some analysts have argued that the Autonomous University of _Aguascalientes_ mirrors the technical-rational model of planning because the representatives of top management imposed the basic values and targets of the institution on the faculty. These general values had to be made operational through a normative model. On these conditions a technical-rational model of planning was possible because of the control of the authorities over potential conflict between the members of the university. It was this control which produced consensus (e.g. Porter, 1988, Ornelas, 1984), and in this way decisions were considered to be the outcomes of a linear process in which several alternatives and their effects and forecast were analysed to choose the optimum one (through a process of organisational development according to Martínez Rizo, _et al_, 1984).

There is a third view which claims that behind this formal consensus, some academic groups do not have the same strength in the decision making process as other 'discipline-bearing groups' have in the university. The former "have not learnt how to conduct themselves well in the negotiation process" which occurs in the university (PL37). Thus there is a kind of top-down controlled balance of interests among the different academic views rather than consensus in the university (Porter, 1988). The last condition flared up, for example, in the process of appointing a rector in the mid 1980s. Academics of Medical sciences pressed for the re-appointment of a medical doctor as a rector, and they succeeded, although the unwritten rule was that successive rectors should not be chosen from the same discipline. A similar problem had occurred to the academics of economics and administration, and they had accepted the no-reappointment of their candidates (CL11). In the words of an interviewee "These circumstances made it difficult to keep the balance among academic groups, and the different interests which have emerged while managing the institution"

(CL34). For this view it is relevant to notice that the first director of planning, who has strongly sustained the technical model of planning, has not been appointed rector although he has been a candidate a least twice (Porter, 1988).

In relation to the planned design of the UAA, there are also some different considerations about its formal claims to technical rationality and originality. Some academic authorities claim that the design of the UAA, its path of development, and even its model of planning were decided after various academic models were considered, and the most appropriate to their purposes and local circumstances was chosen (Martínez Rizo *et al*, 1984). On the other side of this debate there are, nevertheless, the claims of some analysts which point to a strong influence of the Metropolitan Autonomous University in the design of the University of *Aguascalientes* and its departmental structure (Porter, 1988); and also the influence of the UNAM's academics in its planning and curicula, "as is the case of Economics" (CL29). By trying to ignore these influences, the academic centres which group the departments in the UAA, became isolated from each other in the same way as the UNAM's faculties (CL29). The "technical and negotiation trends", and the tendency of bureaucratization in its planning process are not too different from other autonomous universities (CL21); the "main advantage of the University of *Aguascalientes* is its small size, and the fact of being a new university" (CL29).

7.4.3. Planning concerns in the new universities.

Since their creation, both universities the UAM and the UAA, have been clearly concerned with university planning (CL13, CV16). In the Metropolitan University planning was mainly promoted by academics from Engineering. It was seen as a convenient way of supporting the interaction between different academic groups

holding disciplinary interests, perspectives and priorities in the management of the institution (CL13). It was reported earlier in this chapter that Engineering-related academics concentrated in the campus of *Azcapotzalco*, and became relatively stronger than the discipline-bearing groups of the other two academic divisions (Social Sciences and Humanities, and Sciences and Arts for Design).

It is in this campus that a UIP was first created in 1974 (when its operation began). The creation of the UIP, in fact, was paralleled by the creation of a similar body concerned with teaching-learning issues and academic development; both have remained in existence since that time (De la Garza, 1990). The UIP was assigned - similarly to the UNAM's - with two main functions: information management, and strategic studies (*estudios especiales*). The first function mainly involved forecast of student demand and graduation, enrolment distribution according to the range of degrees offered, and the general data of academic staff. In its turn, the second function mainly involved analysis and evaluation of the academic-administrative structure of the UAM model, the range and structure of the degrees, and the assessment of proposals for innovation emerging from the academics in the UAM. The general purpose of the UIP was to inform the different analyses and proposals of the academics for the development of the UAM model, rather than supporting only the proposals of its authorities. (COPLAN, 1975a).

During the second half of the 1970s, the Engineering-related academics of *Azcapotzalco* were appointed to the General Rectorate of the UAM, and a general planning unit was created for the UAM as a whole, with similar characteristics to the UIP model of the campus of *Azcapotzalco* (DIPLAN, 1976). Under these circumstances, similar UIPs were created in the other two campuses of the UAM, *Iztapalapa* and *Xochimilco* (CL13). In a general perspective, the UIPs have

maintained their initial features. However, in the general UIP of the UAM, a normative emphasis on planning was clearly laid in the early 1980s, when academics related to Humanities and Social Sciences were appointed to the General Rectorate of the UAM (Marquis, 1982).

It is worth noting that planning in the UAM was devised to support the interaction of the academics, rather than to establish a top-down technical model of management for the development of the university (COPLAN, 1975a). However, the contribution of the UIP to the organisation and management of information processes was expected to produce "better informed decisions to encourage institutional development" (COPLAN, 1975a p. 2). For example, one of the initial tasks of the UIP in *Azcapotzalco* was to produce a model of growth for the UAM in general, and for the campus of *Azcapotzalco* in particular. The purpose of such a model was to inform the discussion of the academic community of the UAM about this issue (COPLAN, 1975b). To serve both this purpose and the interdisciplinary goal of the university, the membership of the UIP was made up of academics related to Systems Theory, Economics, Sociology and Administration; and a similar interdisciplinary membership has remained ever since (COPLAN, 1975a, López & Martínez, 1980). It is plausible to relate these characteristics of planning both to the interdisciplinary aim of the university based on a close relationship between research and teaching, and to the disciplinary interaction of interests and views of its academics. Behind these interdisciplinary aims of the university, there was the purpose of establishing a dynamic institution, able to adapt rapidly to the changing socio-economic circumstances which were the challenge to the country and its universities (CL13, CV16).

As far as the University of _Aguascalientes_ is concerned, a planning model was conceived since it was designed by the committee of professionals and academics involved in its creation. The first authorities of the university implemented the planning practice on a top-down basis; this was to be a normative model for the organisation of the university, and the means to manage it efficiently (Porter, 1988). Furthermore, planning and an institutional plan of development were formally defined in its constitution as to be undertaken for the management of the university (UAA, 1983). The director of planning reports the following steps in the process: i) definition of the philosophy of the institution, ii) collection of necessary data to do a diagnosis, iii) elaboration of the diagnosis and definition of external demands, and the institutional answers to them, iv) list of basic ideal objectives, v) basic programmes, vi) resources needed (PPB), vii) estimation of the benefits of programmes, viii) implementation of programmes, ix) evaluation of results (Summary from Martínez Rizo _et al_, 1984). It has been suggested, by a number of analysts that in the case of the UAA the features of its planning model put the emphasis on the technical-rational aim of an organisation according to the ideal bureaucratic model (as referred to in Chapter Two, for example), and attempted to apply it to the university (CL11, CL21, CL29).

Some analysts claim that, in relation to the UAA, the consensus regarding planning has been mostly maintained by the relationship between the Rector and the Planning Director (in accordance with the intended top-down basis of its model). It is worth noting that these top officials of the university were related to Accountancy and Educational Administration, and both strongly believed in technical planning as means for efficient administration (CL11, CL21, CL34). The following rector also supported planning and reinforced the position of the Director of Planning and the UIP which, in some views, was already at the centre of the dynamics of the institution

(e.g. Porter, 1988). Under these circumstances, the membership of the UIP included academics mainly related to Administration, Accountancy and Systems Theory, and It has not varied since that time (CL21).

In the early 1980s a new director of planning was appointed; he was a former member of the UIP and himself an administrator. This movement paralleled the appointment of a Lawyer as a Rector who also believed in planning as a normative frame for the institution. By this time, however, the formation of disciplinary groups in the academic departments, and the subsequent development of their vested interests, started to challenge the administrative hierarchy and rigidity of the process (Porter, 1988. Also CL21). Notwithstanding the emergence of this variety of academic interests in the UAA, a basic consensus, enough to support a general approach of technical planning, remained until the end of the period of analysis (CL11, PL18). This control and conciliation of interests allowed a planning process which enabled the UAA: (Porter, 1988)

i) to do programming,

ii) to maintain, to some extent, homogeneity of academic views related to the aims of the university,

iii) to forecast the kind of graduates to be incorporated into the local labour market, and to conduct cost-benefit analysis.

Accordingly, the planning-related academics of the UAA claimed that it was in this university where the first Institutional Plan (PIDES) was completed, and in which the PIDES is also evaluated and updated systematically (CL34).

At this stage we have seen that both the UAM and the UAA, have been concerned with university planning, have established UIPs from the moment of their creation, and both UIPs have been in existence until the present. However, the planning of these universities have emerged and developed differently. Planning can be viewed in the UAM as supporting the interaction of its academics in the management of the university in a bottom-up perspective; whereas in the UAA planning was conceived as the technical means to manage the university as a rational organisation, on a top-down basis, in accordance with previously determined targets. In this way the planning model in the UAA emphasised the production of a plan, its implementation and evaluation. While the planning model of the UAM emphasised the production of strategic studies which would enrich the academic interaction towards the management of the university. It could be said that both concerns were reflected also in the membership of the UIPs. In the UAA the UIP members had been mainly related to administration and systems. In the UAM, in its turn, the UIP membership has maintained an interdisciplinary approach.

7.5. The General Directorate of Educational Coordination.

Given the consideration that higher education planning was mainly a concern of universities (ANUIES, 1979, Arizmendi, 1990, De La Garza, 1990), the emphases of the formal history of SiNaPPES do not take into account the higher education planning concerns and actions of the General Directorate of Educational Coordination (DGCE). These were related to the autonomous universities and, in the end, promoted and carried out, between 1971 and 1976, by the academics incorporated into this office of the Ministry of Education.

7.5.1. University reform and the DGCE.

The preceding sections of this chapter have evaluated the proposition that different academic perspectives could be distinguished in the process of the reform of the autonomous universities, independently of the way they differed from the governmental preferences. This was the case of the CCH and ENEP proposals in the National University, the creation of new universities, and the enlargement and innovation of autonomous universities in the states. In this sense, all these different paths of academic reform and innovation in autonomous universities were supported, in the end, by public funds provided for them.

The point needs also to be made that the Federal Government was itself interested in the reform of the autonomous universities, and that was why the DGCE was created in the Ministry of Education (SEP) in 1971 to support financially the reform and expansion of higher education. (CL28). The main task for the General Directorate of Higher Education Coordination (DGCE) created in the Ministry of Education (SEP) was to be the channel of provision for extra funds directed to the autonomous universities. The Director General of DGCE had direct communication with the President (Latapí, 1982), although the Minister was also informed about the agreements and the President's instructions on the matter (CL28). Because of both the direct communication of the DGCE director with the Presidency (CL28), and the incorporation of academics into this office (PL22), the operation of the DGCE may be viewed as relatively autonomous in relation to the administrative environment of the Ministry (CV14, PL18, PL37).

Behind this description, there seems to be conciliation of interests within a kind of partnership between the autonomous universities and the Federal Government.

However, the point to highlight here is that of the participation of academics, and their involvement in planning, even in the DGCE which was an office in the Ministry.

7.5.2. Academics in the DGCE.

The Director General appointed to the DGCE, was the former Rector of the Autonomous University of *Guerrero*. He had been, as a Rector, President of the National Assembly of ANUIES in 1971. In that Assembly he complained in formal terms to the government of its lack of financial support for public autonomous universities which were undergoing processes of expansion and reform. The opportunity for innovation in academic activities would improve their contribution to national prosperity and the leadership of the country, and more funds were needed to fulfil such a commitment. "The President of Mexico was present in the Assembly and seemed to be sympathetic to such a formal complaint in the ANUIES' forum" (CL28). Some academics considered that the complaint of the Rector, as President of ANUIES' assembly, and the attitude of the President of Mexico to it, were the reasons behind the appointment of the Rector to the DGCE.

As haS been pointed out already, there were different views among academics about the paths of development the autonomous universities should follow. In the event the Federal Government supported the development of public autonomous universities through all of these paths: the process of reform of the UNAM, the creation of new universities, and the renovation of the universities in the states. The DGCE was created to be the funding channel of public resources for all these purposes.

So far as our discussion is concerned, the DGCE in the Ministry of Education was "mainly staffed by academics and academically related professionals" (CL28, PL22).

There were approximately 20 staff members of the DGCE from which 8 were academics who went there from the autonomous universities in the states; the other 12 were young graduates mainly from the National University. In terms of disciplinary background, they came from Economics, Maths, Sociology, Psychology, and Law. There were also a few former officials from the Ministry, who were "directed to administrative duties by the Director who, himself, has always been very committed to academic concerns" (PL22).

7.5.3. Higher education concerns in the DGCE.

The DGCE directed several planning initiatives aimed at public universities. In the views of the academics in the DGCE, the main concern of the Director was to maintain a small team of academics and professionals from different disciplines (PL22). The clear purpose, they claimed, "was to remain a small group instead of a large bureaucratic one as was common in the Ministry of Education. We [DGCE's academics] could then, be rather productive" (CV14).

In their own words, the commitments to planning of these academics were expressed as follows: "we brought with us the different perspectives which had been developed on educational planning; written work from Onushkin to Habermas" (CV14). "Our purpose was to promote efficiency and to encourage planning processes (CL28). The "produced reports of them made the DGCE more influential" (PL22). We looked closely at recent higher education reforms in other countries such as France, England, Germany, and of course The United States" (CL28). For example, "our contribution to the design of the Metropolitan Autonomous University was influenced by the Sussex experience. with which we were particularly impressed" (CV14).

A central concern of the DGCE was forecasting social demand for higher education as a main policy issue of the 1970s. The DGCE also supported the development of physical facilities in universities, in order to improve their capacity and quality (PL18, CV14, CV16, CL21). Accordingly the DGCE encouraged studies on the departmental organisation of universities and promoted the establishment of postgraduate courses in education. It also supported autonomous universities in the appointment of full time academics, in order to encourage a close relationship between teaching and research (CL21).

Specifically related to planning issues, universities were given the support of the DGCE to make institutional self-diagnoses (Arizmendi, 1990); "we encouraged Universities to self-diagnoses as the starting point of planning" (CV14). Academics and professionals in the DGCE conducted studies on particular planning issues such as cost-benefit analysis and manpower planning (CV14), students' migration in higher education, and a national diagnosis of educational research (CL28).

In relation to higher education funding, "we requested universities to propose funding priorities for themselves and established a major financial criterion for the allocation of university funding based on a simple distinction; the provision of the ordinary budget, and an extraordinary one to be provided according to established priorities; this was indeed strategic planning" (CV14). In fact this practice modified the former style of providing funds on the basis of enrolment figures and the previous budget history (CV16, PL18). These new criteria are still in practice.

Since the DGCE was the channel of extra public funds for universities after a period of restricted funds, the DGCE became a major influence on the autonomous universities between 1971 and 1976. ANUIES reaction was that it was facing a "kind

of unfair competition" (CL21) from the DGCE influence on higher education coordination. Interest in the efficiency of higher education planning was shared by both agencies (CL21). However, as a result of their differences, the DGCE had a critical view of ANUIES claiming that its lack of efficiency "had been overcome by the DGCE" (CV14), giving the latter, between 1971 and 1976, a better position to influence the practice of higher education planning directed towards the autonomous universities in the states (CL21, CV14).

The view of some of the academics in the DGCE was that "the Federal Government was not happy with the efficiency shown by ANUIES in the process of the university reform" (CV14), and that was the reason for the creation of the DGCE in the Ministry of Education, because the DGCE "could provide a more efficient commitment to higher education reform, in accordance with the purposes of the Federal Government (CV14). There was, nevertheless, the view which claimed that the DGCE, in parallel to technical planning, also encouraged non-technical negotiations with the universities in the states, in order to maintain its influence. In the end, this attitude "was no different from the style its Director criticised in ANUIES at that time" (PL37).

The criticisms of ANUIES made by the DGCE were explicit, and it was said that these discrepancies were a reason for not appointing the Director General of DGCE as General Executive Secretary of ANUIES (CL21), notwithstanding the fact that he was a former Rector and a "well informed planner in that period" (CL21). Furthermore, there was also the strong consideration that the Director General of the DGCE, as an academic and a former rector, was "too far over on the governmental side" for the academics' liking (CL21, PV31, CV16, PL22, CV23).

Differences between these two agencies with regard to the planning of higher education cannot be viewed as deep ones. Both of them may be related to the technical-normative approach which has already been discussed. However, the academics of the DGCE stressed the use of planning techniques, whereas the academics of ANUIES emphasised its normative aspect. On the other hand, what is useful to highlight here for the purposes of our discussion is the issue that there were academics on both sides of the fence, and their differences can be related to their different academic views and interests.

In the case of the DGCE office, technical planning concerns were mainly supported by the views of academics from the hard-pure and hard-applied disciplines, such as Biology and Economics (CL13), whereas in ANUIES the view of the "Social Scientists was prominent" (CL21). This was also shown for example, in relation to the creation of the Metropolitan Autonomous University. There was a view which claimed that mainly the academics in the DGCE "designed the Metropolitan Autonomous University" (CV16, CL28), and tended to undermine the participation of Engineers (CV16). An alternative view emphasised that the Engineering-related academics were, in fact, the ones who started the project of the UAM (CL13, CL33). This alternative view, on the contrary, apparently undermined the participation of the academics from the DGCE in its foundation. It could be suggested that it was a conflict of academic interests behind the issue. The words of an interviewee, related to the creation of the UAM, were illustrative: "it was better to leave the establishment of the UAM to the academics already involved in its creation, rather than to the professional-academics of the DGCE" (CL28).

The prominent financial role of the DGCE in the period of expansion of higher education made this office influential for the autonomous universities. It could be

said that the operation of the DGCE challenged both the influence of the UNAM in autonomous universities, and the advisory role to the government of ANUIES during the early 1970s. This challenge, however, can be better seen as an expression of disciplinary differences between academics than anything else. Furthermore, the challenge highlighted rather than diminished the participation of academics in higher education policy-planning and the different attitudes they had towards this process. In this sense, their participation in the coordination of universities was strengthened and this may be related to the creation and establishment of SiNaPPES.

7.6. The participation of the academics in the creation and establishment of SiNaPPES.

The alternative narrative of SiNaPPES has been following the participation of academics in the planning and reform of higher education. This has been related to the pronouncements of the 1970 National Seminar of University Planning organised in the National University by ANUIES and the UNAM. It has been shown that it was in this Seminar that both a dynamic national system of university planning, and a national plan of higher education were proposed by the participants; among them the General Secretaries of the UNAM and ANUIES were prominent.

In 1978, when SiNaPPES was created, it was a previous General Secretary of the UNAM who - as Minister in 1978 - strongly supported the proposed creation of the planning system. At the same time, a former Executive General Secretary of ANUIES, was the Director General of Higher Education, appointed to the Ministry of Education in 1978. He could therefore also take further the request of other

academic views for a higher education plan (Rangel Guerra, 1970). The PNES was to be produced through the operation of SiNaPPES (ANUIES, 1979).

Academics participating in the 1970 Seminar emphasised the importance of their participation in the reform and development of their universities (Solana, 1970). An analogous emphasis was expressed in 1978, by the new Minister, about the necessary participation of the universities in their planning (ANUIES, 1979). It has been reported that an illustrative example of this participation is the way in which the academics from the UNAM were prominent in the reform and expansion of the autonomous universities. From this starting point in the UNAM, the participation of academics has been demonstrated through the universities and their related bodies in the process, in the creation of new universities, particularly the UAM, and in the programmes promoted by the UNAM itself and ANUIES. This academic participation even reached the DGCE in the Ministry.

The university reform has also been related to the expansion of academic territories and the dissemination of the different views and interests of the academics. The creation and enlargement of autonomous universities constituted these new territories which were occupied by discipline-bearing groups. Notwithstanding that the process of expansion and dispersion of research activities from the universities in Mexico City had not been as rapid as the deconcentration of the enrolment of students, mainly because the development of new research groups has been taking longer, an analogous process of dispersion has also been on its way. (Ortega, 1982). In the end, these expanded conditions had provided the space, through jobs and promotion opportunities, for the academics to express both their agreements and their differences.

Thus in 1978, at the time of its creation, SiNaPPES had to deal with an expanded and diversified university scene for policy-planning purposes. This was different from the one in 1970 when the creation of a planning mechanism had been initially proposed. There were new and enlarged universities, and they had established different priorities and planning practices for their development. It could be said that the establishment of SiNaPPES provided the universities with the formal means for the interaction of their planning concerns and priorities.

In accordance with our alternative narrative of SiNaPPES, it is worth stressing that the same groups of academics, who in 1970 had proposed a system and a plan, had in 1978 the opportunity to create SiNaPPES. That is to say that, the creation of SiNaPPES can be better seen as an outcome, a by-product, of the policy process itself. During the period of analysis, the university process of coordination was a dynamic one within which academics were able to maintain their influence on the academic realm. They were prominent actors in the establishment of SiNaPPES in 1978, and have controlled its operation since then. In this perspective, the creation of SiNaPPES can be seen as an attempt of the academics to maintain their influential participation in the process and to cope with the 'political requirement' of higher education planning that the different interests of the academics should be brought together to the process. As was said in the beginning of the chapter, such a requirement has already been expressed in the 1970 National Seminar as a condition of planning success.

7.6.1. University expansion and dissemination of planning.

It has been reported that different academic working groups inside the National University, proposed different projects for its reform and development. Priorities

in the directorate of the UNAM, which were sustained by academics from the Social Sciences, supported the creation of the CCH in 1971. They, however, resigned in 1972, and their priorities of reform were replaced by those of the new Rectorate (from 1972 to 1980) supporting the creation of the ENEPs and the City of Research. These proposals looked towards the separation of both the preparatory and the postgraduate levels of higher education from the professional one. Their view was that the postgraduate level was to be linked with research, in order to improve the academic quality of the University. Academics in the fields of Physics, Biochemistry and other hard-pure and hard-applied disciplines (Becher, 1989), were prominent proponents of these proposals.

The different views and interests of the academics with regard to university reform and its planning were also expanded through their participation in the process of renewal of the autonomous universities. Their influence was important on several occasions preceding the formal creation of SiNaPPES. These were the cases of the UNAM and the UAM, and the programmes of ANUIES and the DGCE for the planning of higher education between 1971 and 1976.

As far as the new universities are concerned, it was reported that a kind of equilibrium had been achieved between the discipline-bearing groups in the UAM, as they 'occupied' the different campuses of this university. In the University of *Aguascalientes* the balanced interaction of academic groups from different disciplines had been 'controlled' to some extent by the UAA authorities. These circumstances had been reflected in the planning practices of both universities: the UIP of the UAM developed an interactive approach to planning whereas the UIP in the UAA stressed the technical characteristics in its planning model.

The involvement of Engineering-related academics of the UNAM was particularly influential in both the dissemination of university planning practices (e.g the UAM) and in the creation of SiNaPPES (CL33). These academics had also been "prominent participants within the process of reform in the UNAM (they were in its directorate until 1970)" (CL33, CL40), and also through the "innovation process in other autonomous universities" (PL40) during the late 1960s and the 1970s. For example, at the time SiNaPPES was created, "academic Engineer-colleagues of the Minister were also appointed to some under ministries namely Planning, and Culture; all of them had shared similar planning concerns since the late 1960s" (CL33). The Under Ministers maintained their academic commitment and "returned to their normal duties in the National University" at the end of their Ministerial appointments in 1982 (CL33), no doubt taking some of their planning assumptions with them.

The prominent participation of Engineering-related academics in the creation of SiNaPPES stressed the prospective element in the planning of higher education (CONPES, 1979d). This is a feature they proposed during the process of reform in the UNAM, and again through the discussion in the 1970 National Seminar of University Planning (CL33). Basically, such a feature attempted to synthesize both the historical data of such matters as enrolment and budgets, and the interests in prospective (*prospectiva*) of the academics involved in the planning process (CL33, PL40).

Academics with this kind of disciplinary background tended to view planning as a simulation game using historical data, a forecast based on it, and an attempted definition of the different interests involved (See e.g. Brunner, 1988, Lindblom 1980), rather than predicting the future beforehand (Prawda, 1985). This concern

with prospective-forecasting can be related to the dynamic characteristic of the planning mechanism which was emphasised in the 1970 Seminar and again in 1978, in the creation of SiNaPPES. Engineering-related academics, whose views influenced university planning practice, were concerned with both the interactive and the prospective-forecasting features of planning. The promotion of these characteristics supported the promotion of planning as the space for the interaction of the different views and interests of the academics.

On the other side of the national coordination of SiNaPPES was ANUIES which was itself the representative of the universities and hence the outcome of compromises between them. The ANUIES top academics' views, in terms of disciplinary bearing groups were, however, predominantly related to the Social Sciences in 1970 and 1978 (CL11, CV16, CL21). They laid emphasis on the "normative aspect of planning" (CL33), and the making of higher education plans, as protocols of action, based on aims and objectives and target setting. These emphases converged, for example, with the preoccupation of those academics in planning in the University of *Aguascalientes*. The making of plans was also, according to the formal account of SiNaPPES, a priority of the Joint Secretariat of the CONPES when establishing SiNaPPES.

There were then, at the time of the creation of SiNaPPES, academics on both sides of the partnership of the CONPES. Although they belonged to different disciplines and laid different emphases on university planning, it could be said that they came to a compromise through the establishment of SiNaPPES (the dynamic planning system) in order to produce the PNES (the normative plan). These conflict and conciliation of views and interests of the academics can be seen better through the alternative narrative of SiNaPPES, than in the formal history which sees its creation only in

relation to a smooth partnership between ANUIES and the government in which the different interests of the academics are not analysed and consensus is assumed (ANUIES, 1979).

7.6.2. The institutional and academic interaction in SiNaPPES.

As far as institutional interaction in SiNaPPES is concerned, the alternative interpretation has shown that planning practices were initially disseminated through the process of university reform itself and the Inter-University Programme (PCAI) of the National University during the 1970s. The formal history of SiNaPPES highlights the involvement of the CONPES in the establishment of the planning mechanism. Institutional Planning Units were created, and a planning culture was promoted in order to make SiNaPPES operate. However it should not be forgotten that the UIPs were already in existence (López, 1982). Thus, for the alternative narrative of SiNaPPES, the formal distinction between the creation of SiNaPPES and the starting of its operation is not as relevant as it is for its formal history. Creating SiNaPPES could be seen as formalising the means to manage the interaction of the interests of both the universities and their academics: "a dynamic system rather than a static plan" (ANUIES, 1979 p. 53, CONPES, 1979a p. 2).

The inter-university influence of the planning practices and the creation of the UIPs reached most autonomous universities during the 1970s. However some differences may be noticed between them with regard to the circumstances of their creation and the emphasis they laid on the interactive and the technical characteristics of planning. On the one hand, for example, the analysis produced in the UIPs in both the UNAM and the UAM were oriented to supporting the interaction of academics in the respective processes of reform of the UNAM (CL28) and establishment of the UAM

(CL13, PV31). In both the UNAM and the UAM, the UIP was an advisory body to the directorate (CL33).

In the National University, the UIP was created in parallel with other bodies concerned specifically with administration, norms, budgeting, and teaching-learning improvement (Llarena, 1980). As an interviewee pointed out: "most of the tasks of the planning unit consisted of specific projects directed to inform and support the academic reform and development of the UNAM" (CL33).

In the Metropolitan University, the UIP was created in parallel with the body concerned with academic development (De la Garza, 1990). The UIP was to serve the interaction between the academics who were contributing towards the 'institutional development of the UAM model' (COPLAN, 1975a). Some analysts say that this interactive "practice of planning could be related to the influence of the UNAM, or at least to its Engineering-related academics" (CL33) who took their interests in planning to the Metropolitan University. By the late 1970s, this approach was taken to the Joint Secretariat of the CONPES by the academics of the UAM who participated in this body (CL21). It has been suggested through the interviews that this Secretariat, particularly its working team, was the "corner stone' in the creation of SiNaPPES (e.g. CV12, CV16, CV23).

On the other hand, in the model of UIP of both the UAA and the CONPES, emphasis was laid on the making of higher education plans (ANUIES, 1979, Martínez Rizo *et al*, 1984), and the efficient implementation of them (CL34). It was reported in the preceding chapter how, for example, the UIP model of CONPES assigned to the planning units a whole set of planning-administrative functions in the universities in order to increase, in the end, their efficiency as organisations. It is worth noting

that the planning-related academics of the University of *Aguascalientes* have also been active participants in the processes of SiNaPPES. Their participation has remained relatively influential through the operation of SiNaPPES, and so have their concerns for efficient planning and technical models (CL11, CL34, CV16). It is relevant to note that in the UAA, the UIP was accountable to the administrative chain of command (CL34).

It was reported in the formal history that the authorities of the UNAM, who participated in the meetings of the CONPES, raised the experience of the UAA in its region as a point for the discussion of planning experiences in SiNaPPES (CONPES, 1981a). Some analysts claim that the technical concerns of planning in the UAA and the CONPES were the same (Porter, 1988). However, an alternative analysis of this issue can be mentioned. During most of the 1970s, the directorate of the National University laid the emphasis of the university reform on the improvement of both research and postgraduate studies (Llarena, 1980). These academics were related to hard-applied disciplines, such as Biology and Health sciences, and their views were supported by academics of other hard-pure disciplines such as Physics. These academics in the directorate had also been involved in the initial creation of the planning unit in the Division of Scientific Research (CL33). They also established a planning unit in the directorate of the UNAM during their term in office (Llarena, 1980). Planning had been useful in their bid to support their claims for academic excellence and priority of research. It could be said that, in their view, planning was useful as an organisational technique to support the academic criteria of excellence on a hierarchical basis in which hard-pure disciplines are at the top (CL33).

The directorate of the UAA, in its turn, also strongly supported technical planning. However, it seemed to be for different reasons. It has been remarked that the UAA

academics in planning had attempted to establish a model of rational organisation and technical planning for the university (Porter, 1988). This could also be viewed as reflecting the interests of these academics who had been from disciplines of Administration; their priorities were the rational management of the university. These academics were concerned with planning as a neutral basis for the hierarchical organisation of the university in which an academic enterprise could be pursued (Martínez Rizo *et al*, 1984).

It seems that there was a meeting point between the authorities of the UNAM and those of the UAA. Both disciplinary groups agreed to some extent on technical planning, while their disciplinary views and vested interests were different. Put in other words, the academics in the directorate of the UNAM wished to strengthen the academic criteria of excellence which met their disciplinary views, and planning seemed to be useful for these purposes (CL33). On the other side, the academics in the directorate of the UAA wished to establish administrative criteria of efficiency for the organisation of the university so that all the academics from different disciplines would be able to operate efficiently (CL34). The underlying assumption in the UNAM is the interaction of disciplinary groups and the need for the academics in the directorate to promote their views; whereas in the UAA the assumption is the neutrality of the rational organisation and its effectiveness in promoting academic work. This second assumption seems to ignore the existence of vested interests among academics.

It is worth noting that this interest in academic excellence, scientific research and postgraduate studies, also emerged in 1980, through the national meetings during the process of formulation of the 1981 PNES (CL11). Academics related to hard-pure and hard-applied disciplines demonstrated the same concern and proposed the

same priorities. In the view of some interviewees, that was why two of the 6 national meetings of the PNES' process, were related specifically to research and postgraduate studies (PV15). As is reported in Chapter Six, the other four meetings were concerned with planning, information, normative concerns and promotion of the culture. A distinguished academic from Economics, who participated in the meetings, raised this issue: the meetings "seemed to be preferentially concerned with the Natural and Exact sciences, rather than with the Social Sciences, although it had been emphasised in the meetings that science and technology should serve the nation by contributing to improve its socio-economic conditions" (Urquidi, 1982 p. 33). Another analysis suggests that the problems were the influential views of the participants in the meetings representing the universities with more research experience and prestige (Ortega, 1982), and the priority of technological development of the country which laid additional emphasis on the hard and hard-applied disciplines (Moya, 1982).

Insofar as the above concerns were reflected in planning approaches, it has been said that the model of the UAA was considered illustrative of technical planning concerns (Porter, 1988), whereas the other two, the UNAM and the UAM's, mainly reflected their interest in the interactive characteristics university planning. For some analysts the latter two represent, on the one hand, a rational and, on the other, a political model of planning (Bolaños, 1986). However, our analysis in Chapter Two has already considered the co-existence of the technical and the interactive characteristics as elements of the process of higher education planning. This is what reflects, we have suggested, its specific "political nature".

Summarising the discussion of this section, it can be argued that, according to the formal history of SiNaPPES, the promotion of the UIP model of the CONPES had the

underlying aim of adjusting the characteristics of the UIPs to its model and did not completely succeed in its purpose. However, in the alternative interpretation both the model of the CONPES and the existing planning practice and models of other UIPs are considered as the expression of the different preoccupations of the academics and their disciplinary views in relation with planning characteristics: interactive and technical, in the policy process. These have already been observed behind the partnership in the formal creation of SiNaPPES. In this perspective, the promotion of the CONPES model of UIP, was carried out through an interactive process within which this model was one planning practice among some others.

Looking at SiNaPPES from this alternative perspective, the planning mechanism can be seen to be working with two dynamic features: the first one was to provide higher education planning with an interactive mechanism to maintain the dynamism of its policy-planning process. The second one was to make the variety of academic interests converge on the mechanism. That is to say, that the agreement to create SiNaPPES was an agreement of academics to create an environment for an interaction of their interests.

7.6.3. Exploring the planning concerns of disciplinary views

It seems worth exploring how disciplinary views, which have been identified in the analysis, relate to the interactive and technical features of university policy-planning. Because of their involvement in the process, it has been possible to distinguish the participation of academics related to the academic fields of hard-applied disciplines such as Engineering, Social Sciences, and hard-pure disciplines such as Physics (Becher, 1989).

The above-mentioned disciplinary groups were initially observed in the process of reform of the UNAM. In this case, although an open struggle was not noticed, differences between them were identified. Whereas the interests of academics of the Social sciences supported the CCH proposal, the priorities of academics of hard-pure and hard-applied disciplines supported alternative projects of reform such as the ENEPs and the City of Research. In the case of the UAM, it had been observed that these discipline-bearing groups maintained a kind of balance in their interaction by occupying the different campuses of this university.

During 1971-1976 a struggle was observed between the academic views of the Social sciences in ANUIES, and those of the hard-pure and hard-applied disciplines which were dominant in the DGCE. The conflict stopped when the DGCE finished its operation. In its turn, conciliation of interests between academics of the Social sciences and Engineering dealt with the establishment of SiNaPPES itself. Upon this agreement, the views of the hard disciplines were incorporated into the process, as it happened through the two previously mentioned meetings when producing the PNES.

An example provided by an interviewee is illustrative of the kind of interaction between the interests and disciplinary views of academics of Engineering and Physics:

"the problem amongst the academic community is the way decisions have to be taken. For example: to appoint the Director of an Institute of Research, there are rigid views such as the ones of Physicists who believe that international publications are the most important factor to take into consideration. Many times these publications have nothing to do with urgent and current problems

of Mexico, but they are considered the most important indicator of academic success and commitment for academics of these disciplines.

On the other side there could be a candidate, an Engineer for example, who has produced a very interesting and useful technical report to deal with an urgent, real, and local problem in Mexico which has also great social importance. The report has contributed to technological advancement adapted to national circumstances, but it has not been published in an international journal.

In the end, what happens is that sometimes the 'strict' scientific view convinces the other, and sometimes it is the opposite. It is often difficult to establish criteria which are clear enough to take you automatically to the right decision" (CL13).

These academic differences and their approaches to university decision-making and planning suggest an interesting feature of the views of the Engineers, and their prominent influence in university planning and SiNaPPES (CL33). The example referred to above shows the interests of the Engineers in the application of knowledge to specific circumstances, while the Physicists value research outcomes by their contribution and diffusion according to international trends of their discipline (See e.g. Becher, 1989).

In their turn the academics from the hard-pure disciplines have maintained their concerns within a more narrow, 'scientific', approach (PV31). In this sense, there is the consideration that the fields with which these 'hard pure' disciplines are concerned, are narrow enough to have clear criteria about the topics of their interest, and the methodology to approach them (Becher, 1989). This international

framework of professional identity and academic concerns has strongly influenced these academics in Mexico (Cleaves, 1985), without, it is claimed, clarifying for them their relation to the country's specific circumstances (Urquidi, 1982).

As far as the Social Scientists' approach is concerned, it has been suggested that their commitments have been strongly related to the particularities of Mexican Society (Cleaves, 1985), and its social and political characteristics (Urquidi, 1982). These concerns have mainly been developed because of their specific interest in the historical conditions of Mexico. The Independence War in 1810-1821; but mainly the socio-economic aims and outcomes of the Revolution in the early 1910s, have been matter of analysis. Particularly constitutional and normative issues, state and socio-economic organisation (Cleaves, 1985). Illustrative examples of them are Law (Cleaves, 1985), Sociology, and Political Science (PL30, Cleaves, 1985).

The dynamic feature of SiNaPPES' functioning for autonomous universities could be related to the academic concern of Engineering, as a hard-applied discipline, to design and to establish a planning mechanism adequate to the autonomous universities in specific national circumstances. The awareness of the different interests in the process, may also be related to this dynamic characteristic of SiNaPPES.

The normative emphasis of the higher education plans and the promotion of a planning culture may be related to the views of the academics of the Social Sciences, and their concern with the specific institutions of Mexican society. The formulation of the PNES, in its turn, needed a process of participation-negotiation in which the planning culture was useful as the norm to be followed (CL11). Both the dynamism of a practice, and the negotiation under a norm, echo the interactive characteristic of planning as seen in the theoretical considerations in Chapter 2.

In their turn, academics from the hard-pure disciplines were mostly concerned, apparently in a narrow sense, with the establishment of criteria for academic development (CV16, CV20). Negotiation processes had, in their view, a political flavour and were considered a waste of time (CL11). However, planning seemed to be a useful way for them to support their views.

Summarising, it has been suggested that the creation of SiNaPPES provided the academics with a mechanism through which their views and interests could interact. In this way it was mostly related to the 'political requirement' of planning in higher education (Solana, 1970). The words of an interviewee are illustrative:

"In my view the real problem of universities was the need for their coordination, and the different perspectives they had already developed with regard to their future and how this would be pursued. The purpose behind SiNaPPES was coordination, to put together the otherwise possibly disparate views of individual universities. That is behind the methodological work in higher education planning which was done to make SiNaPPES operate, but a process of negotiation among different academic interests had always been within the mechanism, in order to keep it legitimately in operation" (CL21).

In the light of the alternative interpretation, we can suggest that the mechanism has been successful. This is further analysed through the functioning of SiNaPPES in 1983 and 1986, which is reviewed in the following chapter.

7.7. A Summary.

The alternative interpretation of SiNaPPES considers its creation in relation to its dynamic feature and the interactive characteristics of planning in higher education: the participation and management of the different interests of the academics participating within the policy-planning process.

This perspective has two major emphases: the first is related to the prominent participation of academics in the process. The second is concerned with the convergence of their views to the process of SiNaPPES. This alternative interpretation has permitted to analyse the interaction of different academic interests in the policy-planning process, including the academic participation in both sides of the SiNaPPES partnership.

This perspective regards the establishment of SiNaPPES, as an action emerging within the process of higher education coordination, a by-product action rather than a previously planned one. In this sense, the academics who expressed their planning concerns regarding autonomous universities in the 1970 National Seminar, were able to later participate in the creation and operation of SiNaPPES. In this way, this perspective recounts the participation of the academics in the major actions of reform in the coordination of public autonomous universities during the 1970s:

1) the academic reform in the National University,

2) the programmes of ANUIES, specially the National Programme of Teachers' Training,

3) the university-directed actions of the General Directorate of Educational Coordination (DGCE), and

4) the creation of new universities, specially the Metropolitan Autonomous University and the Autonomous University of *Aguascalientes*,

5) the creation and operation of SiNaPPES.

The alternative interpretation of SiNaPPES has permitted us to observe the dissemination of different views and priorities of the academics through the process of reform of autonomous universities. The planning practices in universities allowed the development of both interactive and technical concerns in planning, while the process itself has been predominantly of academic interaction. SiNaPPES became the means to incorporate into the policy process the variety of institutional and academic views which were developed through the expansion of universities.

The creation of SiNaPPES permitted a dynamic policy-planning mechanism which, conceived with interactive characteristics, provided the space of interaction-negotiation for the different views and priorities of the academics and the different planning concerns of the universities, in order to manage them in the process of policy formation which emerged from the university expansion starting in the 1970s. This is to say that this narrative lays the emphasis on the interaction rather than on consensus in the university policy-planning process. In this sense, SiNaPPES has been an effective mechanism for the academics to manage the tension emerging from the interaction of their disciplinary interests. How this interaction has been managed in 1983 and 1986 is viewed in the next chapter.

Chapter 8. **THE FUNCTIONING OF SiNaPPES. 1983 - 1986.**

Introduction.

At this stage we have reconstructed the story of SiNaPPES establishment; it aimed to be a dynamic mechanism of higher education planning, and its operation was to produce the PNES as a policy guideline. We have demonstrated the emphases in its creation and establishment regarding two interpretations of its processes. It is now convenient to consider succinctly how the operation of SiNaPPES in 1983 and 1986 is analysed in the light of both stories.

Succinctly, the formal history of SiNaPPES highlights the normative-technical characteristics of planning, from formulation to implementation, and lays the emphasis in the formal production and improvement of the PNES (CV20, CV16, PL18). Thus it has tended to see in the formulation of the PNES the signal of achievement of the process. For the formal history, the planning process was to respect the institutional autonomy and plurality of perspectives (PL18) of the universities through a participatory process. This process was to be, in turn, coordinated by a smooth partnership ANUIES-SESIC. However, it appeared that the process was not being carried out as technically as had been expected. The same highlighted diversity of views of the universities, made difficult their coordination under technical planning aims in order to reach optimal choices. Thus planning was only partially succeeding, and the planning culture needed to be promoted further.

For the purposes of our analysis at this stage, it is convenient to remember that SiNaPPES was intended to be a dynamic mechanism of policy-planning and this feature had to do with the diversity of views of the universities. Here the alternative interpretation of SiNaPPES recounts the dynamism of SiNaPPES in relation to the management of the different interests of the universities and the academics. This

interpretation lays the emphasis on the interactive characteristics of the planing process. In this way, this perspective has highlighted the participation of the academics in the policy process, and the conception and creation of SiNaPPES. It has also explored the influence of some disciplinary views within them. In this perspective, SiNaPPES has apparently succeeded insofar as the academics have been able to manage their differences, as discipline-bearing groups, through its process.

The operation of SiNaPPES, in 1983 and 1986, may be viewed in relation to these two interpretations. In 1981 the PNES was successfully produced; however, in 1983 its process showed a tension because of the limited participation of the universities in the process (CL11, CL21, CV16, CV12, PL25). Such a tension was overcome in 1986, when SiNaPPES "recovered its participatory style as a true mechanism of policy-planning for the autonomous universities (CL11, CV12, CV16, PL35).

8.1. The operation of SiNaPPES in 1981 and the PNES.

A detailed description of the process and the Plan has already been provided in the final section of Chapter 6. In order to continue our analysis it is, nevertheless, convenient to briefly recall here their main features. In the second half of 1980, at the time of completing the formal establishment of the SiNaPPES network, the PNES started to be formulated. It started by discussing the higher education issues related to five areas, namely i) operation of the substantive (teaching, research and cultural promotion), ii) normative concerns, iii) coordination, iii) development, and v) funding (CONPES, 1981d).

Institutional proposals were collected from the above-mentioned discussion and presented to six national meetings about the following topics: i) research, ii) postgraduate studies, iii) cultural promotion, iv) information, v) planning and

administration, and vi) normative concerns. The outcomes of this process were synthesized by the CONPES in the PNES which was, in turn, handed in to the 1981 National Assembly of ANUIES for approval (CONPES, 1981d).

It has been noted, also in Chapter 6, that the higher education issues in the content of the PNES have been fairly similar in 1981, 1983, and 1986. What had been different are both the emphases manifested through their process of formulation and the structure of their presentation. In 1981, the structure of the PNES highlighted four major issues: (CONPES, 1981d)

i) the state of the art in higher education planning and SiNaPPES,

ii) an overview of the socio-economic circumstances of Mexican society at the time,

iii) a perspective of higher education trends in the face of them, and

iv) a prospective view of higher education.

In brief, in 1981 the emphases were laid on: i) a balanced development of institutions and functions, ii) increasing demand of students to be faced by improving higher education quality and the university-society linkage, and iii) participation and partnership in coordination and planning. The document highlighted that, although the process needed to be improved (CONPES, 1982f), the partnership and participation in the functioning of SiNaPPES and the production of the PNES were signals of success. (CONPES, 1981d). Nevertheless, by 1983, these features came under stress.

8.2. The tension in SiNaPPES in 1983.

In 1983, an updated version of the PNES was produced through SiNaPPES. The 1983 PNES was presented into a programmatic structure which, although it included the

same 32 sets of issues of the 1981 PNES (See appendix to Chapter 6), it did not include: i) a detailed account of the state of the art of planning and SiNaPPES, not ii) a diagnosis of the situation and circumstances of Mexican society, and not also iii) the particular trends and challenges of higher education within them (CONPES, 1983, De la Garza, 1990).

The report of this 1983 PNES defined it as "an instrument for planning in higher education", a further effort "to support the academic improvement undertaken by the institutions" (CONPES, 1983 p. 6). "Extraordinary funds respecting the ordinary annual budget of public universities were to be channelled" for its operation (CONPES, 1983 p. 7). Its structure highlighted the following:

First, special emphasis was laid on the preeminence of research as the basis of higher education excellence and development. Research should be closely related to postgraduate studies. Both were considered of particular importance in the universities (CONPES, 1983, De la Garza, 1990). Consequently, the promotion of planning methodology at institutional, state, and regional level was not emphasised. Although, on the whole the contents of the 1983 PNES were the same as those in 1981, the emphasis and priorities were different.

Second, to improve higher education, research had to be improved. Those academics with doctoral degrees were considered the most appropriate for conducting research, thus the increase in the number of staff having a postgraduate degree was a priority. Research should be closely linked to teaching for its improvement. Moreover, a necessary condition for ability in science was seen in the familiarity with the language and approach of mathematics (CONPES, 1983 pp. 8-9, De la Garza, 1990 p. 78).

Third, the above priorities were to be exercised by developing a number of universities as centres of academic excellence throughout the country (PL32), particularly related to the training of academic staff (CL21) and the efficient share of research resources. These ranged from academic staff, computing services, and instruments of scientific research, to library facilities (CL11. Also De la Garza, 1990 pp. 78-79).

Fourth, the extraordinary funds of the 1983 PNES were to be provided to support specific projects of the universities which matched these concerns (CONPES, 1983). Universities were encouraged to present proposals to be financed on these priorities. However the selection of the projects was to be made in the national coordinating agency of SiNaPPES. For the formal history, this top-down planning practice was in fact a cause of great tension in SiNaPPES' operation.

It is worth to observe that this 1983 PNES was, in fact, produced by the CONPES on its own (e.g. CL11, CV12, CV16, CL21). Some analysts have suggested that this was a "top-down, deductive process" (De la Garza, 1990 p. 74) of planning, without the participation of the universities, notwithstanding that they had been called together between 1978 and 1981 (CL11, CV12, CV16, CL21. Also Villaseñor, 1989, CONPES, 1986). A number of authors have highlighted that the Under Minister to SESIC stated that the intention was for the 1983 PNES not to be only a 'collection of wills' (PL32). According to this view, the Under Minister considered that participation had become an aim in itself in SiNaPPES with no visible results because of the way in which the plans had become a mere addition of wills (e.g. PL32, CV16. Also De la Garza, 1990 p. 79). Therefore, the need was felt in SESIC to select the projects to be funded through the CONPES 'on a top-down basis' (De la Garza, 1990).

Under the above-mentioned circumstances, the main claim was that the universities were not called together through SiNaPPES as a planning mechanism (CV12, CV16, CV19, CL21). According to ANUIES' views "that was not university planning" (CV12); it was rather an "authoritarian administration of universities" (CV16) which was undermining universities' autonomy (CL21). According to this view, the updated version of the PNES was, in the end, "conceived only as a tool for the allocation of extra funds to the public universities" and not a complete planning exercise (CONPES, 1986 pp. 50-51). There was even one view which claimed that it was 'a lottery' to obtain these additional funds (PL35), since there was not enough clarity about the criteria on which funds would be allocated (beyond a general statement of intent) (De la Garza, 1990 p. 85). In terms of the formal characteristics of a plan the view was that this version of the PNES did also not include a diagnosis of higher education (De la Garza, 1990 p. 85).

For the formal history of SiNaPPES, then, the main differences of the 1983 PNES, in relation to the 1981 PNES, was the drastic constraint on the institutional participation: the "categoric establishment of central priorities" (De la Garza, 1990), and the disappearance of some of the formal aspects of the structure of a plan (CONPES, 1986). Moreover, the Ministerial side of the partnership in the CONPES became prominent, and diminished the partnership relationship with ANUIES at the National level of SiNaPPES (CV16). SESIC took over the process of establishing priorities (CV12, CV19), and also centralised the process itself (CL21, CL11, CV23). In this way, during 1984 and part of 1985, the improvement of the autonomous universities was directed according to the priorities established and practised by SESIC at the national level. (PL32, PL35, CL21).

The above-mentioned conditions brought about a great tension in the relationship SESIC-ANUIES. As the tension increased, the General Executive Secretary "was about to resign" (CL11, CV12, PL17). although "former ANUIES officials advised him to

wait until further negotiations could be carried out" (CL11). Since the formal history relates the difficult conditions of SiNaPPES mainly with the appointment of the new Under Minister to SESIC in 1983. Then, when a new Under Minister was appointed to SESIC in 1985, the tension was overcome.

8.3. The recovery of SiNaPPES in 1986.

During the second half of 1985, the autonomous universities were called together again through SiNaPPES, and in 1986 a new version of the PNES was produced. This time, its process of formulation was emphatically participatory (CONPES, 1986). In 1986, there was the participation of the UIPs in the process, and the formulation of plans at institutional level, the PIDES, to integrate the PNES. A 'group of promoters' was also put together in the Joint Secretariat of the CONPES, to encourage the functioning of the SiNaPPES network at institutional and state levels, and the promotion of the 'planning culture' (PL17, PL25). These promoters were mostly responsible for providing advice in the formulation of the institutional plans -the PIDES- and the state plans -the PEIDES- of higher education (PL17).

On this occasion, a number of specialised working groups were set up in the Joint Secretariat of the CONPES, according to the basic functions of the universities: teaching, research, and promotion of the culture. In addition there was one more related to the issues of administration and management (the 'supportive functions') (CONPES, 1986). These four working groups were integrated by 12 representatives of the universities and had the purpose of synthesizing the proposals of the UIPs and the PIDES for their respective areas (CONPES, 1986 pp. 35-37). Subsequently, the synthesized proposals which emerged from the working teams were presented for discussion, as was done in 1981, to eight regional meetings of the universities. The outcomes of these meetings were further integrated by the specialised working teams

into the 1986 PNES. Finally, the National Plan was approved by the twenty second National Assembly of ANUIES (CONPES, 1986).

The general structure of the 1986 PNES included again: i) a review of the state of the art of planning and SiNaPPES, ii) the social and economic conditions of Mexican society, iii) their influence and challenges to higher education, and iv) the principles and prospective trends facing higher education (CONPES, 1986 pp. 46-48, 55-60). A major difference in these trends in relation to those of 1981 was the expected growth of higher education enrolment: whereas in 1981 a 150 per cent increase was expected during the following decade, in 1986 this expectation was of less than 50 per cent. Thus the central trend moved from growth in 1981 to quality improvement in 1986 (CONPES, 1981d, 1986).

After the experience of 1983, the 1986 Plan also laid especial emphasis on the importance of a balanced development of both the institutions and the functions of higher education and highlighted the necessity of maintaining the participation of the universities in the process as an essential characteristic of SiNaPPES (CONPES, 1986. Also CL11, CV16, PL35).

As far as the ANUIES-SESIC partnership is concerned, this time the PNES also included a 'national strategy' regarding the preoccupations and priorities of the CONPES - as the national coordinating body of SiNaPPES - which should be promoted within the general guideline of the PNES. The central concerns regard the support to university participation in the operation of SiNaPPES, the proposal to the universities of criteria for the improvement of funding procedures, and the follow-up of the process itself (CONPES, 1986).

The PNES was indicative in character but a "norm for action" when approved by the National Assembly of ANUIES, and "fundamental" for concerted actions when, in its

turn, "ratified by governing bodies in higher education institutions". (Casillas, 1986b p.15). In the words of the Executive General Secretary of ANUIES, "Organising a system of higher education needed agreement, coordination and implementation" among its constituent institutions. Contemporary Mexico "needed agreement among higher education institutions, the government and social sectors which obtain benefits from higher education" (Casillas, 1986a. p. 19). As a policy guideline for the following decade, the purpose of the 1986 PNES as a planning instrument was "to orient higher education change in a particularly difficult stage of economic crisis of Mexican society" (CONPES, 1986 p. 46). Its central concern was "to improve the academic quality of institutions, in order to better contribute to the needs of the country and the solution of its problems" (CONPES, 1986 p. 46).

8.4. The assessment of the formal history and the constraints to planning.

According to the formal history of SiNaPPES, differences are particularly noticeable between the process in 1981 and 1986 on the one hand, and that of 1983 on the other. The period of SiNaPPES' operation, between the end of 1983 and the middle of 1985, in which institutional participation was practically stopped (PL35, CV16), was a "political parenthesis in higher education planning" (Arizmendi, 1990. p. 12). It has been linked to an authoritarian attitude of SESIC' officials (CL21), which became strengthened by the "personal strong character" of the Under Minister of SESIC (CL11, CV16). There was the view which also suggested the economic crisis of the country, because of the drop in the oil prices, as a reason for the emphasis of the Under Minister on the efficient performance of the universities. However, the widely shared claim had been that the attitude of SESIC was the obstacle - external to the universities - for the operation of SiNaPPES (e.g. CL11, CV12, CV16, CL21). In one view the crucial factor was of 'political' order because the Under Minister was "part of a political group which challenged the current team in ANUIES" (De la Garza, 1990 p. 73).

This tension between ANUIES and SESIC which had been viewed as a conflict with the government in the CONPES, was overcome when "the Minister of Education died, and time had arrived for a change in the SESIC. This was beneficial to the universities and the rest of the institutions gathered in ANUIES. Moreover, the former General Executive Secretary of ANUIES was appointed Under Minister to SESIC" (De la Garza, 1990 p. 87). Subsequently, some other academics of ANUIES were appointed to the top positions of the SESIC in 1985, and its partnership with ANUIES recovered its balance in the management of the CONPES (CV12, CV16). As a consequence the operation of SiNaPPES was set up again including the participation of the universities, and an updated version of the PNES was produced in 1986. The 'political parenthesis' was overcome and "SiNaPPES' functioning and the making of plans for higher education was reactivated". (Arizmendi, 1990 p. 13).

Under the above-mentioned circumstances, the Minister of Education (SEP) and the Secretary General Executive of ANUIES expressed "their compromise, interest, and political will" in the 1986 PNES when it was ratified by all higher education institutions (CONPES, 1986. p. 45) . Universities "had their own dynamism" and had developed a "plurality of ideologies, approaches, and theoretical-methodological perspectives" (CONPES, 1986. p. 62) . Their policy-planning process had been carried on within a "framework of mutual respect" between them and the government. (CONPES, 1986. p. 67). Thus the partnership and participatory features of the planning mechanism were taken up again in the process of formulating the 1986 version of PNES (CONPES, 1986 also CL11, CV16, CV12, CV23).

Notwithstanding the recovery of SiNaPPES' functioning, a number of failures in university planning are highlighted in the 1986 PNES. The central preoccupation focuses again on the diversity of institutional views among universities, the

"ideologies, perspectives, and theoretical- methodological approaches" they had developed. (CONPES, 1986. p. 45). Therefore university planning was seen as a "complex process" which was still not entirely successful. The following considerations had been expressed (CONPES, 1986. pp. 84-85).

First, there was a great difficulty in establishing and coordinating a general strategy for higher education development. "Heterogeneous and diverse" constituent institutions of higher education increased the complexity of its planning (CONPES, 1986. p. 53), and the coordination of such a variety had not produced optimal planning tasks between universities. The activities and role of the Institutional Planning Units were also diverse and varied according to the above-mentioned characteristics of the institutions they belonged to (Velázquez, 1982).

The second weakness was the intermittent characteristic of the planning process, and its emphasis on administrative control (CONPES, 1986 p. 54). Plans for higher education became formal-normative documents, mostly produced to fulfil the task of formally producing the PNES (PL36, PL17, CV12, CL21). Moreover, the variety of institutional views and interests "forced the plans to establish only very general goals", and tended to leave the planning process at an initial stage of diagnosis (CV19).

Third, there was still a weak link between information, planning and budgeting (CONPES, 1986 p. 85). Although the information processes had been improved, the collected data was not seen as accurate enough to plan rationally (PL18), and the budgeting processes were not working properly to implement the plans (CV16).

Fourth, the national planning of higher education also became a formal commitment, a normative and bureaucratic-administrative task rather than an academic concern. It was pointed out that university decision-making processes were tending to be

centralised in the administrative area of the institutions which underwent a process of bureaucratization (CONPES, 1986 pp. 84-85). This process, in its turn, promoted a gap between administrative duties and academic concerns; therefore planning was neither increasing administrative efficiency nor supporting academic improvement (CONPES, 1986 p. 85).

If we relate these planning concerns to those which had been expressed by the General Secretary of ANUIES in the mid 1970s (Section 6.1.), it is possible to see that the formal history of SiNaPPES sees that planning in higher education had not yet achieved what was expected. Planning was still of an indicative character and, consequently, the plans were not fully implemented and they were still weakly related to the funding provision.

Notwithstanding these apparent planning failures in university planning between 1981 and 1986, SiNaPPES had been considered successful to the extent that it has remained in existence on the higher education policy-planning scene (CV16, CV12). Moreover, the view is that its functioning had supported a process of coordination-negotiation among the autonomous universities (CV16, CV21), and between the autonomous universities and the government (CV23). In this way the coordination of higher education had been improved (PL35, PL37), and university autonomy had been respected (CL13, CV23). The technical tools of planning still needed to be promoted and improved in the universities (CV12, CV16) without, necessarily, sophisticated techniques but rather more "common sense" (CL11). The emphasis of the formal history on the technical improvement of the processes was still important in 1986 (CONPES, 1986. Also PL25). In fact, in 1989 a "Manual of Higher Education Planning" was published (CONPES, 1989). It included the procedures for drawing up higher education plans, and the methodology to produce them.

Summarising, the institutional diversity of universities shows the respect which exists for institutional autonomy. This is considered an achievement (ANUIES, 1979, CONPES, 1986). However, this success is also considered, in an apparently contradictory view, as the main limit to university planning. It is worth observing that by highlighting the presence of SiNaPPES on the scene, and the participation of the universities in its processes, the formal history echoes what was referred to in chapter two as the second level objective of the political condition of planning, i.e. the maintenance of the process itself and the interaction of the participants in it. This issue in fact moves our discussion to the alternative interpretation of SiNaPPES.

8.5. The alternative interpretation and the achievement of SiNaPPES.

When we look at the above analysis from the alternative interpretation of SiNaPPES, we can see that both stories highlight the participation issue. The preeminence of the CONPES in 1983 was constraining institutional participation, and that was limiting the interaction of the universities in the policy-planning process. This was more so since SESIC was undermining the role of ANUIES within the CONPES partnership. However, an alternative view can be argued if account is taken of the following considerations:

First, it has been suggested in Chapter 7 that the interaction of the different views and interests of the academics was in the basic agreement between them to create SiNaPPES. This agreement was expressed in the 1970 National Seminar, it supported the formal creation of SiNaPPES in 1978, and the production of the 1981 and the 1986 PNES. This agreement was apparently broken in 1983 when there was a Plan without the interaction of the universities in SiNaPPES.

Second, what was different in 1983 in the ANUIES-SESIC partnership in CONPES was the dominance of the SESIC side on its own. Nevertheless, it is important to see that there were also academics in SESIC; the Under Minister was a Physicist himself, and went to SESIC from the scientific community of the UNAM where he had held directive posts in the Faculty and the Institute of Physics respectively (CL11, CV16, CL33. Also De la Garza, 1990). He returned there after his resignation (CL13). Conversely, on the ANUIES side of the CONPES partnership, the dominant academic views were related to the Social Sciences.

It is relevant to remember that an analogous tension between academics of different disciplinary views was reported in Chapter 7 as having appeared between the DGCE and the ANUIES during 1971-1976. There were academics related to hard-pure and hard-applied disciplines in the DGCE who strongly criticised the performance of ANUIES in which the prominent academic views were related with Social sciences. However, on that occasion the academics in the DGCE finished their term in office. It is interesting to note that in 1983 there were academics of analogous disciplines in both sides of the fence: Social Sciences in ANUIES, and hard disciplines in SESIC.

Third, the emphasis on the preeminence of research over the other two functions of the university, and its close relationship with teaching, as well as on the importance of postgraduate studies, had already been raised during the 1970s through the process of reform in the UNAM. This emphasis in the UNAM was also strongly supported by academics from the hard and hard-applied disciplines.

For a number of analysts, in the 1983 PNES, the academics of the hard disciplines were only expressing the clear and "categorical style they are used to" (CV16, PL36) in their disciplinary approaches, and their lack of interest for "negotiation in the higher education coordination process" (CV16). The establishment of priorities for the development of universities, according to their disciplinary views "was no

matter for further discussion" (PV31), without "clear and hierarchical academic criteria" (CL13); a process of negotiation was therefore considered to some extent waste of time. On the contrary, the views of these hard-discipline related academics, with regard to higher education planning, were considered "too narrow" (PL30) by the academics from disciplines of the Social sciences (e.g. CL11, CL21, CL33). It is important to note that this tension can also be seen as reflecting lack of negotiation and equilibrium which had been achieved between the discipline-bearing groups.

Fourth, the 1983 PNES included fairly similar higher education issues to those in the 1981 and 1986 PNES (Appendix 2). The lack of a formal diagnosis in the 1983 PNES may be seen, certainly, as a formal failure in the Plan. However, the emphasis in that Plan and the priority given to research and postgraduate studies, and the efficient use of university funding themselves reflect a diagnosis of higher education that depended on the processes by which these priorities had been established. It might be noted that the funding criterion for universities, which distinguished the normal and the extraordinary university funds had been, in fact, already established by the DGCE during 1971-1976. The emphasis on efficiency had also been highlighted from that time on, as well as the use of extraordinary funds for selected priorities. Both criteria had been mainly promoted by academics from the hard disciplines. The financial constraints of the country in the early 1980s were certainly there, and they affected severely not just the university budget, but also the educational expenditure as a whole and a number of other social expenditures in the country, as is reported in Chapter 4.

Fifth, according to the alternative interpretation the tension in the national coordination of SiNaPPES in 1983, can be seen in relation to the differences between the academics themselves. The tension was overcome when the academics from the hard-pure disciplines on the Ministerial side resigned. These academics could be seen, in fact, as challenging the agreed interactive characteristics of the planning

mechanism, and tensioning the achieved equilibrium among different disciplinary groups. Their resignation allowed the recovery of both the interaction of academics and the equilibrium among their interests which SiNaPPES was missing during 1983-1985. As the formal history suggests, it may be possible to consider the influence of the death of the Minister in the resignation of these academics in SESIC. Nevertheless, the further appointment of the academics from ANUIES to SESIC can be seen as reflecting, in fact, the outcome of the negotiations conducted to overcome the ANUIES-SESIC tension. Thus, in this perspective, the academics have succeeded in the management of the process of interaction of their disciplinary views and interests through the functioning of SiNaPPES.

Summarising, from 1978 to 1986, the academics from different universities and disciplines have maintained their participation through both the operation and the partnership of SESIC and ANUIES in SiNaPPES. In the Ministerial side, in 1978, at the time of SiNaPPES' creation, the influential views were of Engineering-related academics of the UNAM. During 1983-1985 the influential academic views were related to hard-pure disciplines, such as Physics (CL11, CV16, CL21). Finally, in 1985-1986, the prominent views were related to disciplines from the Social sciences from ANUIES (CL11, CV16, CL21). More recently, in 1988, academics from similar fields, this time belonging to the universities in the states, were appointed to SESIC.

As far as the ANUIES side has been concerned, changes can be observed as follows: by the time the General Secretary was appointed to the General Directorate of Higher Education (DGES) in the Ministry in 1978, a former Rector of an autonomous university "committed to these planning matters was elected to the post of Executive General Secretary in ANUIES" (CV20). The purpose was to maintain the ANUIES role in higher education planning (CL21). On these conditions the proposal to create SiNaPPES "could be carried out successfully" (CL11) The prominent academic views

in both cases can be related to the Social sciences. As was said above, in 1985 these academics in ANUIES moved to the SESIC, and were substituted by Engineering-related academics of the new universities. From 1985 onwards, it is interesting to note that the equilibrium of interests in the CONPES partnership was analogous to that of 1978-1983, although the influential views of the Engineering-related academic were first in SESIC and later in ANUIES and, conversely, the influential views of academics from the Social sciences were first in ANUIES and later in SESIC.

As far as the institutional origin of academics is concerned, a kind of academic participation pattern was apparently being established in the ANUIES-SESIC partnership at the national coordination of SiNaPPES. Figure 10 provides a graphic view of this pattern.

Figure 10

INSTITUTIONAL ORIGIN OF ACADEMICS IN THE NATIONAL COORDINATION OF SiNaPPE!
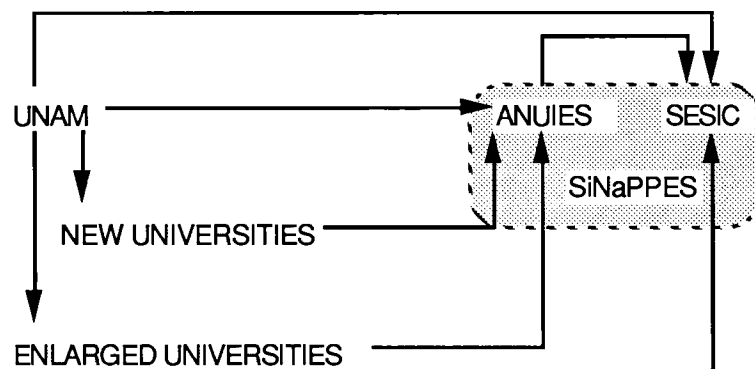
Formulation. Martinez, 1992.

In general it could be said that, despite their differences, academics have been able to maintain their participation within SiNaPPES and its national coordination (CV16). The interviews have highlighted how this pattern of academic participation has

enabled the universities "to sit at the table and negotiate as peers" (PL35) among themselves, and between themselves and the Ministry (CV12, CV16,CL11, CL21). In this way "SiNaPPES has so far been convenient for the autonomous universities, mainly the ones in the states. Their participation in the process has been strengthened" (PL17, CL34). The process also promoted inter-university communication "within which university concerns such as postgraduate studies, research policies, and criteria for student access were discussed, other than solely technical-planning issues" (CL29).

8.6. Summary.

The functioning of SiNaPPES in 1983 and 1986 has been reviewed in the light of its two interpretations, respectively concerned with the technical (the formal history) and interactive (the alternative interpretation) features of higher education planning.

The formal history has highlighted the ANUIES-SESIC partnership and the participation of the universities as conditions for the process. In accordance with this view, the partnership had been in conflict when the government took over the partnership in 1983 and, in so doing, the participation of the universities was practically stopped. Since 1985, there was again conciliation of interests in the CONPES partnership, and the participatory operation of SiNaPPES was recovered. Thus the formal history highlighted again the variety of institutional views, which this participation brought about into the process, as a limitation to technical planning pursuing optimal choices.

In its turn, the alternative interpretation of SiNaPPES has highlighted the participation of academics and the interaction of their views and interests in the process. In the light of this perspective, the tension in the CONPES partnership,

during 1983-1985, was seen as originating in the conflict of disciplinary views of the academics themselves in SESIC and ANUIES. Participation in the process was, however, certainly stopped. This is to say that SiNaPPES was not really functioning as intended. In accordance with the alternative interpretation, further negotiations between the academics permitted the tension in the CONPES partnership to be overcome, and the universities were called together again through SiNaPPES in 1985-86. In this way the academics were able to maintain their influence and participation in the policy process.

It is worth noting that in both perspectives a condition for the success of SiNaPPES is its very existence; in other words: its presence and participation in the higher education policy-process for more than a six-year governmental period. In fact the influential participation of the academics in the process has been there during the whole period of analysis.

The two interpretations of SiNaPPES, as perspectives of analysis, are concerned with specific characteristics of this planning mechanism. Both have provided a view and an understanding of it. In this sense, although both demonstrate different features of SiNaPPES, it could not be said that SiNaPPES and its processes are now fully understood; there are a number of issues on the subject which might be matter of further investigation. The purpose of developing an alternative interpretation has been to improve the understanding of SiNaPPES and its rationale and, in this way, the policy-planning process in Mexican higher education. This is what, we suggest, the alternative interpretation has provided.

It is now convenient to see how the analysis in this study has been able to articulate and characterise the process and, in so doing, fulfilled its purposes. This is a concern of the final chapter.

Chapter 9. **CONCLUSION.**

This final chapter reviews the main findings of the study. It considers how the alternative interpretation of SiNaPPES increases our understanding of its rationale; examines these findings in the light of the main issues of the theoretical analysis; and assesses the use of the defined period of analysis. Finally, a number of areas for further research are proposed, which may be relevant to current issues in Mexican higher education.

9.1. The aim of the study and its major findings.

The aim of the study has been to understand the rationale of SiNaPPES within the process of higher education policy formation. With this in mind, the analysis has focused on the participation of academics in the process and the characteristics of their participation. It was stated in the introduction that the study attempts a kind of naturalistic approach to the phenomena by following the grounded theory path (Chapter 1) through a qualitative methodology (Chapter 3) in which the theoretical analysis (Chapter 2) informs the empirical observation (Chapter 4) and vice-versa. In order to do this SiNaPPES has been reviewed in the context of a policy period from 1970 to 1986 (Chapters 5 to 8). The main outcomes of the study are therefore: a theoretical analysis of higher education policy-planning and an empirical analysis of SiNaPPES with regard to higher education planning.

The theoretical analysis suggests the existence of certain characteristics specific to higher education which may be of a "political nature" but which are also specific to its planning concerns. This notion takes into account the interaction of the views of different disciplines and the conflict of interests of discipline-bearing groups of academics. The theoretical analysis in Chapter 2 considers the political condition of educational policy-planning, i.e. its technical and interactive characteristics, and

the specific characteristics of coordination and governance of higher education systems. The singular dynamism of higher education systems, as relatively independent academic domains in contemporary societies, emerges from the conflictual interaction of academics belonging to different disciplines and institutions. This interaction reflects, it is suggested, the "political nature" of higher education planning.

The analysis of SiNaPPES has produced two interpretations of its creation; a formal history which is concerned with the technical characteristics of planning (Chapter 6) and an alternative interpretation of it concerned with the interactive characteristics of planning (Chapter 7). These interpretations of SiNaPPES have allowed us to reconstruct the process of its establishment (Chapters 6 and 7) and to review its operation (Chapter 8). The formal history sees the creation of SiNaPPES in 1978 as the culmination of a progressive process towards efficient planning and coordination in the universities. The conciliation of interests between the universities and the government is highlighted in its creation through the ANUIES-SESIC partnership which produced the formal proposal of SiNaPPES and has operated through CONPES (the national level of coordination of SiNaPPES).

The alternative interpretation, however, sees SiNaPPES as a by-product of the policy process, and charts the interaction of academics in it. This interpretation points out that some academics had argued for a dynamic planning mechanism at the National Seminar on University Planning in 1970. These academics also stated that successful university planning had the 'political requirement' of managing the different interests of those academics participating in the process. However, it was not until 1978 that these same groups of academics had the opportunity to pursue that early initiative and create SiNaPPES. This was seen as a means of formally bringing the 'political requirement' into the process of policy formation.

Between 1970 and 1986, according to the alternative interpretation, academics of different disciplines have managed to maintain their influential presence in both the policy process and the national coordination of SiNaPPES through CONPES. These characteristics of SiNaPPES can thus be related, on the one hand, to the conception of SiNaPPES as a dynamic mechanism to cope with the 'political requirement' of university planning and, on the other hand, to the "political nature" of higher education planning suggested in the theoretical analysis. Both deal with the participation and management, in the planning process, of the different interests of the academics. Thus the 'political requirement' of higher education planning, as expressed in 1970, can be seen as reflecting its "political nature", as analysed in Chapter 2.

From the above we can conclude that the "political nature" of higher education planning, is a significant element in the rationale of SiNaPPES.

9.2. The two interpretations and the rationale of SiNaPPES.

The process of establishing SiNaPPES, according to its formal history, can be seen as following the stages of a policy process. In 1978 the need for such a mechanism was raised, it was discussed, proposals were developed by the ANUIES-SESIC partnership, and the creation of SiNaPPES was approved by the National Assembly of ANUIES. Subsequently SiNaPPES was implemented and the first National Plan for Higher Education (PNES) was produced in 1981. This Plan was revised in 1983 and 1986. The formal history of SiNaPPES, however, argues that given the variety of views and interests of the universities, planning had still not been completely successful. Thus the production of plans and their implementation had not been totally effective. This assessment derived from the underlying assumption - on which the production of the PNES was based - that, as reason-based institutions, there would be a consensus among the universities in support of technical planning.

Since 1978, mainly through the formal process of establishing SiNaPPES, a priority of CONPES was to promote a planning methodology for the production of the National Plan. This was to support the operation of SiNaPPES at institutional, state, regional and national levels. The overriding preoccupation with the production of the PNES thus gave undue emphasis to apparent consensus among universities and tended to overlook their many differences. This shifted the emphasis on the dynamic participation of universities in SiNaPPES to the production and updating of a plan; an emphasis that subsequently highlighted the formal-normative characteristics of a plan and underlined the expected optimal choice and homogeneity of the planned actions. Thus the formal history highlights the failures in higher education planning: plans were not produced as technically as was expected and were not implemented in terms of optimal-rational choices.

Initially, the formal history ascribed these failures to an insufficiency of information and inadequate technical skills of personnel in the Institutional Planning Units (UIPs). Later intermittent and formal-bureaucratized planning practices were identified as the cause. Throughout, however, the variety of views within the universities were also seen as a major limitation to planning. To overcome this limitation, the formal history claims that universities will be persuaded of the value of technical planning through the promotion of planning methods - the planning culture - and that the diversity of their views can best be accommodated by technical planning through the policy formation process.

From 1983 to 1985 disagreements in the ANUIES-SESIC partnership in CONPES seriously jeopardised the operation of SiNaPPES. The disagreements halted the operation of SINaPPES and the participation of the universities in its process and, therefore, the promotion of the 'planning culture'. The formal history claimed that both disagreements in the partnership and the absence of participation of the

universities were related to external factors originating in the government's representatives in SESIC, rather than either the different views of the academics within the universities or the limits of technical planning. Consequently, when these external constraints were overcome and SiNaPPES recovered its normal operation, the formal history again emphasised the promotion of technical planning in order to produce plans.

Despite the failures and disagreements, the formal history argues that the continued existence of SiNaPPES over a period longer than the Mexican governmental six-year cycle is a major achievement. But the existence and operation of SiNaPPES demands the participation of the universities in its process. This participation brings into play the variety of university interests which are seen by the formal history of SiNaPPES as the obstacle to planning. Here, this perspective can be seen as contradictory. On the one hand, the diversity of views is considered to be the result of respect for university autonomy whereas, on the other hand, the same diversity is viewed as the obstacle to technical planning since optimum alternatives cannot be selected and implemented. Thus higher education will not completely succeed in planning its development. These considerations seem to overlook the point made in the formal document defining SiNaPPES that it is impossible to have perfect forecasting and optimum choice. Ultimately, however, what the formal history of SiNaPPES seems to underestimate is the dynamism of SiNaPPES as a participatory mechanism for universities and their academics.

It is at this point that the new theoretical insights and empirical data provide an alternative interpretation of the creation of SiNaPPES which relate the dynamism of SiNaPPES to the participation of the academics. The dynamic characteristic of SiNaPPES was emphasised when a planning mechanism was proposed at the 1970 National Seminar on University Planning. This dynamic mechanism, rather than a static plan, was again emphasised in 1978 at the time of the SiNaPPES' creation.

This characteristic of SiNaPPES has been discussed in Chapter 7 as being concerned with the participation of academics from different disciplines and interests in the process. In the 1970 National Seminar, the management of these interests was highlighted as the 'political requirement' of successful university planning. It has already been noted that this requirement echoes the "political nature" suggested in Chapter 2.

Given the above considerations, the alternative interpretation is concerned with the participation of the academics in the policy-planning process in SiNaPPES, rather than with the plan itself. For this perspective the production of the plan reflects an achieved agreement between the interests of the academics rather than the optimum-technical choice of such an agreement. Thus SiNaPPES can be seen as a by-product of the academic participation in the policy process, a participation which has been observed since 1970 through the expansion and reform of higher education. For the alternative interpretation of SiNaPPES, its creation provided the opportunity for the academics to maintain their influence in the policy process, in the universities and university-related bodies. As has been reported in Chapter 5, the influence of the academics between 1971 and 1976 even reached the Ministry of Education through the General Directorate of Educational Coordination (DGCE), and again from 1978 onwards, as has been reported in Chapters 7 and 8, through SESIC.

The alternative view of SiNaPPES reviews the interaction between academics in the university reform and the planning practices of the universities and university-related bodies, and in the conception, creation and operation of SiNaPPES. In practice, a kind of agreement of views and conciliation of interests developed among the academic groups through the creation of new universities. These views and interests were also manifested in the different concerns of the planning models of these universities which, as analysed in Chapter 7, were also a matter of interaction through the formal establishment of SiNaPPES from 1978 onwards.

According to the nature of the disciplines, the influential groups of academics participating in the policy-planning process of the universities can be distinguished as related to hard-pure (e.g. Physics), hard-applied (particularly Engineering) and Social Sciences. Academics from the varied Engineering disciplines, for example, had been prominent in advancing the idea of a dynamic planning mechanism in 1970 and the creation of SiNaPPES in 1978. During the 1970s, they were also influential in the dissemination of planning concerns through the process of reform within the universities. At the same time social scientists were behind the proposal to produce the PNES and had also been influential in the establishment and operation of SiNaPPES.

The interaction between discipline-bearing groups has sometimes reached critical points of disagreement through the policy process. This was the case in CONPES from 1983 to 1985. It is through the alternative perspective of SiNaPPES that the tension in the CONPES partnership from 1983 to 1985 can be seen in terms of the conflictual interaction between different discipline-bearing groups. In general, however, throughout the whole period of analysis 1970-1986, there was more agreement than dissent between the academic groups. The most significant were the negotiations leading to the creation of SiNaPPES in 1978, and in 1985-86 the conciliatory moves to overcome the tensions in the CONPES partnership (Chapter 8). Thus, the interactive characteristics of the policy-planning process between 1970 and 1986, which have been highlighted through the alternative interpretation of SiNaPPES permits us to observe the ability of academics to incorporate and manage through SiNaPPES the diverse views and interests of both individual universities and discipline-bearing groups into the policy-planning process. As has already been stated, the interaction of the academics reflects the "political nature" of higher education planning which, according to the alternative interpretation, is a prominent element in the rationale of SiNaPPES. In this perspective SiNaPPES, in the process

of policy formation, has succeeded as a policy-planning mechanism to the extent that it has permitted the participation of institutions and their academics, and has managed to embrace their different views and interests.

It can also be said that, though the different views and interests of the discipline-bearing groups will continue to find expression in the policy-planning process, their management through the operation of SiNaPPES is crucial for the operation of SiNaPPES itself. Moreover, the further success of SiNaPPES is likely to be in its capacity to integrate new academic interests and their new planning concerns which will emerge within the policy-planning process of higher education in Mexico.

In the end, as was analysed in Chapter 2, this academic tension arising from different views and interests reflects both the institutional conditions and circumstances of the discipline-bearing groups and the respective characteristics of their disciplines resulting from particular epistemological perspectives. The latter is related to the different stages of knowledge in which insight is aimed beyond competition among disciplines. These new stages will again condition the interaction among disciplines and the negotiation between the discipline-bearing groups. The implications of this issue are matters of further research and are beyond the scope of this study.

An analysis of the changing institutional circumstances of the discipline-bearing groups outside the period of analysis of this study which will have its impact on the future development of the higher education system in Mexico, is also matter for further research. It would be important, for example, to review current coordination policies of universities and university-related bodies and the roles of UNAM, the autonomous universities, and the technological and private institutions within such policies.

It is now appropriate to see how the findings relate to the purposes of this study. The central purpose of the study regarding the participation of the academics in SiNaPPES included four main issues, expressed as research questions in the introduction of the thesis:

1. The involvement of academics in the conception, establishment and operation of SiNaPPES.

2. The participation of academics in shaping the particular features and dynamics of national coordination and governance of public autonomous universities.

3. The response of academics from different disciplines and with different interests to the higher education policy-planning process.

4. The extent to which the specific characteristics of higher education coordination and planning reflect its "political nature" and can explain the creation of SiNaPPES.

In relation to the first three issues, as has been observed in the preceding section, the participation of the academics in the policy process, their prominent influence over the conception, establishment and operation of SiNaPPES, and the interaction of the different concerns and interests of the different discipline-bearing groups have been demonstrated. In so doing, the first three research questions have been dealt with. As far as the fourth question is concerned, the theoretical analysis of Chapter 2 suggests that the "political nature" of higher education planning is concerned with the tension emerging from the interaction of both the views from different disciplines of academics and the vested interests of their discipline-bearing groups. This is characteristic of the higher education domain and permits the analysis of the

interaction of the academics in the policy process. In this perspective, the study has shown that the management of this interaction was a significant element in the dynamic conception of SiNaPPES and it has remained so in its operation.

9.3. The findings of the study and the main research issues.

The theoretical analysis in Chapter 2 has noted that the early development of educational planning was associated with a strong concern for the efficient formulation of alternatives. Consequently, the selection of an optimal course of action was to be supported by objective criteria suggested by technical planning. These neutral-rational concerns of pure educational planning were soon confronted by what was called the interactive conditions of its process. These interactive characteristics of educational planning, which were apparently limiting its technical expectations, had been attributed to the different educational values and professional vested interests of the planners themselves. The rational assumption, or rather the specific rationality which educational planners assumed as the neutral-technical way of doing their tasks, showed its limitations. Educational planners' contributions were supposed to increase the rationality of the process, whereas planners themselves, by supporting specific alternatives of action to be sustained, supported specific views and interests in the process.

In its turn, it has been suggested that the particular negotiation between discipline-bearing groups in higher education systems reflects a specific "political nature". It expresses both views and vested interests of the academics. The vested interests of the academics co-exist with their shared concern for knowledge which, in turn, is supposed to be based on an interactive reason-based process. These interests are developed over and above their tasks within academia. In other words, there is a tension in the interaction of these two spheres in the academic domain, from which a political culture emerges. The "political nature" of planning in higher education is

thus contextualised. It emerges from the fragmented domain that is higher education and expresses academically generated vested interests.

Departing from the interactive and technical characteristics of planning, its approaches were grouped into three major models: consensual, political, and technical. The political model, including both the interactive and the technical features of planning, expressed the tension of both planning paradigms. The tension between technical and interactive planning characteristics and the tension arising from the political-conflictual nature of higher education due to the interaction of discipline-bearing groups echoed each other. Thus the models of both educational planning and higher education coordination could be related: collegial-consensual, political-conflictual, and technical-bureaucratic.

It was pointed out in Chapter 2 that technical concerns of planning were very much developed through the hard disciplines such as Economics, Engineering and Systems. Additional considerations about education as a soft discipline and higher education as a 'loosely coupled' system included the concern about the interactive characteristics of planning in its paradigm. The perspectives of the disciplines associated with the Social Sciences were seen as being concerned with these interactive features.

The empirical analysis, in its turn, has observed that Mexican universities have developed a strong practice of autonomy which is mainly exercised on an institutional basis. Within this pattern, academics have been able to maintain their prominent participation in the general coordination of their institutions and policy process. This participation, as has already been observed, has even involved the appointment of academics to senior positions in the Ministry of Education with responsibility for higher education (analogous to the situation in Italy mentioned in Chapter 2). Such appointments have generally taken into account the views and interests of the varied academic groups.

As far as the involvement of the perspectives of the disciplines in the process is concerned, the empirical analysis has mainly identified discipline-bearing groups related to i) Engineering (hard-applied), ii) Physics and Biology (hard-pure), and iii) Social Sciences (soft-pure and soft-applied disciplines). It has been noted that conflicts appeared over the priorities of social scientists (ANUIES) and biologists (DGCE) during 1971 to 1976 (Chapter 7). An analogous struggle appeared within CONPES between the physicists (SESIC) and the social scientists (ANUIES) in the period 1983-1985 (Chapter 8). On the other hand, the main conciliation of academic views supporting the creation and operation of SiNaPPES has been between the engineers and social scientists in 1970, during 1978-83, and after 1985 (Chapters 7 and 8).

The views of the disciplines associated with Engineering and the Social Sciences have apparently stressed the technical and interactive planning concerns of SiNaPPES, similarly to that observed in the theoretical analysis. What seems to be different in this case study is the emphasis of the engineers on the interactive characteristics of SiNaPPES e.g. the coordination and management of different interests in its policy-planning process. However, this interactive concern of Engineering-related academics provided a meeting point with the academics of the Social Sciences who wanted a National Plan based on a participatory process. On the basis of this agreement, academics of the hard-pure disciplines were also involved in the process. The process, as has been stated before, has not always been one of smooth negotiation between academics of different disciplines and views, nevertheless conflict has been managed insofar as to permit the operation of SiNaPPES.

It was suggested in Chapter 7 that the interactive concern of the Engineering-related academics, while designing SiNaPPES, reflected both their preoccupation with the appropriateness of a planning mechanism and their concern with the autonomy of

universities and the interaction of academics from different disciplines. It could be said that the former has to do with the orientation of Engineering itself as an applied discipline whereas the latter is a reflection of the place of Engineering in the history of Mexico. The Engineering profession, through its involvement with the establishment and development of the mining production, has its roots in Mexican colonial times. Engineers were also closely involved with the nationalisation of the oil and electricity industries in the 1930s. Their connection with major technological projects served to advance their disciplines and increased their involvement with national concerns. This situation was paralleled by the social scientists who were involved in the legal, constitutional and social framework of Mexico, most notably following Independence in the early Nineteenth Century.

On the other hand, the priorities of the academics of the hard-pure disciplines such as Physics, have been more oriented to the advancement of their disciplines within an international rather than national context. During the period 1983-1985, academics belonging to these disciplines apparently underestimated the interactive characteristics of SiNaPPES and had therefore increased the tension in the negotiation of academic interests through its operation. The concerns developed by the disciplines within both international and national conditions are also elements of the relationship between the discipline-bearing groups in national systems of higher education, and might be matters of further research.

The interaction of the academics in the case study of SiNaPPES can also be seen as a reflection of the limits of the technical-objective and the symbolic-interactive paradigms of educational planning discussed in the theoretical analysis of Chapter 2. On the one hand, the formal history of SiNaPPES highlights the partial success of technical planning because of the constraints that a diversity of views imposes on technical-optimal choice which is supposed to be based on complete information and objective knowledge. On the other hand, the alternative interpretation of SiNaPPES

highlights the interaction of the views of disciplines and the interests of the discipline-bearing groups. These processes, in turn, occur because the critical discussion in which the advancement of knowledge is based, and the consensus of academics is expected, has not completely achieved a condition of symbolic-interaction as an alternative paradigm to higher education planning. As has been analysed in Chapter 2, higher education planning has limitations in both paradigms.

The tension emerging from the interaction of the academics, which has been suggested as the "political nature" of higher education, also reflects the tension in the university between the goal of its mission and its empirical conditions of existence. An issue which arises from these considerations is that it is not necessarily the politician who brings a political element into the planning of higher education. Planning is also not necessarily imposed on higher education by external bodies within society; planning preoccupations emerge through the subject matters of concern to the disciplines of the academics. Thus these preoccupations become and element in the interaction of the views and interests of the discipline-bearing groups, within the coordination and governance of higher education systems.

It was noted in the introduction that the study attempted an appropriate relationship between the theoretical framework and the empirical analysis. It can be finally said that the attempted relation between both made it possible the analysis of recent theoretical studies of the coordination and governance of higher education systems which, having been informed by systematic empirical observation of the policy-planning process in Mexican higher education, permits this study to suggest the notion of "political nature" of higher education planning. In other words, the specific characteristics of coordination and governance of a national system of higher education have been systematically observed through a case study of SiNaPPES and the process of higher education policy with which it was associated, in the light of appropriate theoretical considerations.

9.4. The study of SiNaPPES and the period of analysis.

It was stated in the introduction that in order to undertake our analysis it was necessary to define a period of higher education policy in which the establishment of SINaPPES could be placed. The policy period defined for this purpose lasted for 16 years from 1970 to 1986 - in contrast to the usual period of analysis of higher education policy in Mexico corresponding to the six-years government cycle - and has provided a perspective which characterises the academic participation in higher education policy-planning. The alternative interpretation has analysed the participation of academics in the policy process since 1970, when a planning system was proposed, through the creation of SiNaPPES in 1978, and its operation up until 1986.

To justify the choice of this period it is important to briefly review the changes of government from 1970 to 1986. There were new elected governments in 1970, 1976, and 1982. The 1970-76 government introduced wide ranging educational reforms in 1970 in which higher education featured. However, the universities, particularly the National University were already undergoing a process of reform. Representatives from higher education institutions played an important role in the preparation and direction of government-supported reforms of universities. This process of university reform, which had began in the late 1960s, became a landmark in higher education policy in contemporary Mexico. From 1971 to 1976, during the 1970-1976 government, tensions arose between the DGCE in the Ministry of Education and ANUIES. However, these tensions were not simply institutional but had their origins in the differing views of academics from the hard disciplines in the DGCE, and the social scientists in ANUIES.

The creation of SiNaPPES in 1978 took place in the period in office of the 1976-1982 government. Notwithstanding the involvement of the Ministry of Education (SEP) in the creation of SiNaPPES, which is highlighted in its formal history, the alternative interpretation shows that the same groups of academics who proposed a planning system in 1970, and who in 1978 held positions in both the Ministry and ANUIES, were prominent actors in the creation of SiNaPPES in 1978. Indeed, as has also been observed, ANUIES was concerned with university planning long before that date. Therefore the creation of SiNaPPES can also be linked to the influential academic participation in the policy process.

After 1978, the operation of SiNaPPES was disrupted by the 1983-1985 conflict within the ANUIES-SEP partnership in CONPES. The formal history relates this to the new government of 1982-1988, though the alternative interpretation argues that the conflict had its roots in the differing views of the discipline-bearing groups of Physicists in SEP and social scientists in ANUIES.

The defined period of analysis therefore has permitted us to observe the prominence of academic participation in the higher education policy process. In so doing it has fulfilled its contextual purpose for the study of SiNaPPES. The study has also shown the desirability of analysing the particular characteristics of coordination and governance in higher education in Mexico over periods longer than the six-year government cycle.

In parallel with the interdisciplinary interaction of the academics and their interests, the conciliation of interests between the government and the public autonomous universities remained relatively stable during the period of policy under analysis. This stability seemed to remain despite the severe financial constraints which affected all sectors of the economy from the early 1980s and, contrary to popular belief, not just higher education. Nowadays, however, as has also been

observed in Chapter 2, both scarcity of funds and technological developments place increased emphasis on efficiency and the technical characteristics of planning. The demand for efficiency and technical planning also becomes a concern of the ANUIES-SEP partnership in deciding on the provision and allocation of funds to universities. How these re-newed concerns for efficiency and planning will condition the academic interaction and its financial support are matters for further research, as indeed is the management of the respective interests of the universities-government partnership.

9.5. Further research and current trends in higher education policy.

Since the study covers the period from 1970 to 1986, and its purpose has been to understand rather than predict policy, this section is better seen as a post-scriptum. In fact, even if 1986 seems to be a distant date, it should remembered that this study was begun in 1988. For an academic research of this kind, this proximity makes more difficult, an attempt to predict the outcomes of current higher education policy. Bearing this in mind it was decided to incorporate a 'post scriptum' perspective related to current higher education issues and further research in this concluding chapter.

Two major issues for further research are raised in this chapter: i) epistemological trends: the national conditions and the international framework within which the advance of the disciplines takes place and some of their specific concerns are developed, and ii) the institutional circumstances for the interaction of the disciplines and the discipline-bearing groups: the characteristics of the higher education systems.

What has been referred to as the epistemological element in the identity of the disciplines, distinguishable from their empirical condition in particular systems of

higher education, is a preoccupation which takes further the analysis of the conflict of vested interests between discipline-bearing groups. Other studies which have been exploring how the paradigms of science express and condition the epistemological concerns of the disciplines can be seen within this path of analysis. It might also be extending this analysis to examine how local/national conditions influence the advancement of the disciplines in countries such as Mexico. For example, in terms of our study, an examination of how the different disciplines and discipline-bearing groups incorporate and express specific interests to apply or develop their particular approaches and perspectives to knowledge might merit consideration.It could look at why the priorities of some discipline-bearing groups coincide with some government priorities for higher education. Behind this issue is the concept of planning as a purposive rational action. This notion was reviewed in Chapter 2 as echoing the implications of the planning paradigms and the tension in the university. According to this notion, the suggestion is that this tension may express an attempt of certain specific interests to control the process of knowledge in higher education itself by means of technicist-imposed planning (e.g. when there is no, as also was analysed in Chapter 2, insight beyond the competition and critical discussion of the disciplines).

These ideas on the coincidence of different interests raise the issue of the relative independence of higher education systems in contemporary societies. This can be seen in relation to the triangle of coordination of higher education, as was reviewed in Chapter 2. In this perspective the academics (the 'Academic Oligarchy') participate in the coordination of higher education coordination together with the Market and the Government. As far as the Mexican autonomous universities are concerned, they and their academics, as this study has shown, enjoy significant independence in coordinating concerns. However, it should be remembered that the formal ANUIES-SEP partnership in CONPES, even though both sides have been controlled by academics, is a relationship between the government and the universities. The

continued ability of academics to dominate the partnership in order to manage and secure their interests remains to be seen.

In the case of Mexican higher education, the relative autonomy of universities in the future will depend on their relationship with the 'paradoxical alliance' of public-private i.e. the Government and the Market interests, which was referred to in Chapter 2. This is very relevant today as Mexico seems to move rapidly towards a freer market economy and enters the Free Agreement on Trade and Commerce with Canada and the United States. This trend towards a market economy will modify such a 'paradoxical alliance' of public-private interests supporting the Mexican state and, consequently, will certainly be a condition for the future relative independence of the higher education system in its coordination and governance.

Society and the economic structure in Mexico seem to be changing rapidly, as a result of a modernisation policy though this policy has been largely manifested in changes in the productive structure. Change in higher education, it has been claimed, is too slow for the requirements of the developing productive structure. These socio-economic trends have certainly influenced specific concerns of certain disciplines (e.g. Economics, Sociology and Systems) which, in turn, will influence the interaction of discipline-bearing groups and their institutions. How this process will affect policy-planning priorities through SiNaPPES remains to be seen.

There is a view which claims that the expansion of public higher education in Mexico during the period covered by this study was achieved to the detriment of its quality. On the other hand, public autonomous universities still carry out more than 70 per cent of the research in the country, and many contain departments and institutes of excellence in terms of academic capacity, contribution to the needs of the country, and quality of service. In fact, the current pattern of autonomous universities in Mexico can be viewed as an outcome of their diversification and development from

1970 to 1986. There is an increased number of them, they have been enlarged, strengthened, and renewed. Indeed, public autonomous universities can still be seen as the most influential institutions in Mexican higher education. In parallel with these developments, the role of the National University in higher education coordination has been modified, but it still plays a significant academic role because of its excellence in teaching and research in a number of areas.

Since the mid 1980s, following the period of expansion, development and diversification of public autonomous universities, there has been a notable strengthening of the participation of private universities in higher education. Even though these private universities are relatively small, some of them have established a reputation of academic excellence in certain professional areas such as Administration and Economics. During the same period, there have also been developments in the technological institutes, particularly at postgraduate level. Thus, it can be said that it is in the context of these developments in the higher education system that the autonomy of institutions and the interaction of the views of the disciplines and the discipline-bearing groups will be managed.

In response to the above features, the issue of efficient higher education coordination has emerged again. On the one hand, it has been claimed that institutional autonomy has produced confusion in the coordination of higher education. Proponents of this view suggest that further regulation of the autonomy of the universities might be necessary in order to improve their accountability. On the other hand, it has also been argued that further regulation is inappropriate and would increase the bureaucratic factor in their administration. Moreover, increased administrative regulation would inhibit qualitative improvements in teaching and research. It is these aspects of university development, so the argument continues, that most be encouraged by estimulating fair competition between universities.

To some extent the above claims can be seen as reflecting the technical and the interactive characteristics of planning. It is important to note, however, that the first view also echoes the regulation of the universities by the government, whereas the second echoes the vitality of academic participation. This academic participation is considered, however, in terms of increased competitiveness between universities which, in turn, reflects the presence of the the Market in higher education coordination.

This study has provided evidence of the autonomy of public universities - the academic oligarchy - in the coordination of higher education. To say it in other words, the relative autonomy of the academics in the management of their interests reflects, to some extent, the 'paradoxical alliance' of interests in the Mexican state. The claim for the regulation of the autonomy as well as the suggestion for increasing the competitiveness of the universities can be viewed, in the end, as reflecting changes in this 'paradoxical alliance'. What remains to be seen is the capacity of the academics to manage their participation in the SiNaPPES partnership within a changing public-private alliance of interests. The influence of government officials, for example, may be reinforced and academic influence may diminish thus curtail any university domination over SiNaPPES.

The analysis in this study has related the creation and establishment of SiNaPPES to a specific period of policy starting in 1970, in which the expansion and innovation of higher education were the means for its modernisation. The aim of the 1970 policy was to improve the quality of the universities and their contribution towards the dynamic needs of the country and its development. A renewed process of modernisation in the late 1980s again stressed the quality of the universities and their contribution to the needs of the country. An outcome of this re-stated process of modernisation could be a policy for higher education similar to that of its expansion and innovation in 1970. Current trends in higher education policy, however, seem to

be different. There is much less emphasis towards the further expansion of autonomous universities. Nevertheless, the qualitative improvement of the higher education provision through innovation and increasing efficiency of higher education institutions, remains a policy priority.

Since 1986 SiNaPPES has been quiescent and no revised version of the PNES has been produced. Instead, the main proposals of the 1986 PNES were incorporated in the higher education policy statement of the 1988-1994 government. Current policy has also emphasised the evaluation of higher education institutions. This, it is claimed, will enhance the operation of SiNaPPES and ensure its continued use in the policy-planning process of higher education. On this evaluation future funding will be based. Given the scarcity of funds and the emphasis on efficiency, the above policy emphases are likely to lead to further tensions among discipline-bearing groups.

This study has provided a systematic view of the policy-planning process in higher education during 1970-1986. It has suggested that the "political nature" of higher education planning is a significant element in the rationale of SiNaPPES' creation. This argument is worth exploring in future research on higher education policy, and tested over a different period of analysis.

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APPENDICES.

Appendix 3. **A CHRONOLOGY OF SiNaPPES.**

1970.   A dynamic system of national planning for higher education and a national plan are proposed in the National Seminar of University Planning organised by ANUIES and the UNAM.

1970-1976.   National Assemblies of ANUIES.

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February, 1977.   ANUIES accepts the invitation of the Minister of Education to participate in the National Education Plan by formulating proposals related to current trends in higher education.

May, 1977.   The seventeenth National Assembly of ANUIES approves the 'Contribution of the ANUIES to the National Education Plan'. The document contains the views and expectations of the member institutions about main higher education issues and planning.

July, 1977.   The National Council of ANUIES presents to the President the approved document by the ANUIES National Assembly.

May, 1978.   The rectors of the universities meet the Minister of Education to inform about the decision of the ANUIES National Council to include the planning issue in the agenda of the forthcoming eighteenth National Assembly.

                         The Minister emphasises the importance of dynamic and permanent mechanisms of planning rather than a fixed and static plan.

May, 1978.   Participant representatives from ANUIES, the higher education institutions, and the Under Ministry of higher education and Scientific Research (SESIC), integrate 12 working teams to produce proposals on the following issues:

                         1. An historical-analytic framework of higher education.
                         2. Higher education planning.
                         3. Higher education funding.
                         4. Higher education administration.
                         5. Academic achievement in higher education.
                         6. Scientific research in higher education.
                         7. A national system of higher education information.
                         8. A normative framework for higher education and professional exercise.
                         9. Higher secondary education.
                         10. Short professional degrees.
                         11. Social service.
                         12. Counselling.

July & August, 1978.	Regional conferences for higher education institutions are organised, previous to the eighteenth ANUIES National Assembly to discuss the planning proposals for the forthcoming National Assembly.
September, 1978.	The General Executive Secretariat of ANUIES integrate the proposals from the regional conferences in order to present them to the National Assembly. Priority is given to information and planning.
November, 1978.	The eighteenth ANUIES National Assembly approves 'The Planning of Higher Education in Mexico' which includes the design of the National System for Permanent Planning of Higher Education (SiNaPPES), and 32 sets of higher education issues to be initially considered when producing the National Plan for Higher Education (PNES). The proposal reviews all the previous higher education planning activities, and proposes a mechanism of policy-planning. The aim of the mechanism is to respect the specific circumstances and needs of the institutions.
December, 1978.	The Law of Higher Education Coordination is published in the Official Diary.
17.01.1979.	The official starting of SiNaPPES is an official meeting attended to by the Minister of Education, the National Council of ANUIES, and senior officials of the Ministry (SEP).
	The National Coordination of SiNaPPES (CONPES) is established in the meeting. The head of CONPES would be a joint team integrated by the General Executive Secretary of ANUIES, and the General Director of Higher Education of the Under Secretary of Higher Education and Scientific Research (SESIC).
	Some priorities are established:
	i) information, ii) planning methods, iii) establishment of the SiNaPPES network.
12.03.1979.	The CONPES holds its second meeting. Its agenda:
	1. The establishment of the Regional Coordination (CORPES) of SiNaPPES. 2. The organising of the National System of Higher Education Information. 3. The linkage of higher education planning activities with national plans of development.
18.04.1979.	CONPES holds its third meeting. Its agenda:
	1. The National System of Information. 2. The establishment of inter-institutional agreements of collaboration in planning issues.

	3. UNAM representatives highlight the planning practice of the University of Aguascalientes as a matter of inter-institutional analysis.
May, 1979.	The Joint Secretary of the CONPES produce two proposals: i) a model of Institutional Planning Unit in higher education institutions, and ii) Methodology for a diagnosis of institutional planning.
May-July.1979.	The eight CORPES are officially established in the regions in which ANUIES is already organised.
August, 1979.	The Joint Secretary of the CONPES proposes: i) 'the State Coordination of Higher Education Planning; its characteristics of operation', and ii) 'Some methodological issues in the production of Higher education plans'.
08.08.1979.	The CONPES holds its fourth meeting. Its agenda: 1. The establishment of the State Coordinating Committees of Higher Education Planning (COEPES). 2. The formal creation of the COEPES in a special meeting in Mexico City. 3. The need to emphasise in the prospective characteristic of higher education planning.
August, 1979.	The Joint Secretariat of the CONPES organises a national meeting in Mexico, City to propose the 'Structure, functioning, objectives, and guidelines for the formulation of State Indicative Plans of Higher Education Development (PEIDES)'.
September, 1979 to June, 1980.	The COEPES are established in the 31 Mexican states on the following dates:

1. Veracruz.	9,07,79.
2. Oaxaca.	9,07,79.
3. Baja California Sur.	9,13,79.
4. Durango.	9,14,79.
5. Sinaloa.	9,14,79.
6. Yucatán.	9,14,79.
7. Tlaxcala.	9,14,79.
8. Aguascalientes.	9,24,79.
9. Zacatecas.	9,26,79.
10. Campeche.	9,26,79.
11. Baja California Norte.	10,15,79.
12. Chihuahua.	10,24,79.
13. Morelos.	10,30,79.
14. Tamaulipas.	11,08,79.
15. Estado de México.	11,08,79.
16. Puebla.	11,16,79.
17. Quintana Roo.	11,25,79.
18. Hidalgo.	11,27,79.
19. Querétaro.	12,05,79.

20. Michoacán.	12,07,79.
21. Colima.	12,07,79.
22. Nayarit.	12,11,79.
23. Jalisco.	1,29,80.
24. Sonora.	1,30,80.
25. Coahuila.	2,18,80.
26. Nuevo León.	2,19,80.
27. Tabasco.	3,19,80.
28. Guanajuato.	4,14,80.
29. San Luis Potosí.	4,24,80.
30. Guerrero.	5,08,80.
31. Chiapas.	6,12,80.

02.02.1980.   CONPES holds its fifth meeting. Its agenda:

1. Evaluating the establishment of SiNaPPES.
2. To extend to 10 years the horizon of the State Indicative Plans of Higher Education Planning (PEIDES).
3. The organisation of programmes and mechanisms for the co-opting and training of people in planning. The experience of the UNAM is highlighted to be used.
4. To include in its agenda for 1980, as a major objective, the consolidation in the operation of the SiNaPPES network.
5. The financial support of the CONPES (provided by SEP) to the activities of the UIPs, the COEPES and the CORPES.

May-June, 1980.   Three regional and one national conferences and workshops are organised for the training of planners and the exchange of institutional planning experiences.

July, 1980.   SiNaPPES' achievements are reviewed in the ANUIES National Assembly.

August, 1980.   A national conference is organised to analyse the operation of SiNaPPES.

Aug-Nov, 1980.   Six national conferences are organised to discuss the proposals for the PNES, according to the following issues:

1. Information.
2. Normative concerns.
3. Planning and administration.
4. Research policy.
5. Postgraduate studies.
6. Culture and communication.

10.11.1980.   The CONPES holds its sixth meeting. Its agenda:

1. The improvement of the procedures for the allocation process of public funds to autonomous universities, in coordination with SEP and SPP.
2. To review the formulation of the PEIDES.
3. The proposals for the PNES, emerging from the national meetings.

11.04.1981.	The CONPES holds its seventh meeting. Its agenda:
	1. The functioning characteristics of SiNaPPES' levels of higher educational planning at national, regional, state, and institutional levels. They are parallel ones rather than vertically depending from each other.
	2. The establishment of Regional Joint Secretariats.
	3. To prepare the process for the PNES 1982-1992.
	4. To reinforce the promotion of planning methodology through its Joint Secretariat.
June, 1981.	ANUIES and SEP representatives work on the preliminary outline of the 1981-1991 PNES to be discussed in the twentieth National Assembly of ANUIES.
26.06.1981.	The CONPES holds its eighth meeting to be informed of the current programmes of the Ministry, specially those carried out to face the increasing demand of education, and the administrative deconcentration of SEP.
July, 1981.	The twentieth National Assembly of ANUIES approves the PNES: 'National Plan for Higher Education. General guidelines for the period 1981-1991'. Its central aim is to provide guidelines for the higher education plans at institutional, state, regional, and national level, in order 'to improve' higher education performance, and its systematic coordination for the requirements of the national dynamic development during the decade.
10.08.1981.	The CONPES holds its ninth meeting to present to the President the 1981-1991 PNES.
22.03.1982.	The CONPES holds its tenth meeting. Its agenda:
	1. Producing the PEIDES 1982-1992.
	2. Producing the PNES 1982-1992; to be highlighted as a normative document of policy.
	3. The governmental support of the states to the activities of the State Coordinating Committees of Higher Education Planning (COEPES).
30.03.1982.	The CONPES holds its eleventh meeting, with the attendance of the President, for a general review of SiNaPPES functioning.
June, 1982.	ANUIES and SEP representatives prepare the preliminary outline of the 1982 version of the PNES.
8.11.1982.	The CONPES holds its twelfth meeting, with the attendance of the President, to analyse the preliminary outline of the 1982 PNES, and the SiNaPPES functioning since 1978.

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1983.   The 1983 PNES is produced through SiNaPPES.

1986.   The 1986 PNES is produced through SiNaPPES.

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Sources. ANUIES, 1979, CONPES, 1979a, 1979b, 1979c, 1979d, 1979e, 1980a, 1980b, 1981a, 1981b, 1981c, 1981d, 1982a, 1982b, 1982c, 1982d, 1982e, 1982f, 1984, UNAM, 1970.

Appendix 4. A NUMBER OF METHODOLOGICAL INSIGHTS FROM THE INTERVIEWS.

1. There were different reactions from different interviewees. From very formal reactions to very friendly ones. The structured part of the interview seemed to be useful to cope with the more formal reactions and to keep the topics, answers and conversations with interest and under the way. The non-structured part helped to overcome the barriers for a more open and friendly attitude towards the issues of the interview, and to encourage their collaboration within a dialogue of interest.

2. Most interviewees reacted with formality and even somehow a self defence attitude when the interviewer tended to record the interview by hand or tape recorder. Their answers and comments changed into more trivial and formal ones, as facing a journalist (PV31   ). Some interviewees even stopped the dialogue at any intention of making any record of the interview (CV20). Recording the interview immediately afterwards was better. As far as interviews were not very long, or could be 'split' into two sessions, most details of the interview could be recovered and recorded.

3. Interviewees reacted in a relaxed attitude when confidentiality was agreed. Two examples are illustrative as follows,

a) the interviewee offered the interviewer, since the beginning, cooperation not matter the issue, neither if answers would be quoted (CL11, CL21). At the time when the interview searched into non divulged details or personal anecdotes, the interviewee suggested not to quote this or that anecdote. Since the anecdotes did not contained themselves central data, but lateral information to improve the search, confidentiality was then granted, and it relaxed interviewee's attitude.

b) the interviewee knew the interviewer already, so its attitude was friendly since the beginning. Some answers mentioned "as you surely already know" or "as you know" (CL29, CV20). Again, when the interview could go deeply into non divulged issues and details including personal anecdotes, the interviewee explicitly ask for discretion mainly when personal issues were involved. Confidentiality was compromised, and the open attitude recovered. A second session was accepted, and this provided the interviewer with an opportunity to check information and the open attitude from the interviewee.

Some comments and personal reactions of policy-makers and planners, either individuals or groups, related by some interviewees have been very useful, if not directly in a indirect way which has helped the interviewer to understand specific situations and contextual circumstances. Interviewees asked the interviewer no to quote specific details of particular situations. That was accepted on the grounds that those details were not really shifting meanings or altering information. (CL20, CV16, CV12)

4. Combining structured and non structured conduction in the interview seemed useful although a couple of comments are of use. The more familiar was the period or the more intensive was the participation of the interviewee in it, the less attention was put on the structured part of the interview and the more extensive use and advantage of the non structured one. A fluent dialogue could be established between interviewer and interviewee and the interview became in fact unstructured.

5. Apparently a more open and free attitude from some interviewees was because they were "out the game at the moment" (CL20), or out of Mexico where "the peace of the Thames was a stimulating atmosphere" (CL29). Telling them about the research as an academic issue of the researcher was most of the time helpful "it is good somebody is researching and writing about these issues" (CL13), "It seems very interesting, I hope you will let me read what you will write" (CV20). It was expected that people still involved deeply in the process could be more reluctant to be interviewed, or they could also had changed their views on the matter, and would refer facts in a different emphasis or perspective. It was a normal risk and challenge for this kind of approach and topic of research. In fact a few interviewees asked for feedback from the interviewer, to check if their meaning were correctly interpreted by the interviewer.

6. Some interviewees were already known by the interviewer. Possible interferences because of that were tackled focusing the interview into issues more in the knowledge of the interviewee. This lack of common knowledge between both the interviewee and the interviewer on certain issues, allowed the interviewer to keep a learning attitude, or an observant one in respect to them. The achieved reaction on the interviewees was positive in general, "you should have been there to see" (PV31), "I tell you what happened" (PL17). In general this previous knowledge of some interviewees was of help to save a valuable amount of time when making contact with, and asking them to be interviewed.

<u>Code.</u>	<u>Institution.</u>
CL11	UAM. SESIC.
CV12	UNAM. ANUIES. SESIC.
CL13	UAM. ANUIES.
CV14	UAG. DGCE.
PV15	SESIC.
CV16	UV. ANUIES. SESIC.
PL17	UNAM. ANUIES. SESIC.
PL18	UANL. ANUIES. SESIC.
CV19	UNAM. ANUIES.
CV20	UNAM. UAM.
CL21	UAM. ANUIES. SESIC.
PL22	UNAM. DGCE. ANUIES.
CV23	UV. ANUIES. SESIC.
PL24	UNAM. ANUIES. SESIC.
PL25	UAM. UNAM. ANUIES.
PL26	UNAM. ANUIES.
PV27	UNAM. ANUIES.
CL28	ITESM. DGCE. UAM.
CL29	UANL.
PL30	UNAM. UAM.
PV31	UNAM. UAM.
PL32	UNAM. UAM.
CL33	UNAM. ANUIES.
CL34	UAA. ANUIES.
PL35	UAM. UAT. ANUIES.
PL36	UAS.
PL37	UAT.
PL38	UNAM.UAM.
PL39	ITAM.
PL40	UNAM. ANUIES. UAT.