The relevance of institutional research for Greek higher education

Counelis James Steve

https://doi.org/10.12681/grsr.225

To cite this article:

Counelis, J. (1974). The relevance of institutional research for Greek higher education. Επιθεώρηση Κοινωνικών Ερευνών, 21(21-22), 181-188. doi:https://doi.org/10.12681/grsr.225
Influenced by Napoleonic France, continental European higher education tends, today, to be centralized as a department of government through a nation’s ministry of education. Most of the administrative services for higher education are centered in the ministry. The institute, college, or university tends to have a skeletal administrative staff, led by elected faculty officers and a small faculty body. Greek higher education follows this French pattern. And Greek higher education appears to be governed through the French principles of droit administratif and tutelle.

American higher education, public and private, organizationally tends to be decentralized down to the individual institution of higher learning. An elaborated administrative apparatus is developed at the institutional level. Federal and state governmental agencies have varying degrees of informative, advisory, consultative, coordinative service and/or direct administrative control over some 2,686 institutions of higher learning. The complexity of American higher education can be seen through the huge two volume 1970 edited work of Knowles, Handbook of College and University Administration. To date I do not know of any scientific study in administrative theory that even remotely suggests the superiority of one administrative tradition and style of academic governance over the other. There is much to be said for each. There is, no doubt, much to be said against both.

A common fact is present in both administrative systems of higher education. That common fact is that each particular university, college, or institute requires an efficient and effective cybernetic system of organizational intelligence so that incipient institutional crises can be ameliorated and educational
effectiveness humanely can be achieved. A significant key to cybernetic systems is the faculty. Regardless of a nation’s social structure that may support an elitist status and role for college and university faculty, there is no evading the fact that students are the clients of the professors, which students are to be served by the faculty as whole persons with needs and creatures of God. In this Orthodox Christian nation of Greece, this view should be axiomatic for the university-level faculty as well as the ministry of education, even though it be breached through the frailties of particular men. An effective cybernetic system of organizational intelligence recognizes and can document the fiduciary trust that the ministry of education and each university faculty member has with each of their student clients.

Recently, American higher education has developed an institutional-level mechanism for organizational intelligence. This mechanism is designed systematically to provide the university trustees, faculty, administration, and students with organizational intelligence about themselves in relation to each other and the wider community. The university is a community of teachers, students, administrators, staff personnel, and the trustees. Their organizational self-knowledge about their own interrelationships is required in order to cure institutional ills, forestall institutional crises, and plan institutionally for effective and humane education. This institutional mechanism has varied names. Most often it is known as the Office of Institutional Research or, as in my own university, the Office of Institutional Studies. The significance of this institutional mechanism is underscored by the fact that within the last decade a national organization of directors of such offices has come into being, viz., the Association for Institutional Research. The 1972-1973 membership of the Association for Institutional Research is 963 persons.

The thrust and purpose of this paper is to suggest how American colleges and universities have used institutional research for systematic and cybernetically-directed organizational intelligence. This institutional-level mechanism might have some relevance for Greek institutions of higher learning. That judgment as to relevance rests, however, with those who have the responsibility and the care for Greek higher education. 

**institutional research**

The purposes of institutional research have been discussed and even debated hotly. But Stecklein’s list appears comprehensive enough to merit presentation here:

1. **Institutional research service to faculty members:**
   a. To learn, by controlled experimentation, the potentialities, outcomes, or limitations of their instruction, e.g., supplementary techniques useful in instruction or which produce certain outcomes of instruction; in general, to provide a research basis for critical examination of teaching procedures and practices.
   b. To obtain a better understanding of the purpose of a course or a curriculum.
   c. To determine a basis for comparative judgments concerning instruction and curriculum building.
   d. To obtain a better understanding of admissions practices, examinations procedures, grading practices, and work loads.
   e. To obtain a better understanding of the role of the faculty member in the administration of a college or university, e.g., of the pressures and forces causing certain administrative problems and/or actions, or of the desirability of a faculty voice in administrative policy making.
   f. To develop better understanding of the factors that influence costs of instruction and other functions of an institution of higher education.
   g. To obtain an understanding of the way in which curricular decisions can affect such things as space utilization, building costs, and various routine operations of an institution.

2. **Institutional research service to the administration:**
   a. To serve most of the purposes listed above.
   b. To identify and analyze factors that influence costs or efficiency of operation.
   c. To obtain overall pictures of the characteristics of the undergraduate and graduate student body, of the faculty, and of the curriculum.
   d. To provide continuous up-to-date data on institutional characteristics such as size and rank of staff, available space, number of research contracts, amount of staff effort expended upon research, public and professional services, etc.

---

The relevance of institutional research for Greek higher education

e. To bring to the attention of the administrators
trends taking place in any of the characteristics
mentioned above.
f. To provide data and information useful in ob­taining financial support.
g. To provide data useful in explaining the mis­sion and achievements of the institution.

3. Institutional research service to coordinating
groups or other outside agencies.

This list provides a sort of holistic definition of
what institutional research is conceived to be. This
definition must be placed within the American higher
education milieu of ever-escalating informational
demands from within and from without. Institution­
al data-gathering and resultant studies are becoming
high priority budget items, rapidly. These informa­tional demands posit the requirement for uni­
versity college management information systems
which have the characteristics of ease in retrieval and
high flexibility in use. Huge computer data banks
and large scale computer algorithms make this in­
formation requirement possible of fulfillment. Stan­
ardized statistical reports as well as specialized stud­
ies, be they in space utilization, resources alloca­
tion, faculty evaluation, curricular experiment, budget­
ing, or cost analysis, are now being done with var­ing degrees of success.

Private enterprise, university faculty, offices of
institutional research and governmental agencies
have developed a whole raft of computer software and
scholarly theory on the measurement and evaluation
of higher education inputs and outputs. Among the
leaders in the field is the federally funded National
Center for Higher Education Management Systems
of the Western Interstate Commission for Higher
Education. This group of professionals has developed
standard lexicons for the several higher education
categories, such as, accounting, academic programs,
faculty, facilities, students and governance mecha­
nisms. Across-the-board institutional comparison
by standard categories can thus be made systemati­
cally.

The work of this group is having wide impact on
some 800 institutions in the fifty states. NCHEMS
has produced an induced course load matrix gener­
ator, a cost simulation model, and a resource re­
quirement prediction simulation model, all of which
are being field tested.

Institutional research professionals have developed
considerable scholarship and many techniques in
enrollment prediction, cost work, space utilization
and budgets. Less work has been done in curriculum
valuation, faculty evaluation and values analysis.
A review of the field can be found in Dressel and As­
associates' handbook, scientific journals as well as the
Proceedings of the Association for Institutional Re­
search.

There is no implication made here that all or even
a majority of the Offices of Institutional Research
are at the level of funding or sophistication to even
use computer simulation models. Certainly the state
institutions are more quickly pushed in this direc­tion
as are the wealthier private institutions. How­
ever the first significant step to more sophisticated
levels of institutional research is the planned de­
velopment and installation of an institution-wide man­
agement information system. For a small nation
like Greece, early standardization of the lexicon of
higher education reporting categories would serve
to prevent years of grief later if institutional-level
idiosyncratic lexicons are first installed. Manual sys­
tems of record keeping are most inefficient to the
task of continuing institutional self-study long range
planning and governmental development.

University of San Francisco experience
in institutional research

Permit the prefacing of the University of San
Francisco's experience with institutional research
with some background on the university.

Since 1855, the University of San Francisco has
offered higher education in the city of St. Francis.
Today, the University is a moderately-sized private
institution of some 6000 full/part time students, 425
full/part time faculty and has an operating budget of
over thirteen million dollars. The University of
San Francisco is a Roman Catholic/Jesuit institu­tion,
that is open to all to study, and an equal oppor­tunity employer under federal law.

Currently, the University is offering undergraduate
degree (B.A. and B.S.) programs in twenty-two
fields of arts, sciences, business administration, and
nursing. The School of Law offers legal education
leading to the Juris Doctor degree. Through the Uni­
versity's Graduate Division, the following masters'
degrees and programs are offered: (1) Master of Arts:
education, English, government, history, and theolo­
gy; (2) Master of Arts in Teaching: biology, English,
government, history, mathematics, religion, and so­
ciology; (3) Master of Science: biology and chemistry;
(4) Master of Business Administration; (5) State of
California education credentials (licenses) in six ar­
 eas: educational administration and supervision,

1. John E. Stecklein, «Institutional Research,» in Knowles,
Handbook General, op. cit., Section 4, ch. 9, pp. 125-126.

2. Paul L. Dressel, et al., Institutional Research in the Uni­
1971).
elementary teaching, secondary teaching, pupil personnel and counseling/guidance, community college teaching, and school librarianship. These degree programs are given through nine academic units: (1) College of Arts; (2) College of Science; (3) College of Business Administration; (4) School of Education; (5) School of Law; (6) School of Nursing; (7) Graduate Division; (8) Evening College; (9) Summer Session.

The Office of Institutional Studies was established in the University of San Francisco in 1968. And when I assumed the directorship in 1971, there was the beginning of institutional recognition of the need for real institutional research. This Office is attached directly to the university president; and as director, I sit on the President’s Council.

The management information system of the University of San Francisco is a mélange of manual and computerized records. But only one time series of data existed in 1971. Since that time and at considerable expense in hand labor, four sets of time series, beginning with FY 1968-1969, have been created. These time series are: (1) student credit hours; (2) student head count; (3) course histories: head counts and units; (4) course enrollment by faculty and term. All of these time series are disaggregated to the levels of courses, departments, schools/colleges, year and term, student status: undergraduate/graduate/professional, and student residence: full time and part time. Other time series are being developed in areas concerned with student and faculty characteristics, staff, and financial indicators.

The management information system of university, college, or institute is fundamental to all institutional self-study or cybernetic feedback. Hence in the absence of a machined data bank, such time series as these are preliminary data developments for serious institutional research. The following things have been done so that the University can get a handle on its fiscal problems. For the first time at the University and based upon the time series alluded to above, regression estimates were made in the area of student enrollments by student credit hours and head count for the development of FY 1973-1974 budget. From these same time series and for the first time in the University, a five year projection to FY 1978-1979 was made for long-range planning and University priorities development in that context. One affirmative result of these studies has been that the acrimonious division of opinion as to what the University facts are has disappeared. And University decision-making properly has settled on the problems of University priorities, short and long-range planning and the realism that is appropriate thereto.

Other studies have been done over time as well. A description and brief evaluative commentary was done on graduate education. At the time when there was a question about the abuse in the faculty use of the grade «Inc.» a study was done to objectify the issues. A 1900-1972 time series on educational costs at the University was produced to provide historical and empirical perspective thereon. Two empirical studies on degrees and other awards given by the University since 1863 were completed. This was done to provide some minimal measure of educational output over time. Surveys on University community attitudes on the assets and liabilities of the University, attitudes of graduating seniors, and faculty salary and age studies have been done. Some of these have been published; others are in-house concerns. Nonetheless, qualitatively these studies are positive informational feedback that stabilize the institution through reality-testing.

In my role in institutional research, I have aided individual faculty in their own research projects, aided the School of Education to develop its proposal to become a school, provided randomized sampling

2. James Steve Counelis, University Planning and Trial Estimates in Futures (San Francisco, Ca.: University of San Francisco—Office of Institutional Studies, 1973).
3. James Steve Counelis, Graduate Education in the University of San Francisco (San Francisco, Ca.: University of San Francisco—Office of Institutional Studies, 1972).
6. The two studies are: (1) William J. Dillon, Academic and Professional Degrees and Other Certificates of the University of San Francisco: 1863-1971 (San Francisco, Ca.: University of San Francisco—Office of Institutional Studies, 1972); (2) William J. Dillon, University of San Francisco Awards: 1905-1972 (San Francisco, Ca.: University of San Francisco—Office of Institutional Studies, 1972).
7. The University of San Francisco cooperated with the State of California Joint Legislative Committee for the Master Plan in administering the ETS Institutional Goals Inventory. Also, the Office of Institutional Studies conducted for the President an open-ended questionnaire survey of the entire University community; trustees, regents, students, faculty, alumni, parents, administrators, and Jesuit community. This latter was an in-house report to the President, the findings of which were released by the President’s Office.
9. These were in-house non-published studies submitted to the administration by memoranda.
of students for student and faculty surveys connected to behavioral science courses, aided the School of Nursing in its own faculty evaluation work, and served as a member on the University Committee on Research.

One of the major tasks of institutional research professionals is scholarship. An area of concern is model building for the development of computer algorithms. The application of mathematics and symbolic logic to the solution of generic problems is an activity of long standing. Computer science people, operations researchers, educational theorists, and behavioral scientists in all areas and in particular administration have done much here. In my career, I worked in the area of higher education model development that is moving rapidly to the symbolic and mathematical propositional levels. At this University, the practical problems of tuition-pricing and self-evaluative performance appraisal in the University have been modeled at the symbolic propositional level. The model for self-evaluative performance appraisal became the basis for University practice in priorities development and attitudinal assessment of the University through broad University surveys. The tuition-pricing by matrix has yet to be tried. The Office of Institutional Research in any university, college or institute provides an excellent vehicle of the University through broad University surveys. The economic depression in American higher education is very broad in swath. The history of American institutions of higher learning is replete with the demise of colleges and universities. University management is concerned with a relevant and humane education that is instructionally effective, socially relevant, and economically efficient. These notions are becoming more systematic and pragmatised. The proposed management information system for the University of San Francisco is intended for those goals.

For the moment, the experience of institutional research at the University of San Francisco is just beginning. Hopefully, the institutional experience qualitatively will improve the University products of instruction, research, and public service.

questions of relevance

In 1964, Russett and his colleagues classified Greece to be at that stage of economic and political development which they termed «industrial revolution» society. The Russett study was an empirical study based upon the best data available. In relation to this
empirical fact, one must know that Greece is a participant in the Organization for Economic Cooperation and Development and cooperated with Italy, Portugal, Spain, Turkey, and Yugoslavia in the Mediterranean Regional Project. The purpose of this project was to prepare an assessment of educational needs to 1975 and arrive at detailed plans, including financial estimates, for meeting these needs. As a result of this program, a recent committee has made a report in the field of Greek higher education making specific recommendations in the area. Given this environment, permit me to raise some questions leading to possible implications of institutional research for the institutional-level of higher education.


the relevance of institutional research for Greek higher education

(42) R. Duncan Luce (ed.), Developments in Mathematical Psychology (Glencoe, Ill.: The Free Press, 1960).
(49) James Maynard, Some Microeconomics of Higher Education: Economies of Scale (Lincoln, Neb.: The University of Nebraska Press, 1971).
Every thinker tries to select his own intellectual past, and is in turn shaped by it... In every generation and in every domain of study, there comes about a general agreement that a small set of works are «classic» in the sense of being somehow indispensable. For by «classic» writers, we do not mean merely those who have been consistently read; we mean also those who, whether read directly or not, have continued to be a point of orientation for the work of others.