

MINISTERO DELL'UNIVERSITÀ E DELLA RICERCA SCIENTIFICA E TECNOLOGICA Osservatorio per la valutazione del sistema universitario

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Evaluation in the Italian University System

Reprint del paper presentato a: International Conference on Evaluation: Profession, Business or Politics?, Rome, october, 29-31, 1998 L'Osservatorio per la valutazione del sistema universitario è previsto dall'articolo 5, comma 23, della legge 537/93, la quale dispone inoltre che presso le università vengano istituiti i nuclei di valutazione. Esso è stato istituito, presso il Murst, con il DM del 22 febbraio 1996.

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1. Introduction: the Development of Autonomy and Evaluation

Over the last ten years, significant changes occurred in the Italian public administration and in particular in the university system in order to develop the decentralization of the decision-making process and the autonomy of each university: first of all budget autonomy and, recently, the teaching autonomy of each institution.

The first step towards Italian university autonomy was taken about ten years ago by Act no. 168/89 establishing the Ministry of University and Scientific and Technological Research (Murst), which recognized statutory autonomy to universities. Then with the Decree Law no. 29/93 the budget control and the control of costs were introduced in all the units of the public administration. In the same year, the budget autonomy of each university was introduced by Act no. 537/93, while, in 1997, Act no. 59/97 and Act no. 127/97 took another significant step toward university autonomy, indicating the elements for the managing and organization autonomy. The provisions for the implementation of these acts are passing tasks and responsibility to university. These tasks and responsibility so far have fallen within this cope of central bodies' control. Other measures to widen the autonomy and self-determination of universities followed. The overall view on the new system will be complete next year when the experimentation on teaching autonomy is implemented.

The thrust towards decentralization and autonomy is an essential condition to improve the managing of the public administration and, in particular, universities. Yet, in order to accomplish this task the decentralization and autonomy have to be accompanied by the managing bodies taking real responsibility for the results that their units reach. They have, as well, to take responsibility for the evaluation of the activities carried out and results reached, in terms of efficiency, effectiveness and quality. Autonomy and evaluation, therefore, are indissolubly bound.

The aim of this paper is to present the main characteristics and activity of the evaluation in the university system in Italy pointing out the need for some improvements. In order to do this, first of all, we recall and explain the importance of building up a complete system of evaluation linked to the programming-planning process of the activity (Section 2). Then we describe the characteristics of the evaluation in the Italian university system (Section 3) and the National University Evaluation Council¹ (NUEC) experience presenting specific case-studies and the used methodologies (Section 4). The final remarks highlight the steps to be followed to improve the present system of evaluation in the Italian university system.

2. The Need for an Evaluation System linked to the Planning Process

There is no doubt that the thrust to reach the *decentralization*, the trend of loosening the procedure standards and increasing university autonomy, within the teaching and research units (faculties, degree and career-oriented courses, departments and so on) implies taking responsibility for results and the introduction of the *evaluation process* of the activities and the results.

This is also due to the growing interest of public opinion in the way in which an important part of public resources (10,000 billion liras a year) is used and, more in detail, it is due to the growing interest of students as main users of university equipment and services.

The new organization model of universities hinges on developing new autonomy and new responsibility and the necessity to adapt constantly the aims and the operative methods to social changes and different needs. In this framework the *evaluation activity proves strategic* as an ex-ante, in itinere and ex-post checking means of the implementation of the planned

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Osservatorio per la valutazione del sistema universitario. It is composed of 5 members: Luigi Biggeri (Chairman), Ferdinando Amman, Giuseppe Catalano, Guido Fiegna and Dino Rizzi.

objectives in terms of quantity and quality of processes and teaching outcome, research and managing to ensure a *guarantee function* for the users and society as a whole.

In general, the *objective of the evaluation process*, to which we are devoting particularly close attention, is the necessity to evaluate the proper management of state resources, impartiality and good managing, the efficiency and the effectiveness of the made choices (*user's satisfaction*) and the activities which have been carried out. At the same time there is the intention to ensure the necessary transparency to win the agreement of internal and external "players" with an interest in the decision-making process methods and procedures. The evaluation requires the monitoring of the implemented activities but also delivering an opinion on the partial or final achieved results. In general the evaluation process starts with the description of the objectives of the actions established by the decision makers, then the parameters and indicators to be used are defined and the necessary information is collected (quantitative and qualitative) and, finally, the opinion is delivered. Obviously, many different methodologies can be used to carry out the evaluation process depending on the object of the evaluation (for example, specific program or routine type activity). The outcome of the evaluation will have to be followed by proper action from the bodies in charge, administrative or political, depending on the institution or the kind of decision-making process.

Actually, referring to a specific sector - like the Italian university system - in order to ensure the efficiency and effectiveness of evaluation for the correct development of the sector, two conditions are necessary: (i) all the units, which are part of the sector, have to develop planning and control processes and functions (as to management) and the connected evaluation processes for all their activities; (ii) an effective coordination among the different evaluation activities and at different decision making levels, both from a methodological and operative point of view, has to be assured.

The first condition implies accepting and developing the *planning*, *control* (management) *and evaluation* functions at different levels where the decision-making process occurs (decision-making concerning university policy and political choices i.e. choices relating to the managing aspects of the administrative action to allow the implementation of the objectives of the policies). The problem is therefore to establish an interaction between the *programming-planning-control process and the evaluation process* at any decision-making levels (see Chart 1).

The chart is quite general in nature, and it can be adapted to take into account the different situations; moreover it is enough self-explanatory. Anyway, it seems important to stress some points: there is no doubt that the "evaluation" activity has to concern the ex-ante objectives and it has to be carried out within an activity planning process as well as within a result checking and control process. Moreover, every kind of decision-making process is based (or at least it is supposed to) on the procedures aiming at consistent planning, control and evaluation activity (with criteria and indicators being set) and on the *relevant information systems*. Hence *the results of the evaluation process* have to be retroactive, affecting the following decisions at different responsibility levels. They can also affect the different stages of the planning process with *action-effects*, requiring a revision of the operative procedures and methods, and/or budget, and/or programs, and/or strategies and the objectives and the regulations regarding different state policies.

The herein provided picture is general and, depending on the level and the features of the initial strategic objectives, in it you can find the idea of evaluation as learning approach (or to determine the policy to carry out) and the idea of evaluation as control of the activities and results.

According to the above-mentioned approach, it's consequently clear that the methodological approach to evaluation has to be interdisciplinary: combining the policy analysis approach, the managing control and strategic approach.

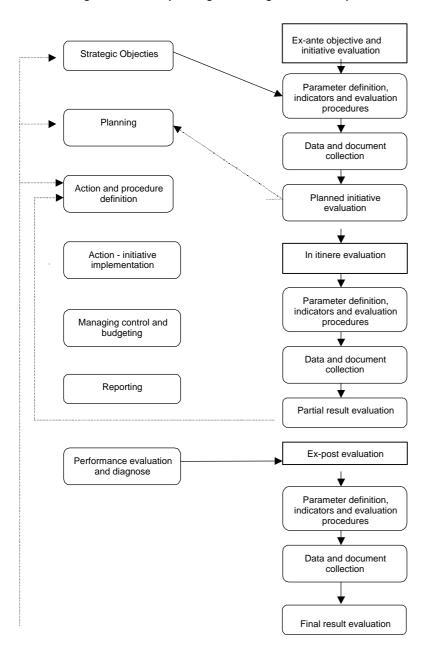
It's obvious that the evaluation activities will differ one another depending on the *nature* (object) and on the *level* (macro and micro) of the decision-making processes to which they relate. Therefore they will differ one another depending on the degree of generalization of the faced problem, importance of the contents of the decision and the level of institutional bodies taking part in the possible chain of choices and decisions. With different decision-making levels, the evaluation process will have to be referred to different objectives. It will have to be carried out separately from the respective evaluation bodies respecting the specific autonomy. In the case of the Italian university system, the highest political decision-making level relating to general decisions is the Ministry, the second is represented by single universities and the third by operative units within each university (faculties, degree courses, career-oriented courses, departments and so on).

In order to check the general results of the whole system and the achievement of the objectives of state policy it is necessary that at each level, in particular at the highest level, a central evaluation body controls the validity of the results of the activities carried out by the units of the system according to a methodological framework and established procedures. This central body will analyze whether the results are consistent and compatible with the general objectives. Therefore a complete evaluation system has to be planned, defining the interaction and the necessary relations among the self-evaluation, internal and external evaluation process.

The evaluation can and has to concern both *specific* or state-of-the-art *programs* and *routine activities* and, within them, it has to concern both *processes* (i.e. teaching) and *results* at different decision-making levels (as far as university is concerned: set up new degree courses or new faculties or new universities or the need for the decongestion of overcrowded courses, faculties, universities and so on).

In conclusion everybody agrees on that the evaluation activity has to win the agreement of the people participating in it and society, in order to produce the expected effects. It has to be consistent, compatible and transparent (releasing the evaluation criteria and results). First of all, the evaluation bodies have to be independent authorities and they have to work autonomously both from a technical and functional point of view. And obviously their decisions have to be taken autonomously. The distinction between the function of a political decision and the evaluation has to prove sharp and clear both at national and university level.

Chart 1 - Integration between planning and management control process: a framework



3. Evaluation in the Italian University System

The needs and university evaluation bodies are quite clearly specified in several regulations like Act no. 537/93. It specifies the need to establish an *Internal Evaluation Unit*² (IEU) in each university and the *National University Evaluation Council* (NUEC) at central level

The universities have already faced the problem concerning internal evaluation and the institution of the Units under the guidance and the thrust of the Conference of Italian University Rectors (CRUI). Since that date there has been an acceleration in the setting up of the IEUs. Moreover in each university many Committees have been established, at faculty and department level, to deal with the evaluation of degree and career-oriented courses and other activities.

The IEUs have the task of checking the management of state resources, the productivity of research and teaching as well as the impartiality and the good managing, by performing comparative cost - efficiency analyses. Act no. 537/93 has also established that the IEUs have to prepare an Annual Report on universities to be sent to the Murst and to the NUEC to evaluate the efficiency and the effectiveness of the results of research and teaching activity, and to check the development and re-balancing programs, also for the subsequent allocation of the resources.

The NUEC was actually established by Ministerial Decree on 22.2.96. It is an institutional body of the Ministry of University and Scientific and Technological Research, composed of five members appointed for three years. That decree established also the main functions and the duties of the NUEC, which cover all the important needs of the evaluation of the university system. Above all, the NUEC has to evaluate the efficiency and the effectiveness of university activities, to verify the development plans and to analyze the situation of the Italian university system. The Council is an independent body which interacts autonomously with the universities and the Ministry and relates to the Minister and to the relevant parliamentary Commissions. The Council has a technical and administrative secretarial office, its own budget and may appoint teams of experts or specialized external bodies to carry out specific researches and studies.

The relevant regulations outline a quite structured system from a formal and institutional point of view. The legislator's intention is to start a "virtuous circle" in which central evaluation and local self-evaluation are intertwined. The picture is complete when we consider the evaluation activities suggested and developed within the CRUI.

It is evident that the new regulations and the changes, which have been made over the last few years and months, will completely change the university system. It will be completely different from the university which existed before 1993. This improvement will require the tasks of the above described evaluation system to be widened.

In fact, from an operational point of view both the coordination of the activity of the different evaluation bodies and the different steps of the evaluation processes are still to be clearly defined.

There is no doubt that – respecting the autonomy of universities – the NUEC has to take on linking and guidance power for the IEUs, mostly to create evaluation models and the relevant quantitative and qualitative indicators (it also has to involve lower levels in universities). This condition is essential to integrate the national evaluation process with the self-evaluation of universities and to make the data *comparable* at national level. This is the very reason for which it is necessary to define the information systems at university level. They have to be "uniform" and they have to have mutual bases and they have to be referred to the essential pieces of information that the NUEC will also use. It will then allow the universities to widen their own information systems (NUEC, Doc 5/97).

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Nuclei di valutazione interna di ateneo.

Another topic on which there is still a long work to do is the definition of shared quantitative and qualitative procedures and standard to evaluate the results concerning the efficiency and effectiveness of the teaching, research and management activities.

In conclusion we have to notice that the tasks, assigned to the NUEC by the instituting decree, relate to ex ante and ex post evaluation on specific topics or programs, don't envisage a consistent evaluation of the current activity with an interaction with the planning one like that specified in chart 1.

This has happened only recently with the new university planning regulations (Act no. 25/98). This clearly distinguishes between general and specific objectives of the plan, and tools and procedures to define the initiatives to be realized. Moreover, among the tools and procedures, it gives an important role, maybe strategic, to the evaluation activity, institutionalizing the work of the IEUs (which have to submit a technical report for each proposal of the university both within and outside the development plans) and the Council (which has to submit a report on the planning proposals and the state of implementation and the results of the programs.) There is no doubt that this is the most important stage along the setting up process of a national university evaluation system. We would like to outline in short the condition which has to be ensured and the activities which have to be implemented to create an interactive planning and evaluation system to reach the aims set by the development plans.

If we consider Chart 1 we can notice that the university planning regulations specified only some of the activities in the chart: the procedures to define the objectives and the actions within universities, when and at which level to perform the evaluation activity. It does not provide with any pieces of information, however, about the way in which the objectives and the proposals in universities are determined. Mostly, it doesn't specify the way in which the selection of the proposals from the main bodies and the implementation of the initiatives as well as the evaluation activity is organized. Actually both universities and Ministry of University have to commit themselves to activate the processes showed in the Chart. They have to organize the necessary infrastructures (offices, equipment and so on) to carry out the planned activities and those following the moment in which the decision is made. Unfortunately this way of working is not the way in which universities and Murst usually work, but its implementation is necessary if the objectives set at local level and the university planning are to be reached.

When we say: "organize the necessary infrastructures for the planning and the evaluation activities" we assume that a primary role is played by the setting up of relevant information systems (possibly linked through a national network) concerning the managing and the evaluation activity at university and Ministry level.

4. Examples of the Organization of the Evaluation Activity Carried Out by the Council

This paragraph is dedicated to a short description of the methodologies used and main experiences realized till now by the NUEC in specific different situations:

- ex post policy evaluation at national level of the University Development Plans from 1986 to 1993;
- ex ante evaluation at local level, through the check of availability of resources in order to authorize the establishment of state-owned and non-state-owned institutions;
- defining general criteria to divide over-crowed universities;
- definition of the procedures and quantitative and qualitative standards to evaluate the results referred to the efficiency and to the productivity of the research and teaching activities:

• last but not least, the definition of technical proposal useful to establish the sharing criteria of the re-balancing part of the state funding of universities, from a territorial and disciplinary point of view.

4.1 Ex Post Policy Evaluation at National Level of the University Development Plans from 1986 to 1993

Here the Council experience in checking the 1986/90 and 1991/93 University Development Plans is to be described (NUEC, Doc 4/97). It was an important methodological challenge to the Council. In Italy there is not a policy result evaluation culture and consequently complex methodological problems were faced. This was also due to the absence of a well structured information and statistical system.

In compliance with its institutional mandate and available information, the Council used the following procedure as suitable:

- a) determining and specifying:
 - the planning procedures which were in force when the two plans were approved;
 - the general and specific objectives which had to be achieved by the plans;
 - the action to achieve the objectives;
 - the means and the quantity and the kind of available resources (financing and staff) to implement the initiatives;
 - the procedures to implement the initiatives and to distribute resources;
- b) setting the criteria, parameters and the indicators to evaluate the initiatives;
- c) collecting data and documents relating to the implementation of the initiatives so as to compare the ex ante situation with the situation examined some years after the approval of the plans;
- d) performing the evaluation of the obtained results both in relation to the general objectives and specific initiatives.

The carried out analyses and the results of the evaluation processes and checks were examined objective by objective, region by region, topic by topic. The possibility to carry out an analytical exam of the single initiative, envisaged and implemented in every university, was ruled out. The absence of suitable and homogeneous documents in universities, prevented this form happening. The documents in universities should have had all the necessary elements to carry out an ex-post result evaluation such as the ex-ante objective definition of the proposed initiatives, the necessary time to achieve the objectives, necessary state resources, local self-financing capability. Yet, two specific topics have been thoroughly examined: career-oriented courses and student mobility.

Concluding, many documents were made available in order to provide as much information as possible. The academic world and the Parliament have been provided with data and detailed information (sometimes in the original form) on the implementation of the plans for 1986-90 and 1991-93. The Council summarized the results of the checking of planning procedure and the implementation of the initiatives in order to provide an overall evaluation of the two development plans.

4.2 Ex Ante Evaluation at Local Level: State-owned and Non-state-owned Institutions

An important task of the Council is the checking of the equipment and resource availability of university institutions, requesting to be allowed to award legally valid qualifications. In this framework the Council dealt with the legal recognition of both new state and non-state owned universities - like a decentralized university site of an already existing university - and new non-state-owned universities (NUEC, Doc 1/96 and 1/97.)

In both cases the procedure was:

- examining the aims for which, in general, it was deemed suitable to establish new universities as well as the methods for their establishment so as to check whether the followed procedures enable the experts to achieve the set objectives;
- defining a methodology to analyze and evaluate the need for factors of production; defining a methodology to evaluate the current availability and necessary resources for each new university and requiring them to provide further information and to self-evaluate their initiatives.
- analyzing the operating implementation plans presented by the "mother" university;
- visiting the establishing universities so as to discuss with all "players" with an interest in the initiative, to have a better grasp of the validity, the development potential, the necessary resources and the possible problems which can hinder the reaching of real autonomy.

At the end of the introduction to the features and analyses concerning the university sites, the Council outlined in few words the strong and weak points of the specific initiatives and suggested some possible measures which could improve the presented plans.

So far, from an overall look at the current situation, in order to establish new stateowned universities, strict and clear rules haven't been followed as envisaged in Act no. 245/90. In the following University Development Plans measures and sometimes also specific resources allocation for the building and general activities have been planned for the establishing or newly established universities. Yet, actions to establish new universities did not abide by a logic of development of university structures on the territory, verifying the potential student population of the establishing decentralized university sites, which would be lately changed into independent new universities, or submitting new organization models changing according to the situation. The planning of single university development has been too often based on local trusts and initiatives. Most of all initiative evaluations haven't been performed neither in absolute terms nor in comparative terms of compatibility with the system as a whole and in terms of comparability with the available resources. As stated by Paragraph 11 of Article 2 and of Article 3 of Act no. 245/90, these kinds of evaluation procedures would be and are crucial to plan the future of a decentralized university: make decisions, with regard to the outcome of the test period, on its establishment as an autonomous university, its closing down, its gradual deactivation or the reduction of its activity or the continuing of its activity as a decentralized university site. This procedure is established because it was and it is crucial to develop properly the decentralized university site and to foresee alternative organization possibilities and not to create too many expectations of local communities.

4.3 Evaluation of Dividing Overcrowded Universities

Among the institutional tasks of the Council there is the setting of the criteria to determine subjective and objective condition and the limits of students and staff personnel according to which the Ministry will have to issue the decrees on the organic division of overcrowded universities (in compliance with Paragraph 90 of Article 1 of the act enclosed with the 1997 Finance Act, no. 662/96.)

As far as the main problems of overcrowded universities are concerned, the Council recorded the skyrocketing and uncontrolled growth of our university system in the 70's and 80's. At that time the absence of an effective access planning and university site distribution gave birth to abnormal-sized universities, faculties and degree courses if compared with foreign situations. When this occurred the universities usually lacked in:

- * decision-making capability and government body efficiency;
- * managing and administrative organization as well as the working conditions of the technical and administrative staff;

- * teaching and study conditions offered to students (quality of teaching, classroom availability, laboratories, libraries, the location of the offered service, transport services, food service, accommodation and so on);
- * conditions offered to teachers to carry out their teaching and research activity (available room, availability and features of teaching and research laboratories and so on);
- * teaching process effectiveness and as a consequence the students' attainment (successful completion of exams, obtain the qualification, necessary time to graduate and marks.)

The above-mentioned problems aren't new to those working in this field and to legislators. In fact the "decongestion" of mega-universities has always been one of the constantly mentioned objectives in the latest University Development Plans. This is to be achieved by establishing new universities. Unfortunately the initiatives aiming at this haven't been successful and in the meantime the problems worsened for more other universities. Therefore it is now necessary to take further actions which will have to be well planned and using well defined procedures and criteria. The criteria and procedures are supposed to improve the functioning and the *quality of university life* and, in particular, *the quality of teaching activity* (teaching process), the *re-balancing of the system*, at least the teaching system (university teaching supply/demand) within the *potential student population* territory (city or countryside). At the same time they are supposed to urge reconsidering the "mission" and objectives of universities and the taking of new action at least in the teaching field.

From these short remarks it is possible to draw some general hints on the methodology of the evaluation of the necessity to divide universities, faculties and/or degree courses and the way to do it (NUEC, Doc 3/97, 9/97 and 1/98).

First, the analyses and the evaluations have to be based on a set of *indicators* referring to the *quantity and quality of* offered *teaching services*, functioning of teaching structures, research and management, *functioning* of decision-making structures and achieved results.

Second, the analyses and the evaluations have to be carried out with regard to and within the *concerned potential student population territory*. This means that the potential student population has to be first determined, both in a city and in the countryside. Then the possibility and the need for action in *all universities* of the territory have to be evaluated, considering the distribution of the teaching demand for university training of the potential student population over the territory. The analysis and information about the location on the territory of the students who are currently registered at faculties, degree and career-oriented courses, (current demand) and potential students which could register at university (potential demand) are crucial to the planning of the positioning of teaching supply universities and for the registration planning at different sites. As far as this aim is concerned it is equally essential to have information about transport mean structures in the potential student population territory in order to determine reference *sub-territories* within which to operate.

Concluding, there is no doubt that since these activities aim at improving the functioning and quality of university community life, once the activities have been agreed and started, it will be necessary to carry out further analyses at set dates in the different stages of the accomplishment process to check whether the developed initiatives were successful or whether they need modifying.

As far as this is concerned the Council suggests that the administration takes the following steps to adjust a procedure enabling it to monitor the division process:

- a) detecting the overcrowded universities and establishing the priority of the action that will be taken for each of them;
- b) defining and signing of an agreement protocol as a preliminary agreement among universities, local bodies and Ministry which set out clearly the general objectives and the possible actions to carry out;

- c) carrying out of an analysis and evaluation of the current state of mega-universities within the reference potential student population territory, detecting and evaluating the overcrowded faculties and degree course (mega-faculties and mega-courses);
- defining the necessary measures and the organization methods "to decongest" overcrowded universities according to the above-mentioned analyses; defining programs for student access (registration) to the different university teaching offer sites, probably favoring those living on the university reference sub-territory; defining the standard for the distribution of teachers over the supply sites (in order to have a successful program the number of teachers for each university and the quality of their teaching activity have to be homogeneous); to draw up a report on necessary resources and possible future "scenarios" after the measures have been taken, considering the possible limitations concerning the availability of adequate structures, town development plans and the structure and the efficiency of transport means within the potential student population territory;
- e) defining and making an analytical program agreement among the concerned bodies. This agreement would plan every necessary measure, and those who will be responsible for the measures to be taken, the way in which the necessary resources will be found, control and check procedures.

Now a specific regulation act has been approved by the Ministry (Ministerial Decree on 30.3.98) and the Council has already evaluated the project of the University of Milan "Statale" (93.151 total students in 1997/98) and it is evaluating the project proposals of the following overcrowded universities: Rome (160.648 total students), Naples (73.090 total students) and Bologna (98.285 total students).

4.4 Procedures, Quantitative and Qualitative Standards to Evaluate the Results Referred to the Efficiency and to the Productivity of the Research and Teaching Activities

Since its institution, the Council worked in many fields to define *shared quantitative* and qualitative standards to evaluate the results referred to the efficiency and effectiveness of the teaching, research and management activities, in the light of the experience of CRUI and IEUs which are useful, but there is still a long way to go.

The Council premises are:

- (i) results have to be evaluated not only in quantitative terms, but also in qualitative terms and the qualitative features are multidimensional. This involves the necessity to accompany quantitative indicators with qualitative information;
- (ii) usually many factors produce the results and to single out the effects of just one factor proves difficult;
- (iii) another problem stems from the need for "standardization" of the indicators, in order to eliminate the effect of the structural features of the inputs (i.e. students) and/or the reference framework.

Taking into consideration these factors, the Council started several research groups to define possible procedures and shared evaluation standards with regard to:

- university library system;
- university building structures;
- students' evaluation of teaching activity;
- evaluation of the scientific production in universities;
- estimate of the costs of institutional activities in universities. The results should be available by next Spring.

In conclusion, along with the IEUs, the Council is preparing a framework to produce the annual reports and an essential set of shared and mutual indicators to enable universities to exchange information and methodologies.

4.5 Technical Proposal to Establish the Sharing Criteria of the Re-balancing Part of the State Funding of Universities

The Council, within its institutional tasks (Ministerial Decree on 22.2.1996), carried out researches and studies to define the sharing criteria of the re-balancing part of the State Funding of Universities (FFO).

Article 5 of Act no. 537/93 establishes that the re-balancing part is shared according to the production costs per student and teaching improvement objectives. It will take into consideration the environmental and structural condition. It also specifies that the re-balancing activity aims at decreasing the differentials of the standard production costs in different subject areas, taking into account the different situations and European standards.

In making its technical proposal (NUEC, Doc 3/98), the Council specified that the sharing of the re-balancing part will produce its effects only if the following requirements are previously met:

- necessity to have additional funds to eliminate or deplete in a significant way the most serious negative unbalances and to award incentives;
- necessity to set out clearly the variables which will be taken into consideration to calculate the indicators and to check the validity of the used data;
- necessity to set out better the objectives to which the indicators refer and the significance they have to take on.

There has been a thorough study of the criteria used in most foreign experiences of university funding and a study of the total or average production cost which depends on several factors (level of activity, production factor costs, technological characteristics of production units and quality of the production process and product). Moreover the problem is to distribute a fixed sum from state funds among universities and not to determine the necessary costs to carry out a production process. In the light of all this the Council suggested that the funds are supposed to be connected to the following variables:

- (i) teaching demand in a subject area;
- (ii) results achieved in the teaching activity;
- (iii) results achieved in the research sector.

Moreover, the Council underlined that in the sharing of the state funding to universities the necessity of introducing new incentives doesn't have to be overlooked. These incentives have to lead the system towards well-defined objectives at political level both in the research and teaching sector.

In particular, the method suggested to share the re-balancing part depending on the teaching demand refers to subject areas (the Council suggested 6 of them). For each of them it is necessary to determine the *standard resources* to be assigned for each student so as to have a *standard cost indicator* ($CS_{j,i,t}$) for all the students registered at each course for subject area, for each university. While, in order to calculate the part depending on the results achieved in the teaching activity, the Council suggested to use the data relating to the number of "full time equivalent student" of each university. So far, no indicator of the results achieved in the research sector has been used, because, unfortunately, there are no relevant data. The Council is organizing a study on the scientific production of the last two years in each university so as to collect information about it.

The Council suggested to use the above-mentioned standard cost indicators for the next three years, but, meanwhile, it will go on carrying out studies and analyses to improve them. They will be improved both to ensure that their relative differences represent the differences

of the standard costs for each student for subject area and to take into account the regulation changes which are in progress at the different level of university teaching processes (degree and career-oriented courses, doctorate and so on).

5. Concluding remarks

As showed in the previous section, the evaluation activity, carried out in the Italian university system during the last years, is to be considered important and valid, but at the same time its implementation faced many problems.

It is clearly highlighted that, on one side, policy makers need more and more new and update information and methodologies to support their decision-making process, on the other side, it is essential that those who are responsible for the evaluation have to be independent from political power, in order to guarantee to the user of this system and tax payers that the public resources are used efficiently and effectively. Moreover, the evaluation system has to guarantee the quality of the offered "product": the level of the knowledge of the young people and the research is the main resource of a society.

At every level the available means are being used for different realities. New methodologies and means are being proposed, adapting them critically, sometimes even in the wrong way. It's necessary, though, to consider that a significant part of the staff (teaching and managerial staff) is still very skeptical about the effectiveness of the evaluation process and this, for sure, does not spur its development. The evaluation performed by the Council has already brought important effects both in terms of university behavior and administration attitude towards the modality of the definition of the strategic objectives of university planning.

There is no doubt that it is necessary to avoid discouraging or too enthusiastic behavior, but universities are better equipped compared to other bodies and public administration systems. Universities have all the capabilities to launch and to develop the evaluation system as well as they can reach all their objectives.

Actually it is unthinkable to perform all these activities without the necessary data base on the variables which have to be analyzed to take appropriate decisions and to carry out an evaluation process. At present there are only few information systems and at national level: there are only sector data bases which aren't always easy to manage. The Council often specified the information necessary to perform check and evaluation activities on each single topic. Murst is working on the setting up of an information and statistic system as well as the setting up and the development of an integrated information system for all the activities of the Ministry. There is still a long way to go, especially in the field of coherent and comparable information systems in universities. Our hope is that resources will be invested in a fast and effective way in this field both at local and national level.

In conclusion let us make three more remarks concerning the evaluation process, one of them is methodological or technical, two of them are political.

First, it is well-know that every evaluation process is based on the definition of suitable indicators and evaluation procedures or strategies (university or Ministry). These are different, or better, specific for the levels at which the evaluation is performed. Yet, it is evident that in the field of planning here analyzed, being the tasks and the objective of the IEUs and the Council equal, a strict coordination activity between them proves necessary to define an essential set of indicators and to perform similar or equal evaluation procedures

Second, the evaluation bodies have to work autonomously and independently from the government from a technical and functional point of view. The distinction between the function of "political" decision and the evaluation process has to be clear and sharp both at national and university level.

Third, particularly at national level, the Council ex-post result evaluation has to produce consequent feedback action-effects on the different stages of the planning process. The Council work should play an important role in the decision making process of the Ministry which regulates institutional behavior in case of new initiatives which do not achieve the set objectives and when the results of the implementation of the planning process are deemed unsatisfactory.

Concluding we can say that the structure of the university evaluation system seems to be valid and it can produce good results if there is a widespread commitment at every level, in particular at university one. Yet, it needs some adjustments to be improved in terms of coordination of the different evaluation units and consequent feedback actions of their opinions. The central administration seems to be slowing down, but also universities do with regard to the activation of the implementation systems which take into account the new conception of planning university autonomy.

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