This report examines variations in organizational patterns and perspectives toward field-centered research and evaluation. While recent trends show greater concern for research, present efforts are mostly university or organizationally based. Limited systematic attention has been given to research and evaluation efforts that share responsibilities. Dimensions that provide a basis for examining varied organizational patterns to encourage and operationalize field-centered research and evaluation are explored. Descriptions are given of organizational structure, needs of constituents, initial efforts to actualize projects, financial support dimensions, and the potential for impact on the areas served. Efforts in urban, regional, state, national, and institutional settings presently operating to actualize field-centered research and evaluation will be highlighted, and emphasis is placed more on new partnership dimensions than on blind adherence to conventional configurations. (MJM)
ORGANIZATIONAL PATTERNS IN HIGHER EDUCATION INSTITUTIONS
FOR THE CONDUCT OF FIELD-CENTERED RESEARCH

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That the university was a party to the birth of educational research is a matter of record. Beginning with Joseph Rice who is credited as the founder of empirical scholarship in education (NCERD, 1969, p. 41) educational research set its early pattern with achievement tests and the subsequent debate concerning the relationships of pupil performance to teaching effectiveness. The primary contribution of research in the early years was the establishment of empirical bases for teaching methodology. Much of this work was in the environment of the laboratory school.

The laboratory school was the result of attempts to provide a live laboratory for the university to use in conducting research through student testing and developing teaching strategies. From John Dewey's initial efforts at the University of Chicago in the 1890s, the practice of establishing laboratory schools by universities grew into a major movement (NCERD, 1969, p. 42). It is perhaps unfortunate that through the years the laboratory schools became conventional elementary programs, serving a select clientele and providing the university little more than a place for their students to "practice" their newly acquired teaching skills before being exposed to the real world. Educational researchers let their laboratory slip from their grasp. It was lost by default, by not being used and/or cultivated as a real laboratory.

Administrative Research Units

It is widely recognized that persons who are located in or affiliated with colleges and universities currently perform most of the work in educational
research and development in this country (NCERD, 1969, p. 69). The administrative arrangements through which they function range from individual faculty members who work either alone or together in informal teams to highly-structured research units that are organized to perform basic research in a specific discipline.

The researcher may be a staff member of a research unit, he may hold adjunct appointment with the unit, or he may use the research unit facilities without actually becoming a part of the unit. Other researchers may pursue their projects without having any connection or interface with the organized research unit. Those who may function in this manner, however, account for a rather small part of the total research efforts. Most of the national R and D expenditures are made through larger institutions with more highly structured organizations devoted to research and service. The extent to which a few such institutions dominate the R and D scene is shown by a report from National Science Foundation (1973) that identified the Leading U.S. Research Universities. Criteria for inclusion in the N.S.F. list were:

a. awarded more than 50 Ph.D. degrees in 1970-71

b. received more than $10 million in federal support of academic science in 1970-71.

From this list of institutions and the amount of support each received it is readily apparent that fewer than 1 per cent of our institutions of higher education are receiving 57 per cent of the federal research dollars. The thirty-one institutions who participated in that 57 per cent received an average of $49 million each. The range was from $112 million received by M.I.T. to $28 million for Michigan State University.

In a status report, Educational Research and Development In The United States (NCERD, 1969, p. 70), the various research units found in schools
and colleges of education are described:

Research organizations associated with schools of education include (a) highly autonomous enterprises with sizable staffs and large budgets devoted almost entirely to empirical research, (b) a variety of smaller operations concerned with developmental and service activities or with facilitating the small-scale research of independent faculty members and (c) arrangements which are almost indistinguishable from the teaching departments which compose them. Some of the units are (1) training facilities with project money, (2) informal teams of faculty members who share some facilities and resources, (3) offices for inhouse research on the operations of the institutions, (4) laboratory schools which make serious efforts to evaluate new educational practices, (5) centers which reach into several departments of the schools and university for personnel and resources, and (6) bureaus which are equally concerned with both the provision of services to local schools and research.

Research Unit Functions

Organizational patterns for conduct of research found in higher education usually provide for proposal approvals by some type of faculty committee or research unit prior to the submission of the proposal to a sponsoring or supporting agency (Sieber and Lazarsfeld, 1967). The use of
research coordinators, directors of research, and/or research committees is common among institutions. The roles which are described as being responsible for coordinating research activities (NCERD, 1969, p. 69) include the following:

1. Administrative responsibilities in facilitating research
2. Leadership and stimulation of research
3. Assistance in proposal preparation
4. Facilitation of communication regarding the needs of the research program to the administration.

Research committees are usually either advisory committees that are concerned primarily with policy, or they are facilitating committees that serve in the leadership and assisting roles (Sieber, 1965, pp. 141-5; NCERD, 1969, p. 69). Liaison and communication with the faculty is an important function of the research committee - a function that should receive major consideration when representation on the committee is determined. Broad departmental representation is a prerequisite to effective utilization of this committee. Every department in the college should be represented by a faculty member who will not only provide communication to departmental faculty, but who can also provide leadership and decision-making about the commitment of the department to research opportunities. The research committee can then be an effective planning unit and give direction to the setting of priorities as perceived in their academic departments.

Extra-Organizational Arrangement:

Organizational patterns for research begin to take on different connotations when one extends the term beyond the place where discovery
actually takes place. Hall and Smith (1965) use the term "Extra-Organizational Arrangements" to refer to this dimension. In this sense, they further identify three structures as descriptive of the participating agencies and the transactional relationships that are found in such arrangements: task organizations that are concerned with discovery and application; support organizations that provide the support (funding); and use organizations where implementation is expected to take place (Hall & Smith, 1965, p. 206-7).

The impact of research units found in higher education is most evident when extra-organizational arrangements are crystalized to the point that the scope of the entire process can be viewed as one entity. Too much effort by the "task" organization has "gone down the drain" because the third party (the use organization) was not a part of an extra-organizational arrangement. When a bureau of research and services or other research unit undertakes a research project through such structures, it is with a more secure knowledge that the product will have the opportunity to "make a difference" in some facet of education because a potential user has not only already been identified, but also one has already made a commitment to implementation.

By utilizing as a basis for pragmatic conduct of educational research the concept of extra-organizational arrangements, one can then develop a description of working transactional relationships between and among agencies that become parties to such extra-organizational arrangements.

Bureaus of Educational Research

Organizational structures used for the conduct of educational research and services are found in many forms and under a number of names today. Irrespective of the label by which research units are identified, the bureaus, centers, and other similar research units that have been established for this purpose are a product of the twentieth century.
A number of such research units were established early in this century; however, only a very few of them survived (Tyler, 1965, p.1).

As the number of organizational structures for research have increased in higher education institutions, their complexity has also increased. Operational arrangements have evolved which bring about various kinds of inter-organizational consortia and cooperative relationships with other types of organizations.

Increased emphasis on educational research and services in recent years and increases' levels of activity have given added importance to the need for the development of a research organization to carry out research and service functions. This is evidenced by the fact that most educational research and service bureaus have been formed since 1950. Sieber (1965, p. 142) found in 1964 that 56 per cent of the colleges of education he surveyed had a research unit and 24 per cent had a research committee. Only 18 per cent had no visible organizational means of facilitating the research function. Since that time, the number of research units has continued to grow - more institutions have established research units. However, the specific count to date is not currently available.

Cooperating Units

Cooperative arrangements between higher education institutions and regional-national organizations is most exemplified by the pattern which was effected beginning in 1964 by the establishment of the Regional Educational Laboratories (REL), the Research and Development Centers (R & D C), and the Instructional Materials Centers (IMC) (NCERD, 1969, pp. 70-80).

While the laboratories were established as independent corporations, they are structured so that their governing boards have individuals representing a cross-section of the broader educational community. The extent to which
cooperative activities between the laboratories and higher education institutions are realized is dependent on the mutual needs of the respective organizations and does not follow a predetermined structure.

The Research and Development Centers, on the other hand, were designed to function in a coordinative, cooperative, interrelated programmatic effort of basic and applied research, utilizing the university setting in "adjunct" relationship. All of the R & D Centers are located on university campuses.

A specific segment of education is serviced by the Instructional Materials Centers where materials are provided for teaching handicapped children. The I.M.C. not only provides commercially-prepared instructional materials but also develops, evaluates, validates, and produces new materials. Most of the I.M.C.'s are also located on university campuses.

These research units of organizations that form cooperating alliances with higher education institutions are still, for the most part, pursuing research goals with which they have identified individually. Their role is not as a support unit to carry out research missions of the university. For this purpose we still look to that organizational structure from within the university like a bureau of educational research and services.

**Bureau Characteristics**

The bureau of educational research and services has already been identified as a typical organizational pattern through which colleges of education effect research. While there are characteristics that many bureaus share, it is difficult to identify a set of these as realistically describing a typical or "average" bureau.

The following description of a bureau is presented by identifying its staffing, functions, and organizational relationships in a pattern which
experience has shown is productive.

The bureau of educational research and services should be physically housed in the College of Education. There are several reasons for this: (a) it gives physical visibility; (b) it provides convenient access for faculty; and (c) it encourages communication.

The functions and responsibilities of the bureau can be prioritized somewhat in this manner:

a. Serve as resource and assistance to other College of Education faculty in initiating and conducting research and/or development projects and/or services for and to local, state, regional, and national educational agencies.

b. Initiate and operate contracts for research and/or development services to local, state, regional and national educational agencies.

c. Assist faculty and students in research problems, project administration, proposal writing and communications about research proposal requests, and provide resources with which to formulate problem solutions. Resources include travel funds, support personnel, research library materials, reproduction equipment, A-V equipment, instructional materials, and contract library.

d. Promote and foster research efforts of College of Education departments through all feasible means available, including assistance in searching for external funding sources for research proposals.

e. Provide instruction in research-related areas through catalog courses, in-service workshops, consultation, and conferences for the College of Education both within the university and outside of it.
f. Serve as liaison between the College of Education and educational practitioners in the field to better serve the common interests of both through research and/or development services.

g. Serve as a clearinghouse for all contract activity of the College of Education and expedite inhouse approvals and submission of proposals.

These functions and responsibilities are primarily facilitative in nature and represent the support posture of a bureau. Rather than emulating a basic research laboratory, a bureau can make a greater impact by facilitating the research efforts of all faculty members - by serving in a supporting role for many research projects instead of focusing on one specific area. The application of research and development to the "here and now" real world of education, in the field, is enhanced through a facilitating agency like a bureau.

In his study of bureaus of educational research and services, Kendricks (1969) found that:

1. Bureaus conduct more applied research than basic research

2. Bureaus are the dominant organizational unit for research in larger institutions

3. Most bureaus do not employ faculty from outside the College of Education

4. Most bureau directors are part-time and hold academic rank of professor

5. Most research efforts from bureaus are in areas other than those that bureau directors consider most important

6. Cooperation with other agencies is predominantly focused at
regional and national levels with very little cooperation
effected with local public schools.

**Bureau Staffing Patterns**

As a descriptive label, the name, bureau of educational research and
services, is rather broad. Ideally, such a bureau should serve not only as
an internal clearinghouse for research proposals of College of Education
faculty, but also as a clearing house for inquiries and requests for research
and development services from the field. In the same manner that R & D funding
sources are identified and communicated to faculty members, requests from
local and state agencies are also transmitted to the departments that are in
the best position to contribute to the problem resolution. These inquiries
might range from a request for an in-service workshop or institute, to a request
for design of a management information system or assistance in developing a
planning process for an administrative unit.

The bureau must function on a college-wide basis, having access to
faculty members without constraints imposed by departmental structures. R & D
can be facilitated through the bureau because of this free access that permits
the organization of an ad hoc research team from among faculty members of
varied disciplines.

Although the communication linkages cannot be as direct to faculty
outside of the College of Education, nevertheless, those from other colleges
should be included in staffing for a project when their skills and knowledge
can effectively contribute to the project. It is not unusual at all to create
a project staff using faculty personnel from the College of Business, the
College of Arts and Sciences, and the College of Education. The writer
recently staffed a small project with faculty members who represented the
departments of psychology, geography, economics, sociology, computer science, and management, as well as several departments in the College of Education.

The need for relatively complex staffing, even for smaller projects, is perhaps more readily addressed by a bureau-type organization than by some of the alternative organizational types previously identified. This need for complex staffing of projects also provides the rationale for staffing in the bureau itself. Some bureau units are staffed and administered as if they were part of or adjuncts of a department. Others are administered as an extension of the dean's office. The proposition is submitted here that the latter of these is the more effective type unit, and staffing within the bureau should reflect this. Except in the very large institutions where large staffs are commonplace, it is likely that the number of professional staff members that can be justified is quite limited. Certainly it is more limited than would permit a staff member for every area of expertise that is needed. A more reasonable staffing pattern is found where joint appointments are used rather frequently (i.e. appointment to a department and to the bureau), coupled with a nucleus of staff members who have broader responsibilities. For purposes of illustration, the staff shown below is presented as an example:

Staff Nucleus

Bureau Director
Associate Director
Publications Editor
Technology Specialist
Measurement Specialist

Joint or Adjunct Appointments

Specialists in Early Childhood, Reading, Special Education, Methods, Social and Psychological Foundations

Classified Staff

Secretaries, Typists
Clerks, Production Personnel
Students

Graduate Assistants - Research Assistants
Undergraduates - Work-study - Trainees

When projects or research problems arise, the entire staff can be devoted to developing the plan for attacking the problem. Then it becomes a matter of analyzing the problem and identifying personnel interests, competencies, and work loads that are compatible with the problem. With departmental representation resident on the staff of the bureau, the mission of the bureau is readily serviced. Communication with departments and stimulation within departments is a primary task to be accomplished by the appropriate staff member.

Budgetary constraints will often prohibit the extensive staffing identified above. In this case, an alternative is provided through the use of the Research and Development Advisory Committee. The R & D committee should have representation from all departments and the college dean's office and can serve the communications and stimulation functions earlier ascribed to the adjunct staff members. The importance of the role of the R & D committee as perceived by the committee member, the department chairmen, and the dean will bear directly on the effectiveness with which the committee fulfills its role. Leadership and support from the dean is critical to the success of the entire research and development program in the college, but particularly is it necessary for the R & D committee to achieve its purposes. In Kendrick's (1969) study it was found that most bureaus of educational research and services were established in higher education institutions as a direct result of the action by the Dean of the School or College of Education.
Field-centered R & D Activities

Colleges of Education that are out on the cutting edge are not content to continue teacher training in the traditional mold. Nor are they content to turn loose of their graduates as soon as they have completed their last course. Field-centered research and development is a vehicle to bring together the "task" organization and the "use" organization for their mutual benefit. It is a vehicle that colleges can use to evaluate their teacher education programs - to receive input from external sources regarding the changing society and its needs as they should be reflected in the education curriculum. The field is today's laboratory for the educational researcher.

An alliance between or among the College of Education and the local schools and/or state department is a logical arrangement for the several parties. The college can provide faculty and graduate students to tackle "real life" educational problems through research because the local schools have ample needs and problems as use organizations. The schools thus become laboratories for educational research where university personnel serve and benefit professionally by firsthand involvement in problem-solving and decision-making. In becoming laboratories for educational researchers from universities, the school systems enact the principle of reciprocity in which they change from a "use" organization to a contributor of research opportunity, a site for experiential activity, and a source for publication visibility. State departments are also "use" organizations sometimes. At other times they are "support" organizations providing the resources but also holding a vested interest in the product.

The state educational agency has not traditionally been strong in educational research either as a producer or as a user. Yet, the leadership
role which is inherently presumed to belong to state agencies demands that they participate in educational research in some manner. The requirements of federally-supported programs in recent years have done much to motivate state agencies toward a more active role in educational research. The college and university community was a natural place to turn to for manpower to serve state agency needs. This has been even more significant when it led to or paralleled the concomitant attention of higher education to the opportunity presented by consortia arrangements and similar joint efforts with other educational agencies. The needs of one agency became the means of another, and together they could both contribute to the advancement of knowledge through field-centered research.

The literature regarding bureau activities reflects a concentration of efforts on applied or developmental research rather than basic research. Data are available that show more proposals were submitted to the U.S.O.E. during a specified time by individual persons than by bureau units. If one is judging how much research is performed by the number of proposals submitted (or the number approved), the data favor the individual researcher. However, if size of project, amount of resources, and number of persons involved and/or directly affected are the criteria, the amount of research performed is dominated in education by the organized research unit; i.e., bureau (Sieber, 1965, p. 144).

Since much of the research and development effort of bureaus is not the result of proposals submitted to U.S.O.E., but instead is related more to state and local needs, the above quantitative description is not inclusive enough to present an accurate depiction of the range of activities of a bureau. These activities may include developing a Teacher Corps project jointly with local school districts; developing instrumentation for a survey
of parental attitudes toward kindergarten experiences of their children; or through the organization of a consortium or multi-institutional group to apply the joint efforts and perceptions of the several agencies to the development of a competency-based instructional program that will produce graduates who are specifically prepared to fulfill the roles of each participating agency. Design of an institute which applies human relations techniques to racially-sensitive school situations and the planning, conducting and evaluating of a district-wide school administration workshop to cope with changing socio-economic characteristics of their schools resultant from implementation of court-ordered busing; or assisting the state agency in the development of a management plan and guidelines for a new state program—all of these are in the purview of the bureau of educational research and services. Some research purists might frown on the label of "research" being applied to these kinds of activities. And it is true that many of these do not employ extensive experimental designs. But then, what is "field-centered" research? Certainly not test tubes and white rats.

Applied research is the "bread and butter" of a bureau of educational research and services. We are told that the weakest link in the research and development chain is implementation and dissemination. The application of research knowledge through development activities in the field is "where it's at" today. Educational researchers should ask that ultimate question about the relevancy of R & D projects regardless of whether it is developmental, experimental, applied or basic, or what. The question is "Will it make a difference?"
References


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