

DOCUMENT RESUME

ED 281 469

HE 020 373

AUTHOR Hughes, Julie A.; Sagen, H. Bradley
TITLE Departmental Decision-Making in the Implementation of a University General Education Curriculum. ASHE 1987 Annual Meeting Paper.

PUB DATE Feb 87
NOTE 25p.; Paper presented at the Annual Meeting of the Association for the Study of Higher Education (San Diego, CA, February 14-17, 1987).

PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS College Instruction; *Curriculum Design; Decision Making; *Departments; *Economic Factors; *General Education; *Graduate Study; Higher Education; Prestige; *Research; Research Universities; Resource Allocation; Teacher Role; Teaching Assistants

IDENTIFIERS *ASHE Annual Meeting

ABSTRACT

The context for implementing general education is discussed, based on research at a comprehensive midwestern research university which has a prescribed distribution general education curriculum. Two major contextual factors are identified: prestige is achieved through research and strong graduate programs; resources to support graduate courses and research tend to be generated by enrollments in general education. Two propositions are offered: departments organize and implement general education activities as efficiently as possible primarily to generate resources to pursue preferences for research and graduate programs; and competition for resources becomes competition for a share of the general education enrollments that generate graduate student and faculty stipends. The research involved interviews with department heads and faculty and used the procedure of constant comparison. Course implementation was influenced by the scale of general education courses involving multiple sections. The extent of faculty participation in general education instruction was influenced by the nature of different fields (i.e., well-defined and codified versus not well defined). It is concluded that faculty involvement in general education is primarily managerial and is guided by the need to minimize the time required, given the preference for research. (SW)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

DEPARTMENTAL DECISION-MAKING IN THE IMPLEMENTATION
OF A UNIVERSITY GENERAL EDUCATION CURRICULUM

Julie A. Hughes and H. Bradley Sagen
The University of Iowa

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

ASHE

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as
received from the person or organization
originating it.
- Minor changes have been made to improve
reproduction quality.

* Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy.

AE 020 373



**ASSOCIATION
FOR THE
STUDY OF
HIGHER EDUCATION**

The George Washington
University
One Dupont Circle, Suite 630
Washington, D.C. 20036-1183
(202) 296-2597

This paper was presented at the Annual Meeting of the Association for the Study of Higher Education held at the San Diego Hilton in San Diego, California, February 14-17, 1987. This paper was reviewed by ASHE and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC collection of ASHE conference papers.

DEPARTMENTAL DECISION-MAKING IN THE IMPLEMENTATION OF A
UNIVERSITY GENERAL EDUCATION CURRICULUM

Julie A. Hughes and H. Bradley Sagen
The University of Iowa

Introduction

General education is among the major instructional goals of research universities. It is also an area in which actual practice often appears to deviate from stated goals. This may occur because general education as portrayed to the public is an institutional function at variance with the social structure of academe.

Major research universities are highly decentralized organizations consisting of relatively autonomous departments that are essentially academic interest groups (Clark, 1978). Academic departments may be viewed as prestige maximizing groups (Garvin, 1980) whose objective is to improve their standing within the field. Prestige is achieved by the research accomplishments of faculty and by the strength of graduate programs. The primacy of the disciplines and the orientation toward graduate education and research are reinforced by institutional policies that reward research and publication (Trow, 1967). However, enrollments in general education and other undergraduate courses typically provide much of the resources necessary to offer graduate level courses and to pursue research (Mayhew and Ford, 1971; Jencks and Peisman, 1968).

The general education curriculum is usually defined on an institution-wide basis (Levine, 1978) and is therefore a goal of the organization

Presented at the annual meeting of the Association for the Study of Higher Education, San Diego, CA, February 14, 1987.

as a whole. Yet, the responsibility for defining goals in operational form and for providing courses typically rests with the academic departments. While ideally the stated goals of the institution and those of the departments are congruent, goal disparities frequently appear. Several authors have written about the contradictions between the goals of general education and those of a specialized faculty suggesting that: a university is an unnatural setting for general education (Clark, 1983); the departmentalization of specialities is in contradiction to the concept of an integrated curriculum (Cohen and Brawer, 1982); and, the specialization of faculty and the priority placed on the research and graduate education functions in universities is not compatible with efficiency considerations in resource allocation (Miles, 1977).

If these observations are correct, then departments should reasonably be expected to organize and implement assigned activities such as general education not to achieve the goals of that activity, but as efficiently as possible in terms of preferences for research and graduate education. This became the major initial speculation of the current study -- that general education at a comprehensive research university can be described most adequately as an exercise in carrying out one activity (general education) as efficiently as possible in terms of a preference for other activities (research and graduate education). Various authors such as Trow (1967) have described undergraduate education broadly along these lines, but no one has explored the phenomenon in any depth or offered empirical evidence to justify the conclusions reached.

A second initial speculation was that the typical distribution requirements for general education within a university constitute an arena of competition among departments for resources in the form of faculty and

graduate assistant lines that can be allocated in turn primarily to the pursuit of research and graduate education. Because resources are tied to the production of student credit hours, the competition is conceived to function as a segmented market in which undergraduate enrollments are recruited to general education courses so that they can generate credit hours which in turn can be exchanged for faculty and graduate assistant resources. The general proposition that university enrollments constitute a market within which departments compete for resources has been confirmed by Mann and March (1978). The current study extends that proposition in more detail to the area of general education.

In summary, the literature suggests that the organization of faculty into departments, the emphasis on research and graduate education, and the market like competition for resources provide the social context in which general education must be implemented. Academic departments respond to the institutional commitment to general education while attempting to enhance their status as determined by the quality of their graduate programs and the research accomplishments of the faculty. Therefore, departments should reasonably organize and implement the general education curriculum in the manner that is most efficient in terms of departmental preferences for non-instructional (status) goals. This behavior would be mediated, however, by the need for faculty and staff resources gained in part through competition with other departments for general education credit hours.

Method

The general research strategy of the current study is described by its originators (Glaser and Strauss, 1967) as grounded theory, and the more specific methodology as the constant comparative method. In traditional methods of data collection linked to inferential statistical analy-

sis, the variables to be analyzed, and the universe, and subsequently the sample from that universe from which data are collected, are specified prior to data collection. In the constant comparative method, phenomena of interest are identified, and initial data are collected and then grouped in as many analytic categories as possible in terms of the area of interest. Additional data are then collected to verify or modify the initial set of analytic categories and to establish their dimensions and limits. Tentative explanations of these dimensions and of the relationship among categories are developed and additional data collected to confirm these explanations and the inferences that may be drawn from them. Explanation thus emerges from, or is grounded in, the data rather than defining the data elements a priori. Likewise, constant comparisons are made between the tentative explanations constructed from data previously collected and from the new data collected to verify, modify, and extend those explanations.

The concept of theoretical sampling and the use of comparison groups is central to the method of constant comparison. As analytic categories and explanations are constructed, additional data are collected by expanding the sample to include subjects from comparison groups whose similarities and dissimilarities relative to the original subjects provide an initial verification if the new data are consistent with the original categories and explanations. Conversely, inconsistencies require modification of the framework and this is typical in the early stages of data collection. Data collection and sampling are thus linked by the method of expanding the sample specifically to secure the new data required to verify or modify the conceptual framework as it has emerged to that point.

In the current study we have placed most emphasis on the "grounded"

and less on the "theory" in grounded theory. The area we are exploring is a multidisciplinary phenomenon. The constant comparative method encourages the comprehensive mapping of an area by continuously exploring potential variables and relationships among variables. As Glaser and Strauss (1967, p.2) point out, there is considerable need for studies that emphasize, "...discovering what concepts and hypotheses are relevant for the area one wishes to research."

Explanations constructed from grounded theory must obviously be considered as tentative. They lack the rigorous confirmation established by examining relationships among variables within a carefully defined (usually random) sample of sufficient size. (Confirmation in grounded theory occurs in later more rigorous research designed for that purpose). The opportunity to formulate a more comprehensive, and with confirmation, a more satisfactory explanation is the compensating factor. The exploration of tentative categories and dimensions of data also allows the researcher to try out alternative explanations from existing theories as they can be linked through analytic categories to the data.

Data Sources and Procedure

A comprehensive research university in the Midwest which has a prescribed distribution general education curriculum (the curriculum preferred by a majority of institutions according to the Carnegie Council on Policy Studies in Higher Education, 1976) was the site for the study. The unit of analysis was the academic department. The data sources were interviews of chairpersons and faculty, and supporting documents. Supporting documents included institutional reports about general education, minutes of faculty and committee meetings, and newspaper articles as well as course and departmental material submitted by interviewees. These

documents were continually examined, analyzed, and integrated with the interview data during the interview process.

Thirty department chairs and faculty representing seventeen of the thirty-four departments offering general education courses were interviewed. Departments were originally chosen on the basis of which offered the most and the least general education courses within a distribution area. The most and least criteria was used to select the original sample because of the contrasts between categories that might likely arise using these criteria. Additional departments were added during the course of the study as the need arose to verify or modify categories and expand explanations.

The semi-structured, open ended interviews lasted from thirty to ninety minutes. Notes were taken during each interview and then reviewed and clarified immediately after each interview. As categories emerged, a coding system was developed and each interview was coded. Coded responses were grouped according to category, discipline, and distribution area.

The process of sampling through interviews occurred in several stages. First, several faculty were interviewed to determine what areas might be appropriate to pursue in later interviews. These interviews and the literature about the social structure of academe, general education, and economic approaches to analyzing decision-making behavior were used to develop topical areas for interview questions.

Second, the topical areas were developed and used as prompts for interviews. These included the following categories: 1) goals and intended outcomes of general education; 2) how (if) teaching assistants are used and the scope of their responsibilities; 3) desired number of teaching assistants; 4) course delivery format; 5) criteria for evaluation

of general education courses in relation to goals and intended outcomes; 6) approximate enrollment in general education classes, undergraduate major classes, and graduate classes; 7) preferences for enrollments; 8) perceptions of their (faculty) role in relation to students in general education classes, undergraduate major classes, and graduate classes; 9) relative importance of general education courses, undergraduate major courses, and graduate courses; and, 10) criteria used to determine inclusion, continuance, and exclusion of general education courses offered.

As the data emerged from the second set of interviews, the categories generated in the first stage were sufficiently verified to begin formulating explanations and an initial framework. Also, data had emerged about anticipated budget reductions. Therefore, the categories were expanded to include questions related to the consequences of budget reductions: whether or not departments had sufficient teaching assistant support, and what courses would the department eliminate first (i.e., general education, undergraduate major, or graduate) should that be necessary. The information that emerged during the third stage interviews supported existing categories and led to more comprehensive and explanatory categories. The twelve general categories were collapsed into seven more analytic categories.

A fourth set of interviews supported the categories by verifying and expanding the information of the previous interviews. At this juncture, the analytic categories were firmly linked to the explanations.

The interview data were then re-analyzed by category and by general education area (i.e., humanities, natural science, etc) and a summary of each category was written. The final categories were: 1) public justification of general education; 2) preferences of faculty; 3) scale of gen-

eral education; 4) technology of general education; 5) management of general education instruction; 6) resources and markets; and, 7) variations by discipline.

A brief summary of the procedure of constant comparison does not begin to describe the false steps and revisions that took place. For the interested reader and to provide a reasonable means of confirming the conclusions reached, as suggested by Silverman (1986), a technical paper incorporating more complete explications of the data and its interpretation has been prepared and is available from the authors. Briefly, and as discussed more fully in the technical paper, the interviews led us to modify our conception of general education as a single market to one of being influenced by multiple markets, and to explain variations in implementation in terms of differences among disciplines. The management of instruction was also developed as an important analytic category since this is a primary point of faculty involvement. Finally, public goal statements and rationales for general education came to be seen as public justification, with little or no role in implementation.

Results

A Model of Choice and Levels of Explanation

The results of the study can be organized, and general education within a university setting reasonably explained, by placing the results within a traditional model of rational choice emphasizing the search for efficiency, and by extending the model to situations involving market conditions. The explanation of general education occurs at two levels, a macro level of departmental-college/university relations at which general education is a means to an end - the acquisition of resources; and a micro level (course implementation) where the issue is how to organize the

required resources most efficiently in terms of the preferences for research and for strong graduate programs. In the traditional model of choice, one or more preferences are pursued in the face of constraints, or limits on what can be achieved. The agent making the choice seeks to maximize the attainment of preferences by selecting among possible alternatives those which make the most effective use of available resources, or alternatively attain a satisfactory outcome while minimizing the investment of resources, if that is the preference. As it applies to general education, the former (effective use) appears to characterize the utilization of teaching assistants, the latter (minimization) the involvement of tenure track faculty.

Departmental and Faculty Preferences

At both the departmental-college/university and course implementation levels, the major explanatory factor is the preference for research and for developing strong graduate programs and for the status gained for those activities. This leads departments to acquire resources for these activities and to organize general education as efficiently as possible in terms of these preferences. Comments such as "people are under the gun to publish," "the bias is away from teaching and towards research - raises depend on it," "every moment (teaching) is money out of the pocket," and "new people can't afford to teach" illustrate the primacy of the research and publish ethos and an understanding of its relationship to the institutional reward system. The importance of graduate programs is reflected in comments such as "departments view themselves as suppliers of students to graduate schools" and "the prestige of the faculty is tied to graduate courses." In the few instances where faculty were heavily committed to teaching general education courses, it was perceived as a personal choice

not supported by the reward system.

Four additional points can be made about preferences and about the related topic of goals. First, the faculty preference for research and graduate programs is more than a preference for rewards and status. If it were, changing the reward system would be a potential strategy for reforming general education. There was little evidence to support the idea that faculty would devote more attention to general education and less to research and graduate programs if the reward system were different.

Second, the publicly stated goals of general education play virtually no role in its actual implementation. Discussions of goals, along with considerations of evaluation and of outcomes, generally constitute a public justification of general education. Once justified, the actual implementation and the way faculty think about general education is devoid of references to traditional goals and outcomes.

Third, goals do play a role in the conception of general education as "service courses," a term used a number of times by faculty. Once a department is convinced the university or another department genuinely desires an educational outcome, it will seek to serve that desire, even at some cost to the efficiency of its own operation. This is particularly true of skills and competency areas, such as written composition and mathematics. These areas are understood by all faculty to be central to the development of strong undergraduate majors and thus the preparation of future graduate students.

Fourth, the attitude of university faculty toward general education is not one of disdain or criticism. Many faculty believe in the goals of general education and its place in the university was not belittled. The point of major focus in the study was the discrepancy between what faculty

publicly profess and what they choose to implement.

General Education as a Competitive Market for Resources

The results confirmed the two central speculations: 1) that general education as a departmental function is a means to an end, a way of acquiring resources that can be devoted to the pursuit of other preference; and, 2) that the acquisition of these resources occurs in a market like context as competition for student credit hours. The situation is more complex than originally envisioned, however. Competition occurs within multiple and interrelated markets and the goal was not the maximization of resources, but optimization.

Departments, especially departmental chairs, were aware of the need to generate student credit hours through general education offerings, and that they must typically compete with other departments for enrollments within their segment of the distribution requirement market. The need for the credit hours generated by general education was apparent in comments such as general education is needed for the "body count" and is the "bread and butter" for the department.

Departments did not seek to maximize the number of graduate assistant lines or even faculty positions. Instead, they generally sought an optimal number of positions. The desired number is heavily influenced by two other markets: the job market for Ph.D.s and the competition for qualified graduate students.

The prestige of a departments' graduate program is influenced by the placement and career record of its Ph.D. graduates. In a declining market for Ph.D.s, departments tended to be unwilling to prepare students for underemployment and to accept less than highly qualified students. (Many departments link graduate enrollments and stipends directly; they accept

only those students for whom they are willing to offer financial support.)

In the face of declining opportunities for Ph.D. graduates, departments were seeking generally to stabilize and in several cases to actually decrease their general education enrollments. Indeed, there was a general perception that many departments were "hurting because of an imbalance between graduate and general education enrollments." The decision to downsize graduate enrollments and consequently general education was further exacerbated by the fact that the institution under study had been experiencing budget reductions and reversions for several consecutive years, and that teaching assistant lines were prime targets for retrenchment. The university was further destabilizing the market by refusing to automatically allocate additional resources in response to additional general education enrollments. The effect of this was to highlight resource concerns and the need for appropriate market responses. As one faculty succinctly stated, "you can't discuss general education without discussing the budget."

When graduate student enrollments were too low for general education enrollments, departments typically dealt with this imbalance by attempting to manipulate the student credit hour market or by seeking non-student instructional resources. Departments manipulated the student credit hour market by: 1) using advanced placement testing to reduce overcrowding in some general education classes and re-allocate student credit hours to other courses offered by the department; 2) waiving or substituting requirements for graduate students thereby re-distributing faculty and financial resources so that general education courses, which produce student credit hours, could be maintained; and, 3) cutting sections or offering fewer general education courses, and capping enrollments in order to

maintain a balance between the supply of teaching assistants and the necessary student credit hours.

Departments with a continued surplus of demand for general education responded to the need for instructional resources by hiring teaching assistants from other departments, assigning junior or visiting faculty rather than teaching assistants to general education classes, and by considering various strategies to recruit graduate students.

In addition to a shortage of graduate students affecting a department's ability to fill allocated teaching assistantships, concern was expressed over the qualifications of existing graduate students. Over-specialization of graduate students, English language deficiencies, and a general sense of inadequate undergraduate preparation of graduate students were some of the reasons cited as problems in filling allocated teaching assistant lines.

Several departments were constrained from reducing general education course offerings significantly by the need for a pool of potential graduate students in the form of undergraduate majors. The reliance on a local supply of graduate students and the concurrent existence of a local market for undergraduate majors surprised us somewhat in view of the desire for national prestige in graduate education. Without comparative data we cannot determine if the phenomenon is widespread. Certainly it is one more piece of evidence of the influence graduate education exerts upon undergraduate programs in a university setting.

Implementation of Instruction

Once the role of general education at the departmental-college/university level is understood as a means to an end (resources), as well as an accepted university function, the actual implementation of

general education instruction can be explained in reasonably straightforward terms. The implementation is explained primarily by: 1) departmental preferences for research and for strong graduate programs; 2) the nature of instructional resources (teaching assistants) acquired ostensibly for general education but selected and organized primarily to pursue other goals; 3) the scale of the enterprise; and, 4) the variation among academic fields which leads to variations in instruction.

Scale. One of the most often overlooked characteristics of general education in most public research universities is the sheer scale of the enterprise. We would estimate that general education generates at least 15,000 course enrollment a year in our site institution. The general education component of one department alone involved well over one hundred sections and over sixty teaching assistants. Courses with over twenty sections and ten teaching assistants were the rule rather than the exception in several departments. If general education is to make efficient use of resources, as it does, some elements of mass production and bureaucracy are going to be found. Comparability of student evaluation alone demands some standardization. Centralized planning and standardization is not possible in some fields, however, and where instruction must be decentralized, the need for supervision, especially of inexperienced teaching assistants is even greater. These factors of scale alone explain the primary general education role of faculty as one of course managers.

Human Resources. The use of graduate student assistants as the primary deliverers of general education heavily influenced the nature of general education. Teaching assistants were presumed to be less than fully prepared for college teaching; their preparation is typically in a single discipline, and departments often experienced a high rate of turnover of

teaching assistants. Teaching assistants were also, of course, present in sizable numbers in many departments.

Despite the public rhetoric about the interdisciplinary nature of general education, instruction by teaching assistants took place within the boundaries of a single discipline. It typically occurred in small groups because of the favorable teaching assistant/student ratio, and was relatively standardized wherever possible to minimize the training required of a high turnover workforce. Interestingly, only one department in the sample did not offer small discussion group instruction in general education. Many of the graduate students in that department did not possess adequate proficiency in English and were used instead as research assistants. The faculty in turn simply offered general education courses in large lecture sections with no opportunity for discussion.

There was considerable need for management and coordination of teaching assistants because of the number, level of preparation, rate of turnover, and need for some standardization among teaching assistants in multi-section courses. Course organization and management, not direct instruction, constituted the primary involvement of faculty in general education. Even where faculty reported greater self-interest and involvement in general education, their involvement was largely through course organization and coordination of teaching assistants, not through direct instruction.

Variations by Discipline. The third major determining factor of the nature of instruction, and a confounding factor, was that some fields lent themselves to an efficient standardized approach to large enrollment courses far better than others. Elements of the term bureaucratic define instruction in the sciences where there is general consensus on what the

field is about, a well defined body of knowledge and domain specific skills to be transmitted, and a communality of academic preparation.

In the sciences, course materials, instructional procedure, laboratory experiments, and examinations were highly standardized. Instructional roles were typically differentiated as lecturer (faculty); and laboratory assistant and/or discussion leader, and test grader (teaching assistants). The faculty organized the course and prepared materials, and transmitted the body of knowledge in large lecture sections. The assistants then worked directly with students in small sections in insure mastery.

In several of the social sciences, and especially in certain humanistic disciplines, there is no well defined body of knowledge from which to draw common course content. Graduate students in fields such as history, for example, would be hard pressed to find a single course that they all share in common. Humanistic disciplines, such as English, are also defined more by the competencies and sensibilities acquired through working with original materials than by mastering a common body of knowledge.

Instruction in these fields was inevitably less standardized than the sciences. Several sections of one general education course in the humanities functioned as relatively independent courses. The teaching assistant was often responsible for all the instruction and has considerable autonomy in the selection of course materials, approaches to instruction, and examinations and grading. Indeed, some general education courses in the humanities offer subject matter varying from section to section.

To summarize, the actual technologies or process of instruction used in general education are thus determined by faculty preferences and available instruction resources in interaction with the scale (large enroll-

ments) of most courses and the nature (well defined and codified versus not well defined) of the academic fields.

Management of Instruction. The final major component of general education is the management of instruction. As reported earlier, the primary involvement of faculty in most general education courses was managerial and organizational, rather than direct instruction. The need for course management and the desire of faculty to use their time as efficiently as possible; i.e., minimize the time demands of course management, must be understood in context of the scale of general education in a large university. Courses of twenty section and seven to ten teaching assistants are fairly typical, and a single course may require fifty percent or more of a faculty member's total professional effort. We are not typically describing a "flight from teaching," but rather the reasonable desire to maintain adequate time for research among those responsible for general education. Nevertheless, preferences of departments and of individual faculty were clear. Given the preference for research, the criterion for general education was to minimize the need for faculty resources. This leads to the interesting situation that faculty as the organizers and managers of general education courses have as their criterion for efficient management, minimization of time spent in management.

The nature of management varies with the technology of instruction. In the sciences and other fields having well defined bodies of knowledge as the basis for course offerings, management consisted primarily of planning and organizing the work of teaching assistants by preparing standardized course materials and establishing procedures for instruction and grading. Although science faculty typically offered some direct instruction in the form of large group lecture, their involvement was minimal

once the work of others was organized. Teaching assistants in disciplines which used standardized course materials typically met only on an informal, irregular, and as needed basis with the faculty member responsible for the class.

Disciplines involving less well defined bodies of knowledge and hence more decentralized and autonomous instruction, presented different problems in instructional management. In multiple sections of a single course, some communality in expectations and especially in grading was maintained if only to forestall inevitable complaints from students. This was accomplished through supervision and hence control of instruction by faculty management. Typically, faculty in decentralized general education courses acted as supervisors and did not offer instruction directly. Moreover, faculty minimized their involvement in management by turning much of it over to experienced teaching assistants who acted as course coordinators. Coordination and control was accomplished through training workshops, consultation with the new teaching assistants, and regular meetings. These activities were most often implemented largely by experienced teaching assistants rather than faculty. The extreme in decentralization occurred in multidisciplinary skills areas where much autonomy for each instructor was necessary and where the teaching assistants were drawn from several disciplines and thus had little in common as the basis for instruction. In one such situation, the teaching assistants were so conscious of their autonomy and of fulfilling the instruction roles of faculty, that they petitioned the university to be given the title and status of instructor rather than teaching assistant.

Summary

Before summarizing the results two caveats should be stated. First, this study did not seek to evaluate general education. We can say that once the primary preferences of the university and of its faculty are taken into consideration, general education is implemented in ways that we consider to promote effective instruction. Similarly, to say that faculty are seeking to use their time as efficiently as possible is not to say that they are shirking their responsibilities. General education remains a significant university activity and consumes major amounts of faculty time. Second, explanations constructed through the method of constant comparison should be regarded as tentative, and subject to verification through more rigorous research methods.

To summarize a complex situation, universities no less than other organizations are guided by the social structure of the enterprise. The preferences of the organization, not necessarily the publicly stated goals, coupled with the constraints imposed by resource and other limitations, shape the behavior of units and individual members. Similarly, the behavior within and across organizations may be coordinated not by stated policies, but by other mechanisms. The American economy coordinated by market mechanisms rather than centralized planning is the outstanding example of this phenomenon.

Contemporary universities reflect the preferences of their influential members (faculty) for research and for strong graduate programs, and for the status and rewards accorded achievement in these areas. But universities must have resources to pursue these preferences and the resources must be allocated within the institution by some mechanism. Universities engage in activities such as general education, not necessarily

because of a primary commitment, but to generate resources to pursue other preferences. Departments are allocated a significant portion of their resources according to their involvement in resource generating activities, but then organize the resources as efficiently as possible in accordance with primary preferences. Competition for resources within a university becomes somewhat a market competition for a share of the general education enrollments that generate graduate student and faculty stipends. The level of resources sought, however, is conditioned by factors such as the job market for Ph.D.'s -- an indicator of success in graduate programs -- and the need to generate sufficient enrollment to maintain undergraduate majors and a pool of potential graduate students.

Implementation of general education courses is likewise explained primarily by the preference of departments and individual faculty for research and strong graduate programs and the incentive to organize other activities as efficiently as possible with respect to those preferences. The primary instructional resource is teaching assistants whose level of preparation and status effectively constrain what can be pursued in general education. Course implementation is further influenced by the scale of general education courses involving multiple sections and often the coordination of more than a dozen teaching assistants, and by differences among academic disciplines.

Large enrollment courses involving well defined bodies of knowledge such as the sciences are typically organized around standardized course materials, instructional procedures, and methods of student evaluation. Teaching assistants often play differentiated and limited roles such as laboratory assistant or paper grader. Faculty participate directly in instruction as lecturers, but their primary role is to plan instruction

and organize the work of the teaching assistants. Once this is accomplished, faculty participation in instruction is minimal.

Less well defined fields found primarily in the humanities lead to more decentralized and autonomous small group instruction with teaching assistants assuming major responsibility for planning and implementing instruction for their course sections. Management needs for coordination and a degree of standardization are met by assigning experienced teaching assistants as course coordinators, supervised in turn, and with relatively minimal involvement, by faculty. Faculty involvement in general education is thus primarily managerial (planning, organizing, controlling), and is guided by the need to minimize the time required, given the preference for research.

References

- Clark, B. (1978). Academic coordination. New Haven, Conn: Yale University, Institute for Social and Policy Studies.
- Clark, B. (1983). The higher education system: academic organization in a cross national perspective. Berkeley, CA: University of California Press.
- Cohen, A. & Brawer, F. (1982). The american community college. San Francisco: Jossey-Bass, Inc. pp.311-341.
- Garvin, D. A. (1980). The economics of university behavior. New York: Academic Press.
- Glaser, B. G. & Strauss, A. L. (1967). The discovery of grounded theory: strategies for qualitative research. Chicago: Aldine Publishing Company.
- Jencks, C. & Reisman, D. (1968). The academic revolution. Garden City, N.Y.: Doubleday and Co.
- Levine, A. (1978). Handbook on undergraduate curriculum. San Francisco, CA: Jossey-Bass, Inc.
- Manns, C. L. & March, J. G. (1978). Financial adversity, internal competition and curriculum change in a university. Administrative Science Quarterly, 23, 541-552.
- Mayhew, L. B. & Ford, P. J. (1971). Changing the curriculum. San Francisco, CA: Jossey-Bass, Inc.
- Miles, M. (1977). The student movement and the industrialization of higher education. In Jerome Karabel and A.H. Halsey (Eds.), Power and ideology in higher education. New York: Oxford University Press.
- Silverman, R. J. (1986, November). The position of the advisor and the editor in grounded theory inquiry. The Pen: A publication of division J american educational research association.
- Trow, M. (1967). Undergraduate teaching at large state universities. In Calvin T. Lee (Ed.), Improving college teaching. Washington, D.C.: American Council on Education.