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AUTHOR Ostergren, Bertil
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ABSTRACT

This document, adapted to readers who are not familiar with institutional details in Swedish higher education, outlines planning and management at regional and central levels. Emphasis is placed on qualitative aspects of planning and on identification of obstacles and possibilities of change and innovation. A central problem for the study is to suggest methods of how overarching societal (political) goals for higher education could be attended to, together with local and regional freedom and a local and regional planning that is effective and innovative. Another main focus is to study how changes in organization and decision-making can promote desired educational development such as problem-orientation, interdisciplinarity, international education, course development to meet demands for new student categories, and new teaching methods, such as project groups. It is based on talks with 250 individuals within the university and professional schools, on literature and documents, and on seminars and discussions within a limited circle of persons. In conclusion, it seems that present bad habits in organization, planning, and management develop because analysis of the real problems is neglected and inefficient methods are used to tackle problems that are not clarified. (Author)

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Planning for Change in Higher Education

A description of interim reports of a Swedish study
by Bertil Östergren

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Information on Higher Education in Sweden
Office of the Chancellor of the Swedish Universities

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A selected list of literature in English

Charts of institutional organization

INTRODUCTION

In November 1974 the Office of the Chancellor of the Swedish Universities decided to undertake a study of local and regional planning in higher education. The task was assigned to Bertil Östergren, adviser to the Office, with Torsten Kälveřmark, head of section at the Office, as secretary.

The first report was published in May 1975. The discussion in this first report covers basic principles of governance and organization, general problems of higher educational planning as well as some fundamental problems in the functioning of the institutions of higher education. The report represents a combination of a descriptive (or analytic) and a normative approach.

The second report was published in September 1975. It discusses planning and management at regional and central level. The final report is planned to appear in May or June 1976.

This is perhaps not a regular summary of the two interim reports, but more of a description of their main outlines, adapted to readers who are not familiar with institutional details in Swedish higher education.

The disposition of this summary - which follows that of the original reports - may seem confusing. We (the expression "we" denotes the two persons responsible for the study) start with outlining general principles of governance and planning and then we discuss some general problems of educational planning and governance; after that we present our view concerning basic principles of organization; and then follows a discussion of problems in the institutional organization. This might seem like putting two carts before two horses. Our conclusions about principles of planning and governance as well as of organization have, of course, been based on our study of Swedish universities and the comparative lessons mainly from higher education in Britain and the United States. But in designing the reports it proved practical to display our identification, analysis and suggestions for solution of problems against a background of general principles.

The structure of the two interim reports has been determined by linkage to the time schedule of a political process, i.e. the preparations for the reform of higher education in Sweden. In the next phase of our work we hope to be able to concentrate on studies of innovation processes and on strategies for change.

The wide scope of our assignment, the short time at disposal for preparing the two interim reports and the linkage to a political process give the reports their character: a broad and preliminary survey of principles and problems together with tentative suggestions for directions of change in planning, management and organization. We do not figure to have any complete or definite answers. We may have identified some fundamental problems, detected some ineffective and irrelevant practices and presented some arguments for our hypotheses about the general directions which planning in higher education should follow. We are, however, quite aware that "the problems of higher education as a system are just now beginning to surface" (James A Perkins in "Higher Education - from autonomy to systems").

The reports do not, of course, represent "research" in higher education. But they may indicate some of the many problem areas which offer challenging objects for research efforts from many disciplines.

Comments on this description and information about studies, research and literature from other countries are welcome. The address is: Bertil Östergren, Office of the Chancellor of the Swedish Universities, Box 16334, S-103 26 Stockholm, Sweden.

1 BACKGROUND AND PURPOSE

In May 1975 Swedish Parliament took decision upon a major reform of higher education. Most of the changes are to be implemented from the academic (and fiscal) year 1977/78. The decisions are in their main outlines based on proposals from two governmental committees: one which had as its task the organization, dimensioning and localization of higher education (U 68) and one which dealt with the rules of admission to higher education ("kompetens-kommittén").

An overarching political goal of the reform is to promote social equality. The proposal of the Minister of Education to Parliament marks a relative shift in emphasis of the goals of higher education: from the concept of growth to redistribution of social values.

The reform marks a desire to admit more students from "non-traditional" groups: grown-up people, people with experience of working life, students without traditional educational background. Opportunities for higher education will be more evenly distributed over the country. In principle, the concept of higher education will be widened to all post-secondary education. Even if the institutional organization may vary, higher education will be treated as one coherent system. Six regional boards will be established, with certain specified responsibilities. Recurrent education will be favoured. Representatives of the labour market and the society at large will have seats on the boards and committees of the various institutions. Endeavours will be made to link more general educational programs closer to working life, while those programs which are more vocationally oriented should have elements of general education. Efforts should be made to strengthen problem-orientation in education. One aim of the reform is to bring those institutions of higher education where no research is carried on into closer contact with research; this will be one of the responsibilities of the regional boards. The resource allocation system will be changed towards a type of program budgeting. The institutions of higher education will have more freedom in the use of resources and in developing education. Even if a formal and total limitation of admissions (numerus clausus) will not be instituted for those faculties where admissions presently are unlimited, the resource allocation will be based on set frames of resources. 1/

The preparations for the reform will be under the guidance of one central and six regional organization committees. The Office of the Chancellor decided to undertake a study of local and regional planning of higher education as a measure of service to these committees and other bodies responsible for preparing the reform. The idea is to facilitate the transfer of experiences from the present system to the new organization and avoid repeating old mistakes. The study should help to clarify how the planning of higher education "really" functions at the local level. Emphasis is put on qualitative aspects of planning

1/ A brief introduction to the present system of higher education is: Higher Education in Sweden. Fact Sheet FS 83, 1975 (exists also in French, German and Spanish). The Swedish Institute.

For a presentation of the reform of higher education, see: The Reform of Higher Education 1975. Swedish Ministry of Education and Cultural Affairs.

Bertil Östergren: Swedish Higher Education to Be Broadened. Current Sweden No 92, 1975 (and corresponding publications in French, German and Spanish). Swedish Institute.

and on identifying obstacles and possibilities of change and innovation. A central problem for the study is to suggest methods of how overarching societal (political) goals for higher education could be attended to, together with local and regional freedom and a local and regional planning which is effective and innovative. Another main focus is to study how changes in organization and decision-making can promote desired educational developments such as problem-orientation, interdisciplinarity, international education, course development to meet demands from new student categories, new teaching methods such as project groups etc.

Reforms of the higher education system in Sweden are usually initiated by proposals from governmental committees. Such committee reports do often look upon the universities "from outside and from above" and tend to overestimate formal aspects. Our ambition is to balance this by trying to see problems "from inside and from underneath". Our basic method thus was talks - not formal interviews - with some 250 persons within the universities and professional schools. We met them individually or in small groups; they were teachers, students or administrators.

The second basis of the report is study of literature and documents. We have used committee reports, government proposals and documents of national legislation as well as the minutes of the educational boards at faculty level. 2/ Swedish research on organization and planning of higher education has been very limited, but we have gained much by literature from other countries. A comparative approach helps to identify and understand hidden mechanisms. However, time has restricted our reading far too much in this first phase of our work. A list of literature in English which has been particularly useful is attached. We have had some limited possibilities for direct studies of universities in Great Britain and the United States.

The third technique we have used has been seminars and discussions within a limited circle of persons, based on a draft of the report.

In preparing the final report, we intend to use these techniques but also to add intensive study of some departments and faculties, questionnaires and case studies of innovation processes.

The conclusions we have drawn from our observations have led to suggestions and proposals which partly are far remote from the practices of today. And so they may be regarded as unrealistic and starry-eyed. But we have been more and more convinced that a lot of "bad habits" have been developed in the organization, planning and management of higher education. Present habits are often bad because analyzing the real problems is neglected and inefficient methods are used to tackle problems which are not clarified.

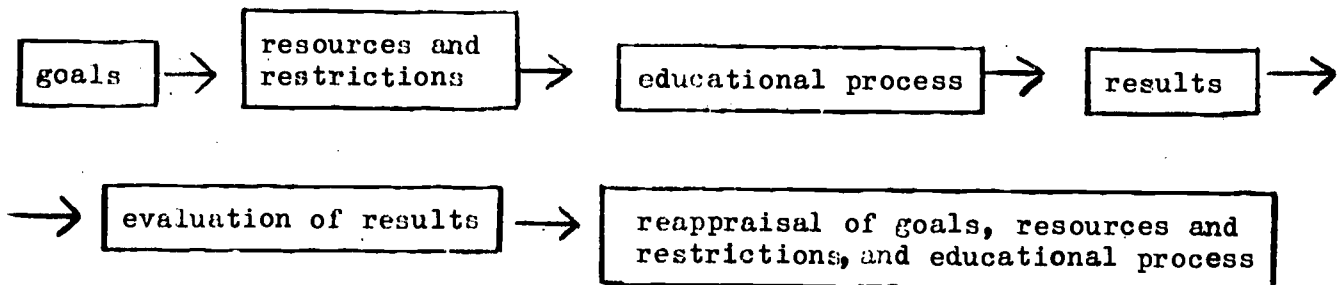
The main reason for this seems to be that the knowledge about universities as organizations is small. Self-observation and problem-consciousness in the field of higher education (in contrast to research) is limited and often superficial.

A realistic and effective planning for change in higher education must in many respects differ from the "bad habits" which people have been accustomed to regard as realistic. A more critical attitude towards established notions and formal systems is highly needed.

2/ The term "faculty" is used in the European sense, denoting a body comprehending a number of departments (e.g. the Faculty of Medicine).

- 3 BASIC PRINCIPLES
- 3.1 Basis of discussion
- 3.1.1 Concepts in educational planning

Educational planning as a system can be illustrated by this simple model:



Effectiveness is the degree of goal attainment in relation to costs. Efficiency (or productivity) is costs in relation to services rendered. These concepts are particularly difficult to apply in education because, inter alia, the objectives are complex and conflicting, because it is particularly difficult to compare various types of qualities and because many of the effects of higher education only display themselves in the long run. But these are not arguments against striving for effectiveness and efficiency in education. Ineffectiveness can be analyzed and measures to make education more effective can be taken, although only a few of many possible criteria can be used.

We use the terms strategic, tactical and operative planning (in spite of their military origin). Strategic planning covers a period of, say, more than 5 years, tactical planning 1-5 years and operative planning one year.

After the reform of higher education, planning and decision-making will take place on the following levels:

1. Central level, consisting of three sublevels
 - a. parliament
 - b. ministries ("government")
 - c. central boards (National Board of Universities and Colleges, National Board of Education and National Board of Colleges of Agriculture) 3/
2. Regional level (regional boards)
3. Institutional unit level (universities, other institutions of higher education).

3/ Even if higher education is treated as one coherent system, part of it will not be under the jurisdiction of the National Board of Universities and Colleges; this applies to agricultural education and education under municipal governance.

4. Area level, consisting of two separate levels 4/
 - a. faculty or section of faculty
 - b. educational program committees within vocational education areas
5. Department level

The three last levels together are denoted as the local level.

In principle, the education offered in undergraduate and professional/vocational studies can be referred to three various types:

1. Fixed educational programs. Examples are the degree programs in medicine, engineering, nursing. The characteristics of these educational programs are that the various courses are studied in a fixed order (even if there may be options between alternative courses) and that one course can be based on the previous courses, because they have no other function than being modules in a fixed educational program.
2. Loose educational programs. Most degree programs within the liberal arts faculties are of this type. The courses are often parts of several educational programs and can also be taken separately. Because of that, they cannot be pedagogically adapted to the demands of a certain educational program.
3. Separate courses. These courses are intended to be studied by persons who do not plan to take a degree but only to study one or more separate courses. These courses can, however, be included in some degree programs as options.

The official classification of the decision about the reform of higher education is another: 1. general educational programs, fixed by the government, 2. local educational programs, regulated by the institutions, 3. individual educational programs, after the student's own choice, 4. single courses. This classification has reference to resource allocation and setting the number of students.

3.1.2 Higher education in a social context

It may seem provocative to claim that universities are political bodies with political purposes. But higher education is not the concern solely of professors and students; various groups in society can have different demands on universities and colleges. In the final analysis, the working conditions of universities are determined by decisions of the political authorities.

In a pluralistic democracy, one of the political functions of universities is to pursue education and research, unfettered by political dogmas, and to be centers for independent critique of society and the political system. One of

4/ Today, the traditional faculty with its educational boards represents one area, responsible for research, graduate education and undergraduate education. From 1977, the faculties will be responsible for research and graduate education, while local educational program committees, detached from the faculties, will be responsible for undergraduate and professional/vocational education. These committees will not be organized according to faculty divisions, but within five vocational education areas: technology; administration, economics and social work; medical and paramedical professions; teaching; cultural work and information.

the many dilemmas of universities is that they are also asked to promote certain political and social goals. These five societal goals for higher education have been adopted by the Swedish Parliament in connection with the reform decision: personal development, greater affluence, democracy, internationalization, social change.

Politicians do often allege that universities are too isolated from working life and social realities. To include representatives from society at large in the governing bodies of universities has been seen as a means of obtaining a closer connection between higher education and its social surroundings.

Our opinion is that such representation will have various positive effects, particularly by influencing the debate situation. But the importance of it has been exaggerated, from those who have been against such a reform as well as from those who have been in favour of it.

The reports discuss, in various contexts, other measures to improve the interplay between universities and society. One of them is a problem-oriented and interdisciplinary education, which can give prominence to the applications of research and higher education to problems in society, and further creativity and a critical attitude among students. We do not deny the necessity of discipline-centered education, but the discipline-orientation has been so dominating and the discipline-based university departments have such a strong position, that concerted efforts for interdisciplinarity and problem-orientation are well motivated.

One of the tasks of universities is to maintain and develop the knowledge base. Even that is a political duty and the universities must be respected for fulfilling it. Reordering of priorities is also needed concerning this task with respect to social relevance, but the social relevance must not be judged solely on the basis of fashionable problems dominating the general debate.

The political and social pressure on universities is increasing and gives rise to irritation and conflicts. But this pressure is a manifestation of the social importance that is accorded to universities. The universities cannot demand to be left in peace. But they can - for the benefit of society - demand insight into their specific nature and respect for their functions.

3.1.3 The system of higher education - a specific organization

Institutions of higher education differ in many respects from other organizations. To widen the borders of human knowledge and to teach and learn on the basis of research are very special activities and they require other conditions than routine administration or production of goods. Research and higher education are interdependent, but these two tasks of universities are also conflicting. The objectives of higher education are exceptionally complex and not seldom at odds. This leads to difficulties in evaluating results, quite apart from problems of measurability.

One of the most characteristic features of Swedish universities is the nature and position of the basic organizational units, the departments. They have an extremely high degree of independence compared to basic units in other types of organizations, even concerning objectives and design of their products, be they research papers or changes in attitudes, knowledge and skills of students.

The position of the students is one of the characteristics of the organization. They cannot be compared with raw material, nor with consumers who select and pay for services and goods. The task of higher education is to alter the students, but they are active participants in this process of change and they influence themselves the type of change that they undergo.

Research is the main status-awarding activity of universities and the professional hierarchy is determined by scholarly competence. Objectives which are immanent in the system and which are not subject to conscious examination and consideration of priorities seem to play a large role. The same applies to informal structures of the real decision-making.

After the 1977 reform, more institutions will be included in the system of higher education, e.g. colleges of social work, teachers colleges, colleges of journalism, nursing schools. With few exceptions they do not have research as one of their duties; their activities are controlled by the basic educational mission. They do not have subject departments in the same sense as the traditional faculties. Hierarchical and even authoritarian elements may be more conspicuous. Linkage to working life is considered as a natural basis for education but is often practiced in a rather conservative way with emphasis on adaptation to present demands. The freedom of and within institutions is less than within the universities. Our first reports concentrate on the traditional universities and professional schools; in the following phases the "new" institutions of higher education will be included.

Even if the institutions of higher education are very specific organizations, they have many traits in common with other types of organizations. Knowledge gathered from these can be applied to universities and colleges but only after adaptation to their specific prerequisites.

3.1.4 Innovation and obstacles to change

"Change" and "innovation" are words of fashion in the international debate about higher education. The demands for renewal are considered to be extremely high.

Many of the factors which lie behind these demands for change are common to most industrialized countries: rapid evolution of societies and conditions of life, transition from elite education to mass education, widening of the systems of higher education, strivings for social and geographical equality, access for new groups of students, recurrent education, changes in working life and uncertainty about the future labour market, the increase of knowledge through research, the growing specialization and the simultaneous need for generalists to bridge across the specialities, the need for linkage between education and research, and between education and working life, growing international interdependence, increasing awareness of fundamental life problems of a global nature, demands for problem-orientation and interdisciplinarity in education, strivings for new teaching/learning methods for instance with more emphasis on independent study individually or in groups, focus on training the ability to tackle new types of problems, conflict between increasing costs and the demands for change and innovation, growing internal complexity within the systems of higher education.

It goes without saying that not all changes which are brought to the fore are desirable. Educational planning involves counteracting and rejecting innovations. The innovations to aim at must be examined through goal analyses and evaluation directed towards identifying problems.

It cannot be denied that higher education has passed through important changes during the last decades. Nevertheless, a common theme in international discussions about higher education is that universities and colleges are too negative towards innovations, too resistant to change. It seems as though these contradictory observations refer to different types of change: on the one hand, a continuous revision of contents of study, a steady widening of the knowledge base through research as well as rather superficial changes of teaching methods and organization; on the other hand, deeper and more central changes in the teaching/learning process and the institutional setting, affecting the fundamentals of higher education. It also seems as though universities and colleges can display a rather high degree of elasticity in response to manifest external pressure but that they are not much inclined to initiatives of their own for radical change. The universities have let themselves be changed more than they have changed themselves.

As an example of desirable fundamental changes we mention a reappraisal of teaching/learning and examination methods so that reproduction of information will be less dominating compared with other educational objectives.

University people in Sweden often claim that innovations are hampered by the detailed central regulation of higher education. And it cannot be denied that this is so. But it is not self-evident that a centralized system per se is less innovative than a decentralized one. Internal mechanisms of behavior and power at the local level have crucial anti-innovative elements.

In some countries radical ideas have been developed at new institutions with an experimental character and with a structure diverging from traditional universities and colleges. In Sweden, however, new institutions have been constructed more or less as miniature copies of the older universities. The historical tradition from the old German universities has left its mark on Swedish university life.

But it has not been necessary for us to give a specific grade to the innovative ability of universities and colleges in Sweden. Our point of departure has been that educational planning and management should be so designed that unnecessary obstacles to innovation are eliminated as far as possible, that incentives for change must be created and that the planning process should include critical appraisal of changes, their rejection or their acceptance and diffusion.

3.2 Principles of governance and planning

3.2.1 Governance by objectives and evaluation

There is a general tendency in Swedish national government to introduce governance by objectives and evaluation of results. 5/ This means that the grants and the activities are not regulated in detail by central government but that local authorities are given more freedom to use their resources to reach the objectives. Program budgeting is a technical instrument in such a system. A type of partial program budgeting is planned for the system of higher education beginning with the 1977/78 fiscal year.

5/ We use the term "governance by objectives and evaluation", deliberately avoiding "management by objectives". One reason for this is that we want to avoid confusion with a dogmatic interpretation of MBO. We lay emphasis on the capacity of an organization to adapt itself towards development and change, using assessment of results in relation to objectives and costs.

But there is a danger that a system of governance by objectives and assessment of results will not be effected consistently enough. There is a risk that overly detailed regulations of grants and activities will be retained. And that would serve to minimize the positive affects of a new system of governance and to maintain the disadvantages of the old system. A crucial point for the reform of higher education will be to abolish the mass of detailed legalistic restrictions and regulations and to develop resolutely governance by objectives and evaluation.

That means decentralization by allowing more freedom for institutions to choose the means to carry out the activities. But it also means that more accent is put on certain aspects of central governance, viz. those connected with general societal goals of higher education, assessment of results and reactions on the basis of the assessment.

3.2.2 Determination of goals

Conceptions about certain goals are prerequisites for planning higher education and for the educational process itself. But we claim that the goal issues have not been given due attention in higher education.

Efforts have been made to establish complete and complicated taxonomies of educational objectives and to elaborate models for the derivation of goals on lower levels from overarching goals on higher levels. But what we have in mind are not such mechanical and theoretically complete systems of goal definition. Goals should primarily be seen as chief directions of desirable change.

The overambitious and unrealistic efforts in the field of goal determination may have discredited goal analysis. It would be a pity if disappointments in this field were to deny goal issues the increased attention that is necessary for educational planning.

The fundamental approach must be to foster increased consciousness of the notions about goals that underlie present higher education. Many objectives may have been passed on without analysis of their real significance and their priority compared with alternative goals. They are considered axiomatic and become system-immanent. Where consciousness of goals is lacking, they will not be questioned, critically analyzed and reappraised. Goal conflicts are not often enough openly debated.

During our work we have met examples where the members of a department or a board have isolated themselves for a few days to discuss objectives and identify connected problems. Such discussions have liberated latent potentials for innovation and created group consciousness around important directions of change. The name of the hotel or the locality where the conference took place can several years later be heralded as ushering in a new epoch.

We are in favour of dynamic and pluralistic working methods for goal analysis: conferences, seminars, project groups, development projects etc. But it is also necessary to develop goal documents in operational, tactical and strategic perspectives, outlining the desirable directions of change at all levels of the system. Such documents should be revised from time to time. We see the work expended on problems of objectives - the setting of objectives in the real sense of the word - as being just as important as formal decisions about goals.

Many of the goals governing the behaviour of individuals and groups within institutions of higher education can be denoted as informal goals. Understanding of such informal goals and how they affect the formal directions of change is crucial to planning and management of higher education (see paragraph 4.4).

3.2.3 Assessment of results

The evaluation of results is the turning-point where a new cycle of planning starts: the evaluation is the basis for reappraisal of objectives, resources and restrictions, and of educational processes.

A truth that holds with equal force for evaluation and goal analysis is the need to avoid over-ambitiousness. If a perfect and complete system of result assessment is demanded, assessment will be found impossible. It is convenient for those who wish to avoid control of their activities to show that no measurement of effectiveness is possible in higher education. But the ability to measure effectiveness with perfection is not necessary to undertaking evaluations which lead to practical improvement of results. Ultimately, the assessment must be based on value judgements.

Seeing goals principally as desirable directions of change, the evaluation must have its focus on accounts of how far these directions of change have been attained. Annual reports should be published at all levels within the system of higher education.

In the first place, assessment must imply self-evaluation at the departmental level by the use of statistical data, economic information, course evaluations, special investigations, project groups, seminars etc. At higher levels the information about results will be aggregated and evaluations made of the activities specific to the level.

Flexibility and a capability for change should be considered important criteria of effectiveness.

The reactions to the results should first of all be channeled through discussions and self-examination at the level concerned, secondly through the use of incentives and sanctions, thirdly through direct interventions from the superior level of governance and only in the last resort through general and formal regulations.

3.2.4 Program budgeting

We use the term program budgeting in a wide sense, signifying that grants are given for certain purposes and not as detailed allocations for various types of resources.

Program budgeting must be seen as one of the technical aids to governance by objectives and evaluation. If program budgeting is treated from isolated technical aspects and emphasis is laid on details of accountancy, the result will be to minimize the advantages of the allocation technique and to maximize its disadvantages. Efforts must be made to eliminate restrictions on the use of grants.

A delicate and difficult problem is that, in accordance with Swedish tradition, most of the manpower resources are tied up by central government decisions

about the number, type and duties of professional staff positions, by central agreements about salaries and other working conditions and by the fact that most full professors and lecturers have life tenure. But the aims of governance by objectives and evaluation, and of program budgeting will be eroded if a substantial portion of the grants which finance staff is locked by central decisions. It will be necessary to have considerable local freedom and flexibility in this respect as well.

At every level a specified portion of the grants should be earmarked for free disposal towards supporting development and innovations. Besides the regular grants, special grants may also be necessary to promote major changes in desirable directions. In the field of higher education - where the goals are so complex and conflicting - a system of program budgeting must allow for such specific allocations to induce a climate favourable to change.

3.2.5 Planning process and planning documentation

The system of governance that we advocate necessitates the drawing up of planning documents of a strategic, tactical and operative nature and of reports which relate the results to the planned objectives. This will be regarded as adding new burdens of paperwork. But it is the price that has to be paid for increased effectiveness and local freedom.

However, planning documentation must not be seen mainly as a new type of paperwork. Of utmost importance are the discussions on which the planning documentation must be based. These discussions are means of making people conscious of basic conditions and of helping them to identify fundamental problems.

It is sometimes argued that planning documents would tend to impede flexibility and development. We are definitely of the opposite opinion. To neglect a systematic identification and documentation of planning problems generates a tendency to accept without reflection traditional objectives, present activities and the existing organization.

Efforts should be made to establish a total and coherent process of planning. Even if the interim reports generally argue for "de-formalization" and "de-institutionalization", we recommend a certain formalizing of the planning process. It is necessary for promoting planning activities in competition with routine business. A systematic process of planning does not imply a more complicated but a more simple planning. It can be an instrument for vitalizing and renewing higher education.

3.2.6 Reordering priorities, liquidating activities, cost consciousness

Change within higher education has been facilitated by a continuous growth of resources. It has not been imperative to liquidate existing activities in order to acquire capabilities for starting new ones. The planning has had an additive character.

But the costs of higher education and research now represent a large part of a national economy. The consequence is increased political observance of these costs and growing tendencies to keep them under control. The economic pressure on universities and the demand for change will both intensify. Change cannot be financed by increased grants alone.

But this new situation should not be regarded as a mere disadvantage or obstacle. The incremental approach leads to ineffectiveness.

A crucial point in educational planning is the establishment of real possibilities for reordering priorities (instead of even cuts) and liquidation of activities (departments, staff positions, courses etc). It can be doubted that universities and colleges themselves will be capable of such decisions, considering that all individuals and groups within them are striving for survival if not expansion and also considering the prevalence of the "vendetta principle" (see paragraph 4.4). But the alternative is that initiatives and decisions in this respect are taken by the superior authorities, and that means a serious setback in the self-management of universities.

The power of action of universities and colleges must therefore be enhanced by building in stimuli for them to establish new priorities and to give up or cut down traditional activities. An institution which reduces costs should not be punished by cutting of grants but be rewarded. A general rule of thumb should be that savings should be retained by those who make them.

The combination of economic pressure and demand for change also necessitates sharpened cost-effectiveness thinking in using existing resources. Savings by reducing costs of telephoning and cleaning are not particularly important. The essential thing is how the time of teachers and students is used. Cost-effectiveness thinking must concentrate on the methods of teaching/learning. It is conceivable, for instance, that a reduction in formal teaching of the traditional types and a transfer of resources to guidance of the students' own activities, individually or in groups, could give better results by satisfying other educational objectives than the cognitive ones (without impairing these) with no increase (or perhaps even a decrease) of costs.

The usual reaction from universities and colleges when demands for change are put on them is to ask for more resources. This well-nigh automatic reaction is in itself an argument for budget cutting because it indicates indifference to reappraisal of activities. The need for a change of attitudes in this respect is really crucial.

3.2.7 Needs of information

Education must be founded on information. But good information does not necessarily mean collection of more and more statistical data or the establishment of complicated information systems. The collection of information must be restricted to what is really essential for planning and management. The information must be total so that it does not exclude what is essential for decisions, and selective so that not too many data are developed. The importance of other types of information than statistical data is easily underestimated.

3.2.8 Incentives and sanctions

A common theme during our talks at universities and colleges has been the lack of incentives for devotion to teaching and for planning and development of teaching (in contrast to research).

An effective governance must be based on rewards to promote development, effectiveness and change and on punishments against inefficiency and neglect. The incentives and sanctions must largely be of an economic nature. For the present there is a tendency to treat everybody equally, unless special support is given to the inefficient. In the discussion about resource allocation (paragraph 3.2.4) we have noted the necessity to make money available for incentives.

But rewards can also be of non-monetary nature, e. g. job satisfaction. It is a primary task for management at all levels to develop incentives through various types of support, encouragement and commendation.

4 SOME GENERAL PROBLEMS

4.1 A changed pattern of access

University education has traditionally been adjusted to a specific and fairly homogeneous category of students, viz. young people who begin studies directly after a 3-year secondary schooling of a broad and theoretical character and who intend to take a degree. In recent years a new type of students is represented among the undergraduates at Swedish universities, mainly at the faculties of liberal arts and social sciences. These students are older, have vocational experience, another educational background than the traditional one and often do not intend to take a degree but to study one or more courses.

The faculties concerned have rapidly adapted their educational offerings to these new categories, e.g. with new types of courses, evening classes, so-called distance teaching etc. But it can hardly be said that there has been a systematic analysis of the needs and demands of the new type of students. Because these new students make welcome bolsters to enrollments at a time of decreasing recruitment from traditional groups, there is a risk that the departments may be inventing new courses in a too unsophisticated manner.

A distinctive feature in the reform of higher education in Sweden which now is under preparation is a widening of access. New rules of admission will be practiced. The intentions are that the new pattern of access and the offerings of single courses that have started at some faculties should be extended to the whole system of higher education.

This growing heterogeneity among students is bound to impart greater variety to higher education. Better information is needed about the demands of the new student population as a basis for planning the appropriate changes; tools for acquiring such information still have to be developed.

4.2 Linkage with research

According to the reform decision, all higher education should be linked with research. Interaction between education and research has many dimensions. One is that teachers do active research work or, anyhow, have done it and naturally keep up with advances in their discipline as part of their job. Another is that the contents of education should be changed rapidly to reflect new research findings. Linkage to research can also mean that the students, even the undergraduates, should get some insight into the methods of research or be made to do assignments which apply elementary research methods. One form of linkage is that undergraduate education is the basis for training of research workers. An institutional linkage exists if teaching is undertaken by institutions which also have research as one of their duties.

In our opinion, the main reason for linking education with research is that education should foster the ability of students to identify and solve new problems of a complex nature and under varying circumstances.

The relation between research and education is often presented as an idyllic picture. But the conflicts are severe. Research and education compete for the time of professors and other resources. Because research and graduate education have the highest status and are looked upon as the core of departmental activity, undergraduate education can be treated like an orphan. A specific research profile within a department can have a stimulating effect upon education but in other cases it may be inimical to comprehensive competence in teaching.

It can be argued that linkage to research also represents a practical linkage to working life by giving general methodological knowledge with long durability. Against this it can be said that the way in which methodological knowledge is organized in research often has little to do with the way in which such knowledge must be organized in order to solve practical problems in professional work. There is a risk that a prestigious and abstract preoccupation with methods will supersede problem-consciousness and practical relevance. The methods may become a status-giving end in themselves.

A well-known phenomenon is that research publications award the most merits in competition for academic positions, even if these are primarily teaching posts. The incentives for devotion to planning and development of education and to teaching are much weaker than the incentives for research. It is not evident that this leads to the best utilization of resources from the point of view of society.

The linkage between higher education and research is necessary for both, but the relation gives rise to tensions and represents a dilemma. The institutions of higher education must accept and live with this dilemma.

4.3 Linkage with working life

Higher education gives training for various functions in working life, even if its importance as cultural consumption will be growing. Linkage to working life must not be given a narrow interpretation. An education which contributes to basic knowledge, abilities and attitudes and provides a general critical and analytical training can be a better preparation for jobs than filling the students with factual information and training them in short-lived practical techniques.

Recurrent education is a form of interrelationship between education and working life. It has been assumed that older students with vocational experience should mainly undergo more practical, vocationally directed courses. But it may well be that their interests would be better served by a theoretical penetration of their practical experiences.

The reports discuss various methods of promoting linkage with working life.

4.4 Decision mechanisms within institutions

There exists an enormous disparity between formal and real mechanisms of decision-making within institutions of higher education. We discuss this problem on the basis of a model presented by Jack Lindquist. Observations made by J. Victor Baldrige and others at universities in the United States and by Dick Ramström at Swedish universities have been corroborated during our own studies.

According to the Lindquist model, there are three main categories of goals (or needs): survival, status/esteem, formal goals. The goals have different purport for individuals, for sub-groups and for the organization. The survival goals are such as holding the job for an individual, maintaining the position of the department for a sub-group and keeping enrolment up for the organization. The strongest influence on behavior - e.g. in resisting or accepting an innovation - is exerted by survival goals for the individual, the weakest influence by formal goals for the organization (such as educating students, advancing knowledge and serving cultural needs). The more levels or types of goals a change will affect, the more likely is the acceptance if the needs are satisfied and rejection if it represents a threat to satisfaction of needs.

The most important organized powers at universities are the departments. The department is the environment which more than other structures shapes professional attitudes and activities of academic staff. Their prime loyalty is devoted to the department. And the dominating goal of a department is strengthening or at least keeping its position within established fields of activities (or such fields which could easily be established), particularly in research and graduate education.

Within many disciplines there has been a sharp rise in the number of graduate students and this reinforces the aspirations for growth in order to get jobs for the best graduate students. Should the number of undergraduates then decline - as has happened at some faculties - the staff situation becomes a strong determinant of decision-making.

The boards and committees at higher levels - faculties, educational boards, the academic senate, various committees - are to a large extent composed of academic staff members from departments. To change one's role seems particularly difficult in university life. Loyalty to the department is a badge of personal conduct. It is also marked by dominating features in the environment: the fragmented power structure with a number of relatively independent power centers and the primary attitude of defence of resource positions from the most important power centers, the departments.

In such a structure the formally responsible boards tend to function according to a passive model of conflict solution. Everybody respects each other's endeavours for maximizing resources and hesitates to interfere in the other fellow's business ("the vendetta principle", so called because of the tendency to avoid provoking a vendetta). This must inevitably lead to a trend to keep the existing balance between power centers and to preserve status quo. We shall illustrate these phenomena in paragraph 6.2, mainly on the basis of studies of educational boards at faculty level.

Ramström claims that universities lack the necessary decision-power and that decision-making is anarchistic and haphazard. He writes that a behavior according to the "garbage can model" can be predicted: a number of resources, problems, people and alternatives happen to be collected at various decision-points at various time-points and the outcome of the decision is to a great extent dependent upon this highly randomized combination of forces available. There is a risk for a state of decision-death, where no active decisions are made; instead there is just a passive adjustment in the direction of such development trends where least resistance is expected.

In discussions of decision-mechanisms within institutions of higher education the importance of individual teachers and students as decision-makers is surprisingly underestimated. Many of the most important decisions are taken by individuals: what to teach, how to examine, what to learn. The formal curricula are just a framework. - In 1969 a reform of undergraduate education was mounted within the faculties of liberal arts, social sciences and sciences. One intention was to have the vast majority of students follow fixed educational programs decided by national government. Only a small number of students were supposed to be allowed to combine their own programs. This reform soon broke down in practice. One of the main reasons was that the central decision-makers had underestimated the power of individual students as decision-makers concerning their own studies.

The expression "organized anarchy" has been used for universities. In spite of the abundance of national regulations about higher education in Sweden, this American expression is applicable by and large to Swedish universities.

Any discussion about planning for change in higher education must be based on a realistic insight into local structures and the prime governing mechanisms within them.

4.5 The mythology of central governance

The national governance of higher education is exercised mainly by formal rules and resource allocation. Typically, great importance is accorded to formal bodies and to detailed regulations about their duties, composition and activities. The design of basic production units (departments) is controlled by regulations about their responsibilities, staff, boards etc.

Central governance is also characterized by isolated decisions on various items. It is supposed that these decisions will have the intended effects, that the type of "rationality" which has led to a decision will lead to a corresponding rationality in the effects. The realism of this assumption is not analyzed and side-effects, counter-effects and dysfunctions in the total environment (outside the specific point that the decision formally applies to) receive only sporadic attention.

Central governance displays an almost superstitious belief in formal bodies and rules. But there exists at the same time a mysterious contradiction: the institutions of higher education are treated as any state bureaucracy and at the same time with suspicion and some lack of confidence. It seems as though central bureaucracy silently reasoned like this: officially we have to treat them as if they were bureaucrats, but we do not really believe that they are.

An illuminating example of how central governance functions are the educational boards at faculty level. These boards have the main responsibility for educational planning at the local level and have consequently been in the focus of our study. We have found a vast gap between the central purposes for the boards and their real functioning. This could have been foreseen from the beginning if all circumstances had been carefully analyzed; yet the central authorities still act as if the boards could and do function in accordance with the intentions. This example will be elaborated in paragraph 6.2.2.

The present type of central governance is ineffective. It is urgent to develop alternative instruments of central governance and, at the same time, decentralize decisions which can better be taken at local or regional level.

4.6 Fragmentization of planning and decision-making

Especially at the largest universities there exists an embarrassing fragmentation of planning and decision-making, due to the fact that the professional administration is centralized for a university as a whole with a far-reaching specialization by functions and that various boards and divisions within administration are responsible for various types of coherent issues. A department at the university of Lund got its basic resource allocation for education through 13 decisions at different time-points, while the decisions about the corresponding education were prepared and taken by other bodies at other time-points. This illustrates the desirability of better integration in planning and decision-making.

4.7 Research and development activities

The R&D activities - comprising research projects on higher education, development projects and in-service training of staff - have evolved since 1969 as an institutionalized subsystem. There is a special department within the Office of the Chancellor for R&D, and corresponding sections within the local university administration. The R&D activities are financed by a special grant.

Considerable endeavours have been made through R&D for renewal and effectiveness in higher education. Particularly important has been, that the activities have contributed to increasing professional involvement in undergraduate education, even if it has not spread throughout the whole system. But the experiences gained, together with consequences of the reform of higher education, are reasons for a reappraisal of the activities and their institutional setting.

For the research projects we stress that they should have a high, direct or indirect, pragmatic relevance. But the relevance must not necessarily imply direct and short-term conclusions for practical action. Research which provides more basic knowledge about higher education, identifies hidden problems and leads to better problem-consciousness can directly have high long-term relevance.

At first, research projects were concentrated on purely pedagogical issues. There is now a tendency to pay attention to institutional and governance problems.

Research on higher education must identify and analyze the tension between formal and informal aspects. This applies to all problems: institutional organization, governance, educational objectives, curricula, examination etc.

Another significant aspect is that of international comparisons. This means more than improving the utilization of international research about higher education. It also means promoting comparative research and studies as one of the best ways to understand the important determinants and tendencies in higher education.

In-service training of teachers and other staff is now pursued on a fairly limited scale, with central as well as local courses. The Office of the Chancellor has proposed that the activities should be considerably expanded so that all teachers will undergo in-service training.

Staff training should become a central element of educational planning for change and innovation. It should be integrated with planning and development at large. There is a close connection between staff training and organizational development.

Most of the specific development projects are locally decided and only a smaller part by the Office of the Chancellor. They vary much in character, since they may involve the development of textbooks and technical aids, minor changes in teaching design and subject content, more radical experiments with new types of teaching/learning, evaluation of new types of courses etc. There are differences between universities in the degree of "conservatism" and "radicalism" of the projects. Staff members of local R&D units often argue the importance of supporting relatively simple measures in order to achieve an elementary pedagogical improvement and initiate a process of change. We are of the opinion, however, that it is desirable to give more support to development projects of a more radical innovative character. More attention should be paid to new principles of education and to institutional development.

A crucial and unsolved problem is the spreading of successful development projects. The diffusion effect seems to be small. Innovations and innovators are often isolated and powerless.

The functioning of R&D as a relatively independent subsystem has created some tensions with the planning and decision-making bodies in general. Deans, educational directors and educational boards like to argue that R&D should be integrated with the ordinary system of planning and decision-making. R&D people usually answer that independence is necessary to give enough scope for experiments along unconventional lines.

But however radical a development project is, if it remains an isolated island it will have minor importance. Planning for change makes it necessary for experiments and development to become an integral part of the planning process. It must be a task for the ordinary planning bodies to try out and evaluate radical changes.

Our tentative suggestion for a practical solution is that, once program budgeting is implemented, money should be set aside from the program grants at all levels - from the Office of the Chancellor to the departments - for development and innovation. This money should be distributed by the normal bodies for resource allocation in general. But the R&D unit within the Office should also have resources for development projects: large-scale projects of national importance, more far-ranging projects and projects which are so controversial that they cannot get local support but which are nevertheless worth trying. A corresponding solution should be applied to staff training, while it seems obvious that support for research in higher education should still be a matter for the R&D unit within the Office (which of course does not prevent universities, research councils and other institutions from financing such research).

The R&D unit within the Office will undergo some change in its activities if these suggestions are followed. There must be a close cooperation with the planning committees for the various faculty and educational sectors. The professional staff of the local R&D units should be what their formal title denotes - pedagogical consultants - and not administrators of grants.

4.8 Planning functions and routine business

In a system traditionally inclined towards dealing with formal items of current affairs it is difficult to set aside enough resources for planning purposes. Current matters arise every day and have to be dealt with. Isolated items usurp priority and push aside total planning. We have found this problem in every board and committee. Little time and vigor is left for discussing innovative ideas after the inevitable matters of the agenda are dealt with.

Throughout the report we present suggestions which we think suitable for giving planning and innovative activities more scope.

4.9 International cooperation

Within disciplines there exists an international community for research but there is no corresponding community for educational activities. The knowledge about and contacts with higher education in other countries are usually scarce. But ideas and stimuli from other countries can promote change and increase effectiveness. One cannot afford to dispense with them.

Teachers and administrators must be given better opportunities to study education in other countries. This has been proposed by the committee for internationalizing higher education in Sweden and as a part of the action program of the Office of the Chancellor for 1976/77.

5 PRINCIPLES OF ORGANIZATION

Our discussion of rules of thumb for institutional development is based on impressions from our talks at universities and colleges. But we have found support in much of the literature from other countries, particularly in the study of British universities by Fielden and Lockwood: "Planning and Management in Universities".

5.1 Flexibility

The concept of flexibility has two aspects. At all times the organization should be flexible so that existing resources can be used as effectively as possible. And it should also be flexible so as to be amenable to change over time. It is often better to make minor changes of organization now and then rather than push through a tremendous reform every decade.

In connection with the 1977 reform of higher education, the institutional organization at local and regional levels should not be fixed in detail. The various bodies must have freedom to develop an organization in accordance with needs.

No two university departments are identical. The Swedish practice of regulating at national level the number, type and duties of academic staff is contrary to efficiency. The department as such must have the responsibility for performing its functions and consequently have large freedom to use its resources for various tasks.

5.1.2 Integration

A national reform of the university and college administration in 1964 was based on specialization by functions within an administration common to the university or college as a whole. This has led to fragmentization; decisions about various aspects of planning and the educational process are taken at different times by different divisions of management. But educational planning must be a unified process and we suggest that integration should be given more priority in relation to functional specialization. Although specialized administration is needed for certain functions it should be bridged, for instance, by project groups.

5.1.3 Devolution and self-management

Decisions, planning and development should be located as close to the educational process as possible. This means that decision-power and administrative resources should be devolved from institutional unit level to area and departmental level. Management and administration at each level should have functions specific to that level. Re-examination of decisions and formal confirmation of decisions at superior levels should be restricted; the number of decision points should be kept as low as possible. Performance at lower levels should be judged by superior levels upon results. Control by results should take the place of control by interference.

Our recommendation about devolution and self-management is in opposition to the 1964 reform which created an office of professional administrators for the university as a whole. That pattern of organization has led to aloofness and conflicts between administrators and those who work directly in the educational process. And it has not led to the supposed decrease in the administrative burden on departments.

We attach great importance to the concept of distance. A smooth-running, competent and realistic planning and administration of education is facilitated if the distance, even in a geographical sense, between the educational process and the administration is as short as possible.

Giving greater power to faculties, educational program committees and departments and placing professional administrative resources at their own disposal has indisputable disadvantages. The informal goals at departmental and faculty level can get too much scope at the expense of formal goals of the institution or the system of higher education as a whole. There is a risk of increased fragmentation between departments and between areas. But that problem cannot be solved by centralizing decision-power and administration within a university or college; this would mean that departments and educational program committees were declared unqualified for the business in which they are expert and would openly demonstrate a lack of confidence in them.

We want to seek the solution in the system of governance. Setting objectives, assessing results, using the authority in questions specific to the level and applying incentives and sanctions should give management at area level and institutional unit level ample possibilities to influence developments and with even better effectiveness than under present conditions.

5.4 Participation

Far-reaching experiments have been made with participation of students, all categories of academic and professional staff, and non-professional staff in boards and committees: the academic senate, the educational boards and the boards of the departments. Even if this, particularly in the beginning, meant a lot of extra work, the experiences are favorable. The teachers are generally positive towards student participation.

Participation can promote change, e.g. by balancing the influence from a hierarchy which often tends to preserve status quo. It cannot be denied that resistance to some types of change can be strengthened through participation by new groups in decision-making, but participation is nevertheless desirable in order to get support for change from all groups concerned so as to avoid suspicion and resistance.

But there has been relatively too much focus on participation in the decision-making boards. Such types of student and staff representation should be supplemented with participation in project groups, symposia, evaluation groups, etc.

5.5 Processes and projects

The present tendency to manage and administrate by dealing with isolated items should be overruled by the use of processes and projects. Planning must be organized as a coherent process and a system of subprocesses (e.g. information process, resource allocation process).

Special temporary activities within the framework of processes can be managed as projects, e.g. to promote certain types of development, and handled by temporary project groups. By resorting to project teams and their members, the boards and committees can avoid being overloaded with work and can get tools for more creative and far-reaching activities.

5.6 Institutional research and development

Our ideas about planning, governance and institutional organization can be summarized as a recommendation to develop more dynamic and creative models and to abandon the traditional type of legalistic governance wherever possible.

Such new models must be evolved with the help of institutional research and development. Universities have been surprisingly uninterested in doing research about themselves. It is to be hoped that a change in this respect is on the way.

6

SOME INSTITUTIONAL PROBLEMS

Section 6 is more briefly summarized than the preceding sections and that has two explanations. The first one is that most of our work concerning institutional organization, planning and innovations at the local level still remains to be done; our third report, which is planned for May or June 1976, will account for these further studies. The other explanation is that section 6 deals with institutional items often specific to Sweden and sometimes of limited interest to readers from other countries. So section 6 only contains a brief description of some of the observations and ideas.

6.1 The departments

6.1.1 Some general remarks

The departments are the basic units for research and education, usually within one discipline. The academic staff consist of (full) professors, associate professors, assistant professors ("docent") and research assistants, who are employed mainly for research and graduate education, and of lecturers, who are employed mainly for undergraduate education. There are also various types of assistants, usually graduate students, who are engaged in education and research.

Responsibility for the affairs of a department is vested in its governing board and head, the "prefect" (usually a professor or lecturer). The department head is in most faculties assisted by a director of studies (usually a lecturer). In some faculties departments have a student counsellor, usually employed part-time, for that specific task; in other faculties the counselling is concentrated on the area level. Departments seldom have non-teaching professional administrators.

The departmental system has many advantages. Departments are suitable organizations for preserving, widening and diffusing the knowledge base within a discipline. But there are also disadvantages. The concentration on a discipline and its development can come in conflict with linkage to society and working life, which often should imply a problem-oriented integration of many disciplines. The department can also display traits of self-centeredness and isolation. Hierarchical features and the dependence of younger research workers on the established authorities can sometimes be obstacles to renewal.

Even if there are universities in other countries which are not based on subject departments, we cannot see any possibility or reason for suggesting a change of the present structure. But experiments with new types of basic units should be encouraged. Interdisciplinary centers can supplement the departments.

6.1.2 The teachers

It is surprising how little attention governmental committee reports about reforms in higher education have paid to the key role of teachers. Nationally instituted changes in the structure of departments have been directed towards doing acute repair work on specific points (establishment of positions as director of studies and student counsellor, new procedures for appointment of professors, participation in management etc). The teacher role (individually and in cooperation with other teachers within and outside the department), the function of the department as a whole, the institutional relations of a department have not been the focus of reforms.

We advocate that acute and fragmented repair work should be replaced by a holistic view of the function of departments and the role of teachers in a wider and more far-reaching perspective and that such a view should guide further developments.

The traditional function of teachers has been to do formal teaching at certain hours and to examine. It is urgent to promote a change so that the teachers' role will be to bear a total responsibility for the educational situation of the students. The teachers shall guide the students through their studies. A change in emphasis should take place from traditional teaching towards more differentiated work in closer individual relationship with the students. There must be more teamwork with the students and with other teachers in order to integrate all efforts into the total educational situation. The students can also be teachers for each other in organized study groups.

There are examples of departments where a change of this type is on the way.

One obstacle to this change of the teacher role is the national regulation of the duties of teachers. One of the features of this regime is that the teachers are grouped in strictly defined categories. Such a compartmentalization sets narrow limits on the free use of academic staff resources.

For each category the duties are described in general terms. But besides this, the regime fixes the number of classroom hours required of a teacher belonging to a certain category. For other teaching work than classroom lectures complicated conversion rules are set up, without making it possible to convert all types of pedagogical work fairly.

We are definitely of the opinion that this manner of regulating the working load of teachers by fixing a number of formal teaching hours for the different categories is detrimental to good planning, to renewal, to flexibility and to effectiveness. Isolating that part of educational duties which can be accounted for by formal and traditional teaching hampers a pedagogically desirable development of educational methods and the teacher role.

Our guiding principle is that the department as such has its obligations and functions. It must be up to the management of the department, with as few restrictions as possible, to combine existing resources to achieve the best result in relation to objectives. The department should not be controlled by detailed regulations but by assessment of its results.

The lack of incentives for undergraduate teaching has been mentioned earlier. This problem cannot be restricted to the balance between different types of merits in competition for teaching posts. It concerns the general attitude towards educational tasks, particularly in undergraduate education.

6.1.3 Management and administration of departments

It is obvious that heads of departments and directors of studies are unreasonably burdened with unqualified administrative tasks to the detriment of their involvement in planning and innovation. When we have asked directors of studies about what they do, the most usual answer has been that they must always be on tap. That is an indication of defects in the administrative structure. The talents of qualified academic staff must not be squandered to the extent that is so common nowadays.

The solution to this problem must be sought along three lines. One is a reduction of central regulation and increased devolution of decision-power. Another is the provision of more non-professional administrative staff who can take the responsibility for a lot of routine matters. The third one is to provide departments with professional administrative staff; to achieve this it will usually be necessary to merge departments into larger administrative units. It may have disadvantages, but we believe that the disadvantages of present inefficiency are more severe.

The posts of directors of studies at departments have existed for some years. They have been conducive to better organization and more involvement in undergraduate education. The functions of directors of studies need to be strengthened, particularly as concerns planning, development and evaluation. But this does not mean that such positions should be nationally regulated. The introduction of program budgeting changes the situation; special resources will no longer be earmarked for posts as directors of studies. In accordance with the principles of flexibility and devolution it should be up to the departments themselves to decide upon the use of resources to fulfil such functions as are assigned to directors of studies. We have seen examples of the advantages of flexible solutions, adapted to the needs of a particular department and the qualifications of its staff, which are already practised (even if they perhaps are not in strict accordance with present formal regulations).

The same principle should be applied to counselling about study problems. Really positive experiences have been gained with the present system of student counsellors at departments within some types of faculties. They have helped to repair shortcomings in the role of teachers. But we are afraid that if a system of professionalized student counsellors at departmental level is given permanence, it might thwart changing the teacher role towards a total responsibility for the educational situation of students. We have seen examples of departments which have changed their educational methods towards close and permanent contacts between teachers and students; at such departments there is no need for specific student counsellors for educational problems. In a system of program budgeting, where extra resources are no longer earmarked for student counsellors, the departments should themselves decide how various functions are to be performed.

In the long run it might be better to develop student counselling by specialized professional staff at the area level (and institutional unit level). A counsellor could for example be responsible for an educational program (instead of a single subject) or could inform students about the choice among courses and also help solve problems which cannot be handled by teachers. It seems more natural to attach such counselling to the area level than to the department.

6.2 The area level

6.2.1 Some general remarks

The area level consists of faculties and sections which are divisions of faculties. Educational matters are dealt with by educational boards, attached to faculties or sections. After the reform of higher education in 1977, the connection between faculties and educational boards (educational program committees) will be dissolved; undergraduate and professional/vocational education will be organized within vocational education sectors, while research and graduate education will be retained within the faculty organization.

The formal position of educational boards has been continuously strengthened, while that of faculties as such has become weaker. But in reality, the educational boards have usually a weak position between, on the one hand, the departments and, on the other hand, university administration and central authorities.

We are concerned about the fact that the design of the area level has not been scrupulously analyzed in connection with reform decisions. Yet this problem is crucial to the progress of higher education. The weakness of the area level will be still more embarrassing with the emergence of a new educational pattern, characterized by the need for more variety to meet the demands of new groups. This will necessitate developmental activities and a consistent planning at area level.

6.2.2 The educational boards

During our work we have paid much attention to the educational boards because of their alleged central position in educational planning and change.

The educational boards are composed of teachers, students and non-professional staff. They are the decision-making bodies in questions concerning education and students within a faculty or section. They are thus formally responsible for education. The intention of the national government was that the educational boards should "have a central position in designing education", that they should be "responsible for the educational programs, courses and curricula"; that they should "assess the results of studies for each course" and that they should "on the basis of experience gained take the initiative for necessary changes in the design of studies" (quotations from the Government's bill to Parliament about the 1969 reform of studies at the faculties of liberal arts, social sciences and sciences).

There is not much resemblance between these central intentions and the real behavior of educational boards. Analyzing the minutes of the boards, studying development processes and talking to university people have given overwhelming evidence of this discrepancy. The mythology of central governance is clearly displayed.

There are, however, certain differences between the educational boards of the faculties of liberal arts, social sciences and sciences, and the boards of other faculties and professional schools. The general picture of the first-mentioned boards can be described in the following way.

The predominant feature is passiveness. The boards confirm and register decisions taken elsewhere, usually within departments. They have a heavy load of routine business: administration of problems concerning individual students (exemptions from study regulations etc), pronouncements on reports from governmental and other committees, formal endorsement of the departments' curricular decisions, etc. Active efforts to plan and change education are scarce. The boards seldom discuss the design of education at large. The departments often look upon educational boards as "paper mills", which neither do any harm nor anything good.

The explanations of these realities are obvious. The national government has endowed the boards with formal, theoretical authority but not given them real power to exercise that authority; e.g. they do not have much influence on resource allocation. Often there are no clear and realistic objectives,

expressed as desirable directions of change, for the boards to realize. Loose educational programs and single courses predominate within the faculties of liberal arts, social sciences and sciences, making it difficult to coordinate course content within an educational program; the departments are very independent in this respect. Sometimes the selection of board members is done in an irrational manner; faculty deans (who often but not necessarily are chairmen of the boards) are in some cases elected by rotation, the last appointed professor being assigned with this tedious duty; the same applies more often than not to the teaching members of educational boards. The reciprocal "watchdogging" of resource positions on the part of departments severely restricts the boards in the options they exercise.

The educational boards of other faculties and professional schools have many features in common with this picture. But there are some differences and these boards are often a bit more active. The main reasons for this are related to the fact that these faculties and professional schools are dominated by fixed educational programs; the need for coordination of courses is obvious and this gives the boards more influence. The board members have better expert knowledge about education within the faculty as a whole because they have undergone or are in the process of undergoing it themselves (cf. a medical school with a faculty of liberal arts). But even for these educational boards it holds true that their governing power and innovative vigor are relatively weak.

There are, of course, varieties between individual boards from all types of faculties. We have observed some characteristics of educational boards which show a higher degree of planning and innovative activities. Ten such indications are listed here.

1. Committed and ambitious leadership

The personal qualities and personal behavior of the chairman are paramount, from which it may be inferred that more incentives are needed for such persons to accept chairmanship,

2. Clear objectives

Well-defined directions of change balance the pressure from routine business and create motivation for active efforts. Such objectives can have been produced through goal analysis within the board or by giving the board responsibility for implementing changes decided on a superior level.

3. Program budgeting and control of resource allocation

Program budgeting has been instituted on a trial basis at one university and one professional school of engineering. In these cases the educational boards have been assigned formal and real decision power over resource allocation for educational purposes. It is apparent that the boards must have economic instruments of governance at their disposal in order to exercise substantial influence over planning and change.

4. Local freedom of action

In specific cases where the boards have been given freedom to develop educational programs according to local designs and with exemptions from central regulations, this has not only been beneficial for the specific tasks in question but it also had general vitalizing effects on the boards.

5. Central initiatives

Internal board efforts to plan and innovate have often been triggered by central committee reports, initiatives and reform decisions.

6. Freedom from general central regulation

While such central activities have a stimulating effect on boards, the formal central regulation of education has an adverse effect, burdening the boards with rule-implementing troubles and restricting the scope for initiatives. As there exist differences in the degree of central regulation between various types of education, it has been possible to observe this effect.

7. Authority towards departments

The departments are more autonomous and the educational boards less influential when the education within a faculty is dominated by loose educational programs and single courses, than in cases where fixed educational programs are predominant. But deliberate attempts by a board to establish authority towards departments influence the position as well.

8. Activities in project groups, planning conferences etc

The existence of activities in various types of project groups and conferences has proved to be an indication of active involvement in planning and innovation.

9. Active student participation

Boards differ from one another in the activities of their student representatives. A high degree of student activity based on constructive educational work within the student union is a key positive factor for the educational boards. The number of student representatives in relation to teacher representatives - an item to which central governance has attached great importance - does not usually seem to matter much.

10. Professional competence

Where the board members have expert knowledge in the whole field of education for which the boards are responsible, the power position of the boards is strengthened.

6.2.3 Directors of education and other administrative staff

In connection with the 1969 reform of education at the faculties of liberal arts, social sciences and sciences, positions as directors of education were created (not to be confused with the directors of studies within departments). There are usually one or two such directors at each of the faculties mentioned. They belong to the central university administration but are attached to the educational boards. They are usually former lecturers.

The intention was to have directors of education coordinate courses with educational programs, to assess results in relation to objectives and to gather information about the achievements of students. The decision to establish these positions is an example of the acute repair work. Adding a new type of staff was supposed to work changes in the realities. The deficiencies to be repaired were the looseness of educational programs within the faculties in question and the prolonged study times.



As with educational boards, there exists a discrepancy between intentions and the actual performance. Directors of education are largely concerned with administering regulations and facilitating contacts between university administrators and departments. They tend to describe themselves as a bridge between these two and as interpreters of systems of rules. They are more or less caught up in routine business and complain about too little scope for initiatives, planning and evaluation. Due to the character of the proceedings within educational boards, where they are the chief administrators, they take on the trait of passive controllers, more reactive than active. The role of gatekeeper prevails over that of change agent.

It is difficult to assess the performance of directors of education because of the lack of realism - under present conditions - in the tasks assigned to them. They have brought experiences of intradepartmental work into the administration, which has proved valuable. They have been essential resources for getting the educational boards to function in some sense. They have smoothed relations between departments and university administration.

But close contacts with departments should not be limited to certain persons within the university administration. Deficiencies in this respect and mutual suspiciousness should be dealt with by general measures affecting the administration as a whole.

In accordance with our general principles, decisions about the design of staff positions should be taken at the area level, without unnecessary constraints imposed by national regulations. The functions of directors of education should be considered in the context of a unified administration at area level, which does not exist today but which should be realized.

At some faculties other than the ones for liberal arts, social sciences and sciences, positions similar to those of directors of education have been established. In these cases, with a predominance of fixed educational programs, there is a better basis for the activities of such staff members.

Usually one administrator serves as secretary of a faculty (section) and its educational board. These staff members could relieve the directors of education from a lot of routine business. We strongly advocate that administration of higher education is a highly qualified and very specific task and that administrators should be selected, trained and recompensed accordingly.

A not unusual complaint from the educational boards is about the lack of freely disposable resources for studies, evaluations, development, project work etc. Within a system of program budgeting, the boards should make use of their discretionary power to set aside resources for such purposes.

6.2.4 Future design of area level

As mentioned earlier, the reform of higher education from 1977 involves a change of the organizational pattern at area level. Faculties (sections) will be responsible for research and graduate education. Local planning of undergraduate and professional/vocational education will be assigned to educational program committees, responsible for one or more programs within vocational education areas. Educational boards, with advisory capacity within a vocational education area as a whole, may be established chiefly on regional level.

We are concerned about the risks of fragmentation at the area level, particularly within certain faculties; the management impulses will come to the departments from a lot of sources: several faculty committees, several educational program committees, the institutional unit level. The proposed system of management does not seem to have taken into consideration the need for bodies, above the departmental level, responsible for the planning and development of single courses and shortcycle education as part of recurrent education.

We discuss possible solutions to this problem and stress the need for coordinating mechanisms at area level, combining a vocational education area and the adjoining faculty (section). We also advocate the establishment of a devolved area administration to facilitate such mechanisms.

The position of educational program committees and other bodies for planning and development at area level should be strengthened. Some measures to achieve this have been indicated earlier. And the committees should not be given formal responsibility for decisions which they are in no real position to influence; the decision-power should to a large extent be devolved to departments, thus giving the area committees better capabilities to exert influence in matters of goals, assessment of results and long-term planning.

6.3 The institutional unit level

The institutions of higher education (universities, professional schools, colleges) are predominantly administrative units, responsible for coordination and service within the institution as a whole. Characteristic for Swedish conditions is the status of the institutions as state authorities.

The functions of the institutional unit level cannot be more closely discussed and determined until the functions of the area level and the regional level are fixed. A great deal also depends on future decisions about the grouping of higher education facilities in institutions. We do not advocate the grouping of a lot of existing units within one institution. The largest Swedish universities with some 20,000 students are even now big and heterogeneous. If they are made still larger and more heterogeneous it might be wise to give them a federal character, the area level being made fairly autonomous.

6.4 The regional level

Regionalization of higher education has a twofold significance. It can denote the introduction of a regional level of decision-making, often as a political compromise between centralization and local autonomy. It can furthermore imply the use of education for regional development. It would appear that the establishment of regional boards within higher education in Sweden has more of the first-mentioned character.

6.4.1 The tasks of regional boards

The six regional boards have duties within three spheres.

1. They are to coordinate planning of undergraduate and professional/vocational education. To this end they have to develop data for the planning of general educational programs and allocate resources to institutions for local and individual educational programs as well as for single courses.

2. They are responsible for forging links between institutions with and institutions without permanent resources for research, in order to develop a nexus between research and education throughout higher education.

3. They have administrative responsibilities for matters common to two or more institutions (e.g. common departments, committees, service units).

6.4.2 Some general remarks

The regional level is new and untried. The lack of experiences makes it particularly necessary to allow for experiments and flexible solutions. The relations between regional boards and institutions of higher education can be designed after varying models. But the relations between regional boards and central level should follow one single pattern in order to avoid complications and confusion concerning responsibilities. As far as possible one must try to avoid the establishment of several time-consuming, decision-making stages.

6.4.3 The planning tasks

The planning tasks of regional boards should be directed towards distributing education within the region with respect to nature and content, student categories, methods of distribution etc. Such planning necessitates an information data base which hardly exists today. It should be a prime regional task to develop such information. A complication is that the planning activities cannot be limited to the region, because students are recruited from other regions and because many types of education do not exist in all regions.

6.4.4 Linkage to research

To develop linkage to research within all higher education is a challenging task for the regional level. It opens up possibilities for new models of research relationship, which may have renewing and vitalizing effects even on traditional universities and professional schools. The regional boards will have access to special funds to promote linkage between institutions with and without permanent resources for research.

Various models can be tested. One is to engage teachers from non-research institutions in research projects at universities and professional schools. Another is to develop research projects in cooperation between research and non-research institutions, projects which can be related to actual problems in society and which can be used in education so that the students are brought in some contact with research. Project groups can be engaged to develop various models of linkage to research.

6.4.5 The administrative tasks

It is not apparent that administrative items common to several institutions of higher education or various types of permanent cooperation between institutions must involve the regional boards. Such matters can be dealt with in direct relationship between institutions without the restraints of bureaucratic procedure.

However, the regional boards should see to it that fundamental functions can be performed in all higher education units within the region. This might necessitate a pooling of resources in some fields.

6.4.6 Regional educational boards

As mentioned in section 6.2.4, advisory educational boards covering a vocational education area may be established on the regional level. But we advise against the creation of too many permanent bodies with formal status, because they may lead to complicated and time-consuming bureaucratic procedures and have conserving rather than renewing effects. It is often better to go in for temporary project groups with specified tasks concerning change and development. The place of educational boards should rather be on the local area level, where they can meet the need for coordinating mechanisms discussed in section 6.2.4.

6.5 The central level

6.5.1 Some general remarks

We have mainly discussed the National Board of Higher Education (NBHE) (which will take the place of the Office of the Chancellor of the Swedish Universities), but some of the general guidelines are also applicable to ministries.

The reform of higher education also implies changes in the system of governance, including a new type of resource allocation, a decrease in legal and administrative regulation by central authorities, emphasis on planning functions at central and regional level and devolution of decision-making.

Even if the thrust towards new types of governance is explicitly stated in the reform decision, there is a risk that this change will not be implemented resolutely and consistently enough. If too much of the old type of regulation is retained there is a danger that, by having two parallel types of governance, the positive effects of the new instruments of governance will not be fully utilized.

It is unlikely that a broad reform of higher education, involving so many changes in organization and management, will strike all the right targets. No doubt a need will arise for changes to supplement and adjust the original reform decisions. It must be a prominent task for the NBHE as well as bodies at regional and local level to evaluate the reform.

6.5.2 Goals for NBHE activities

The activities of the NBHE must be guided by a few fundamental goals. We particularly stress these duties:

- Collecting and analyzing information on future needs and prospects.
- Preparation of development plans.
- Assessment of results.
- Development and utilization of new instruments of governance.

This means a change in emphasis: from more passive, legalistic functions to a more active role, stimulating change and innovation.

The development plans should cover desirable directions of change within higher education and research in short-term, medium-term and long-term perspectives. The definition of objectives and the demarcation of directions of change must be regarded as frames, allowing for regional and local variety.

Existing means of evaluation must be better utilized and new methods for assessing results must be developed. The assessment must partly be based on annual reports from the system of higher education as a whole.

6.5.3 Development and utilization of new instruments of governance

New instruments of governance must be developed to supersede the old, ineffective and inefficient types. Few tasks can be more important in order to achieve a realistic implementation of the reform and promote systematic planning, change and effectiveness. These instruments should be so designed that a devolution of decision-making can be combined with providing for overarching political and social goals.

Economic incentives are essential instruments of governance. Part of the program grants (e.g. one percent) must be set aside at NBHE level to be used to promote change and reward high performance.

It will be more necessary in the future to cut down or even liquidate activities (departments, professorships, courses) so as to afford sufficient scope for expansion in other fields. Plans for liquidation must be an integrated part of development plans.

Research and development activities can serve as better instruments of governance by paying more attention to prospects and problem areas with high long-term relevance. Examples of such prospects and problem areas are the teacher role and the educational process, objectives of higher education, education as an instrument to promote social equality, institutional development and assessment of results. But it must also be remembered that the foundation of effective governance rests on studies and research aimed at obtaining basic knowledge about higher education as a system.

Whenever the Office of the Chancellor has succeeded in stimulating change and innovation, it has usually been the result of committee work or other types of special studies. Such types of work at central level should be more directed towards long-term changes and be systematically integrated into planning.

Organizing the activities within the framework of coherent processes - as far as possible and at the expense of fragmented decisions on isolated items - is not only a technique but will also serve as an instrument of governance.

6.5.4 Organization of NBHE

Within the NBHE there will be five planning committees for education and research, each one covering a vocational education area and the adjoining faculty area. The administration will be organized in several bureaus, some of them serving as secretariats of the planning committees while others will be vested with specialized functions.

We discuss several problems concerning institutional organization and activities of NBHE. Suffice it to mention here that we stress the need for integration between bureaus and providing for activities which are common to all or many bureaus. One of the means to facilitate this is to establish permanent working parties and temporary project teams empowered to cut across boundary lines between bureaus and to supplement the formal, horizontal organization with a dynamic, vertical one.

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Figure 1 Present organization of higher education

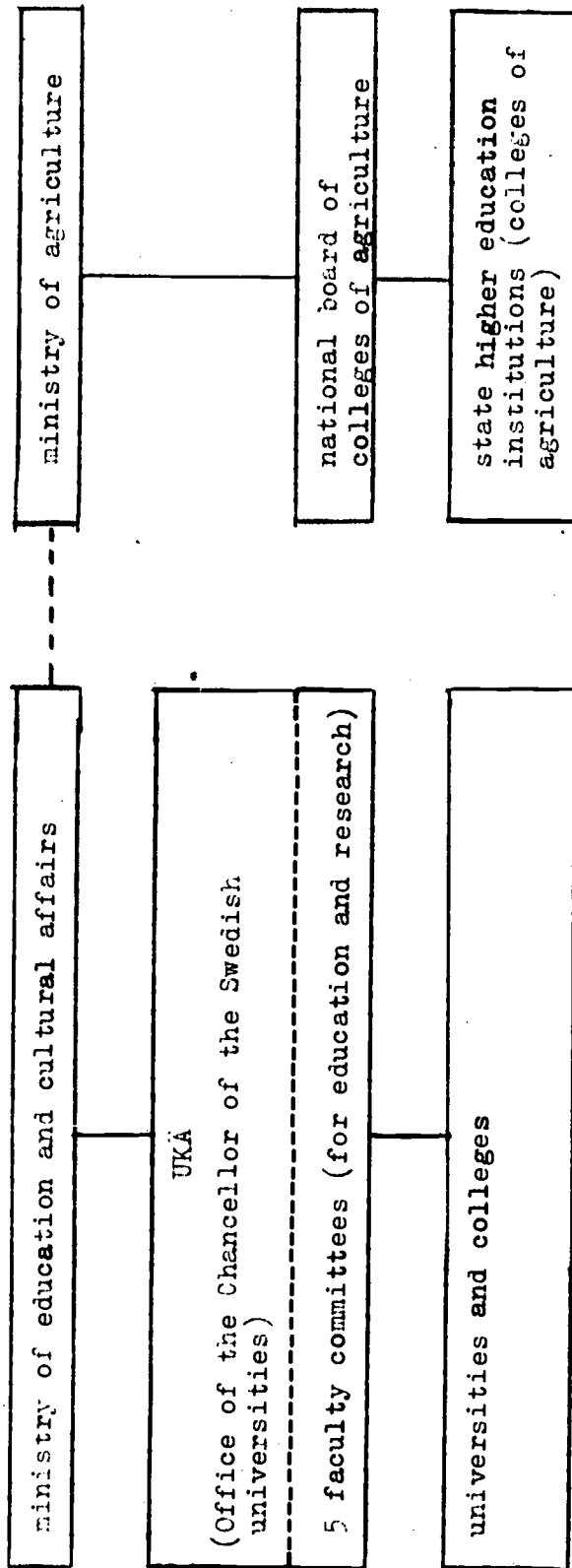


Figure 2 Present organization of a university or professional school

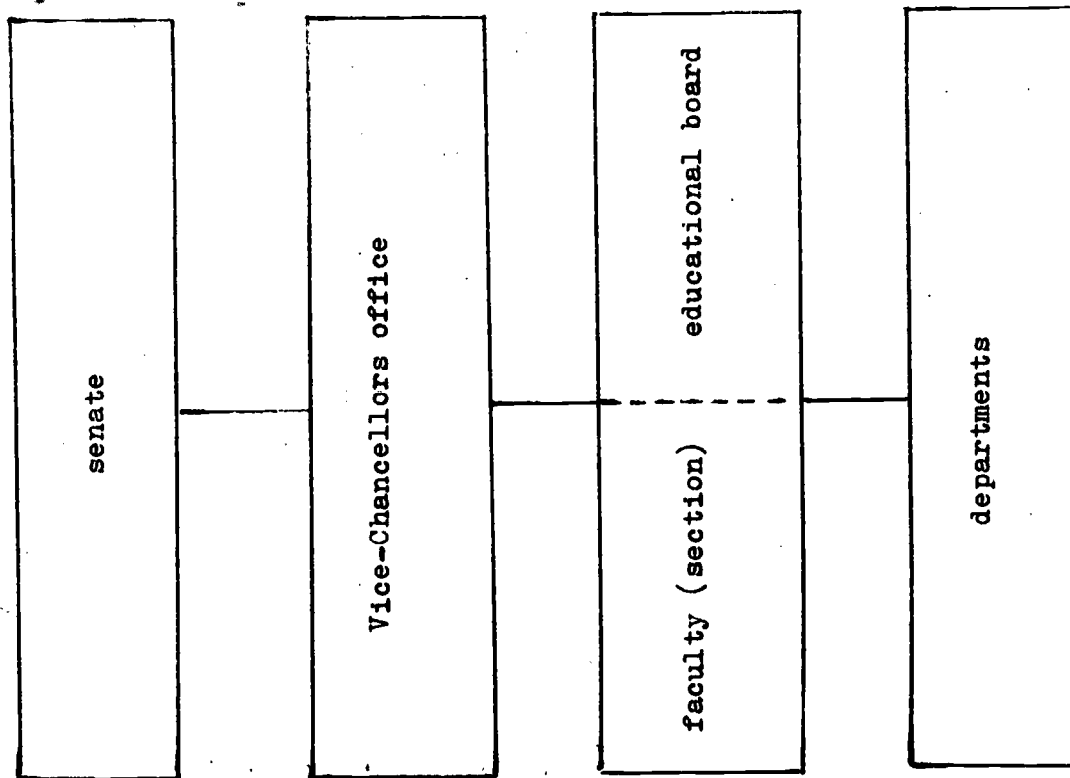


Figure 3 The new organization of higher education

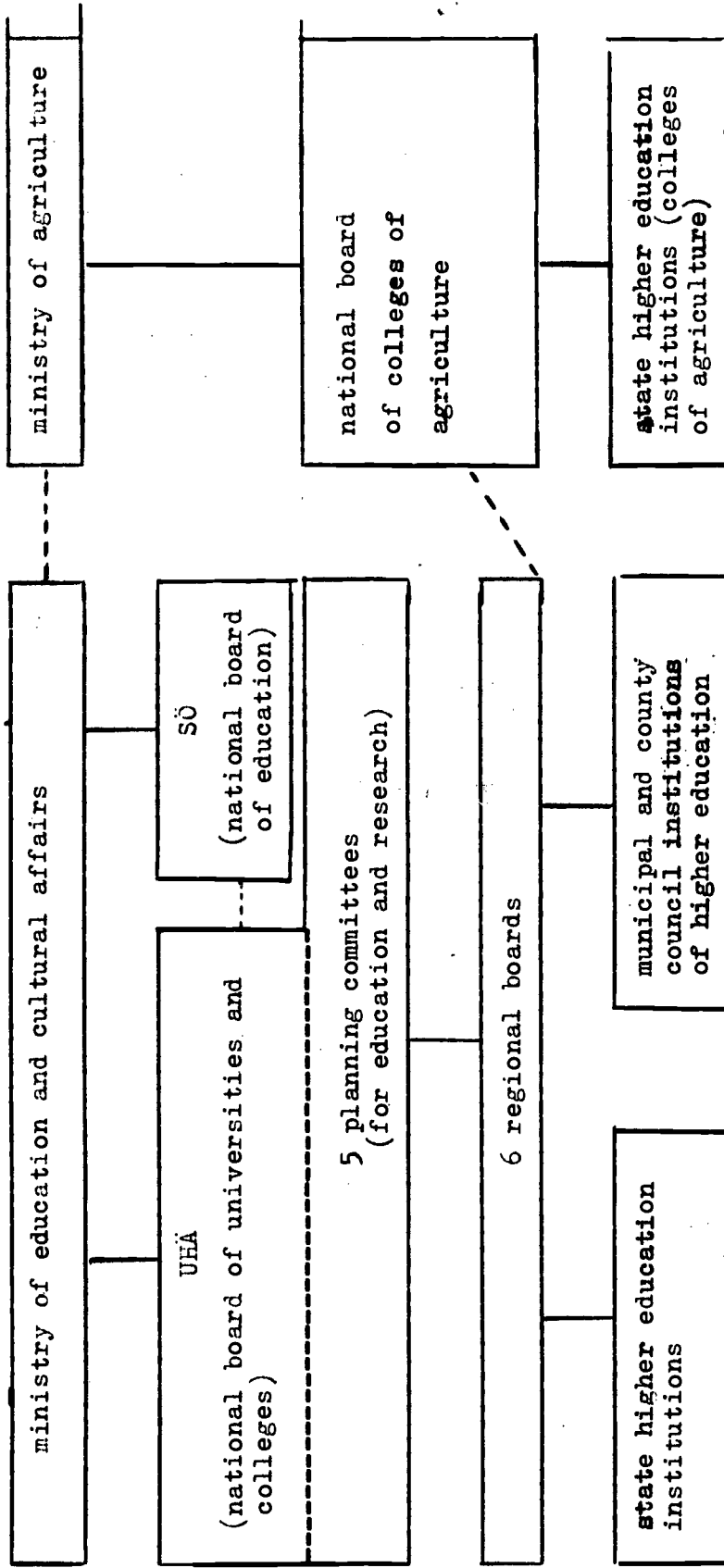


Figure 4 The new organization of an institutional unit of higher education

- A. University or other institution with a research organization
- B. Institution without any research organization

