from the editors' viewpoint

With this issue Educational Considerations enters its second year of publication. We have been well received by educators in many different areas of specialization; however, the warm reception and kind words do not translate directly into spendable dollars.

Our first year was devoted to establishing a reputation as a quality publication and soliciting manuscripts reflecting that level of scholarship. Our second year of publication will, of necessity, be devoted to the more mundane matters of subscription and financial solvency.

We begin our second year at a time when many educational journals across the nation are being threatened by extinction in that the sponsoring institutions are finding it necessary to channel scarce funds into other areas. The “little” journals, like Educational Considerations, have an important place to fill in American educational journalism.

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educational considerations

Volume 2, Number 1: Fall 1974

The Goal of Classroom Instruction: Entertainment or Learning
Don B. Croft 2

Education as a Community Activity: University for Man
Joseph K. Rippetoe 5
Sue C. Maes

Bilingual Education Comes to Kansas
George Hughes 11

Tenure and Due Process
Joseph L. Mills 13
A. Bruce Hartung

In-Service Training for Professionals
V. Ray Kurtz 15

Latent Functions of Research Management
Alvin E. Keaton 17

Changes in Editorial Responsibilities
Inside back cover
Using nearly 10,000 college students, this study isolated six factors of an instructor's behavior which influence how much students learn and whether they would take another course from the instructor. The results provide suggestions for improving your instruction.

**the goal of classroom instruction: entertainment or learning**

by Don B. Croft

As director of the Claude C. Dove Learning Center at New Mexico State University, Dr. Croft specializes in social psychology, educational programs for disadvantaged students, tests and measurement, statistics, computer programming, and information systems and systems theory. He holds a Ph.D. from the University of New Mexico and bachelor's and master's degrees from New Mexico State University. He has been involved in testing and research since 1952 and from 1967 to 1969 was in Washington, D.C. as Chief of the Analysis Section, Division of Educational Laboratories for HEW. He has served as consultant to numerous organizations in the fields of education for the disadvantaged and educational measurement.

Recent events on and off campuses across the country have brought increased attention to university teaching, and have provided a renewed impetus for faculty to examine both their course content and methods of classroom instruction. The emphasis upon improving university instruction has arisen from a variety of sources: decreased student enrollment, faculty merit and tenure decisions, contentions of non-relevance from students, emphasis upon competency-based instruction, and of course a continuing faculty interest in instructional improvement.

One basic component of many instructional improvement programs at the college and university level is the use of student rating forms. In spite of conflicting evidence associated with the reliability, validity, and usefulness of student ratings, the information obtained is often used by faculty as one among several sources of information for improving classroom instruction. Then the question is asked: "How may student feedback be used to improve classroom instruction?" Student rating forms are often of two basic types; evaluative or descriptive. Evaluative forms in most instances simply report student opinion of how "good" or "bad" were various aspects of the classroom instruction. Descriptive forms, on the other hand, may indicate what is occurring in the classroom but may not necessarily provide information for improving instruction. Moreover, the particular attributes included in any single student rating form may not span the instructional attributes that prior research has associated with effective teaching.

The purpose of this study was to identify the relationship between descriptive attributes of classroom instruction and overall evaluative ratings students reported for university classrooms. The two overall ratings students employed to evaluate the classroom included: 1) a self-report of the amount the student learned, and 2) how much the student would like to take another course from the instructor. Although these criteria for classroom instructional effectiveness were primarily "student outcome oriented," the findings might offer instructors information for guiding the direction of a self-initiated instructional improvement program.

An instrument, the University Classroom Description Questionnaire (UCDQ), was developed to obtain the students' description of "how often" certain instructor behaviors occurred and to obtain the students' overall ratings of the course. For three successive years, different pilot forms of the instrument were administered to a total of 9,523...
university students and analyzed to identify specific clusters of questionnaire items.

The statistical techniques of factor analysis and varimax rotation were used to select the items which were retained in the final form of the UCQ. The retained items obtained an average factor loading of .66 (range = .49-.81) on the appropriate factor, and an average of .11 (range = .00-.39) on each of the other factors. Thus, both the criterion of .40 or above recommended by Kaiser, and the criteria of Thurstone's simple structure were met. Accordingly, the UCQ was considered a "factorially pure" measuring instrument. On the basis of the analyses conducted, the following six factors, e.g., clusters of items, were named and defined:

**Enthusiasm** — refers to expressed enjoyment in teaching, interesting teaching style, enthusiasm and humor. The "showmanship" of the instructor.

**Class participation** — describes the instructor's ability to stimulate class discussion, encourage dialogue, and allow students to express their own views.

**Course difficulty** — refers to course difficulty with reference to pace, complexity of concepts, and amount of work required to learn the material.

**Clarity of presentation** — refers to organization of presentations, appropriate level of terminology, complexity expressed understandably, and the material covered agrees with course objectives.

**Objectivity of exams** — refers to fairness in grading, balanced coverage, and sufficient review and time given prior to the exam.

**Individual assistance** — describes the availability, friendliness and rapport of the instructor with individual students.

Each one of the constructs above has been discussed as an attribute of classroom instruction by one or more of the following investigators: Deshpande, Isaacs, Remmers, Hildebrand, Coffman, Gibb, Ryan, and Hoyt. Although the investigators identified a somewhat different cluster of items, each cluster appears to be representative of a similar underlying construct. The particular set of six constructs obtained in the study reported here, however, were the ones which emerged after the series of factor analysis with the sample of students in the Southwest United States.

Now, in what manner are the six attributes of instructor behavior associated with the overall ratings reported by students? A multiple regression analysis was used to identify how each construct, in and of itself, was associated with the overall ratings as well as how "predictable" the criteria were when all the constructs were taken together. The results of the multiple regression analyses are presented in Table 1.

First of all, note the magnitude of the multiple correlation coefficients, which are respectively, .65 and .82 for predicting **Amount learned and Take another course from the instructor**. Both of the multiple correlation coefficients are significant and account for a sufficient amount of the variance to warrant discussion of the individual predictors. In other words, the item clusters identified by the factor analyses were relevant predictors of the student ratings.

### Table 1
Partial Correlations of Instructor Attributes with Overall Ratings

<table>
<thead>
<tr>
<th>Instructor Attribute</th>
<th>Overall Ratings by Students</th>
<th>Amount learned in the course</th>
<th>Take another course from the instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enthusiasm (r = .75)</td>
<td></td>
<td>.01</td>
<td>.33*</td>
</tr>
<tr>
<td>Class participation (r = .72)</td>
<td></td>
<td>.12*</td>
<td>.04</td>
</tr>
<tr>
<td>Course difficulty (r = .58)</td>
<td></td>
<td>.08</td>
<td>-.09</td>
</tr>
<tr>
<td>Clarity of presentation (r = .66)</td>
<td></td>
<td>.70*</td>
<td>.35*</td>
</tr>
<tr>
<td>Objectivity of exams (r = .62)</td>
<td></td>
<td>.00</td>
<td>.08</td>
</tr>
<tr>
<td>Individual assistance (r = .67)</td>
<td></td>
<td>.09</td>
<td>.20*</td>
</tr>
<tr>
<td>Multiple correlation</td>
<td></td>
<td>.65*</td>
<td>.82*</td>
</tr>
</tbody>
</table>

*significant at or beyond .05

1. Cronbach's Alpha reliability coefficient

An examination of Table 1 indicates that a significant contributor to the **amount learned in the course** by the students was the instructors' **clarity of presentation** (beta = .70). It appears that the organization and presentation of the class materials remains an important stimulus to learning in spite of the current de-emphasis upon lecturing and the stress upon student initiated instruction. Note, however, that the instructors' ability to elicit discussion and **class participation** (beta = .12) is also significantly associated with self-reports of student learning. Thus, dialogue between class members and the instructor serves to enhance the amount learned by students, and one may therefore infer that instructor and student discussion of course content helps students learn.

When the partial correlations for wanting to **take another course from the instructor** were examined a different style of instructor behavior emerged. Apparently, in addition to the main contributor of **clarity of presentation** (beta = .35) two other attributes were also important. These attributes were instructor **enthusiasm** (beta = .33) and the **individual assistance** (beta = .20) that the instructor provided to students. Thus, the "entertaining" facet of instruction was the impetus for students to want to take additional courses from the same instructor. This finding may have implications for instructors who want to increase class enrollments.

It is important to note that the correlation between the two overall ratings, **amount learned** and **take another course** was very high (r = .70). However, in spite of the high correlation between the two overall criteria, different sets of classroom attributes were associated with each rating. Accordingly, the overall ratings are sufficiently independent to infer that they
describe different outcomes for the class. These two outcomes have implications for the direction an instructor takes for improving classroom instruction.

Thus, in general, the results indicate that if the instructor organized course content, presented the materials clearly, and involved students in class discussions, then the students reported that the amount learned was high. On the other hand, if the instructor in addition to organizing course content and presenting the material clearly was enthusiastic, and gave individual assistance, then students indicated high interest in taking another course from the instructor.

Accordingly, the following advice can be offered to instructors as a guide for a self-directed instructional improvement program. If student learning is the most important outcome you expect from classroom instruction, then spend time upon the improvement of course content. In addition, if you include the goal of having students take additional courses from you, then develop the "entertaining" qualities of your classroom presentation.

FOOTNOTES


6. M. Hinklebrand and R. C. Wilson, Report to the Faculty on Effective University Teaching and Its Evaluation (Davis, California: The University of California at Davis, 1970).


10. Donald P. Hoyt, Improving instruction through Student Feedback (Manhattan, Kansas: Office of Educational Research, Kansas State University, 1969).

The lesson of the past may . . . only confirm what both radicals and conservatives have often said but have not always really believed—that man does not live by bread alone. Affluence does not buy morale, a sense of community, even a quiescent conformity. Instead, it may only permit larger numbers of people to express their existential unhappiness because they are no longer crushed by the burden of the economic struggle.

Robert L. Heilbroner, An Inquiry into the Human Prospect
New York: W. W. Norton and Company, 1974, p. 70
education as community activity: university for man

by Joseph K. Rippeteo and Sue C. Maes

Free universities are among the least understood educational phenomena today. This is partly because they are few in number, but perhaps more because they have made few attempts at a widespread dissemination of information—neither throughout the educational community nor to a more general nationwide audience. Unfortunately, some people misconstrue the "free" characteristic to mean "license," or also take it to mean the absence of any cost to participants. Others stereotype free universities as radical or even subversive organizations. This article attempts to demythologize free universities in general by examining—as a case study—the progress and future potential of one such educational agency in particular.

A free activity might be defined as "a community learning center that connects people who want to teach or learn with the resources to meet their needs." According to Lichtman, such centers may be distinguished in terms of their financial support as either dependent or independent agencies. Dependent agencies are those affiliated with and subsidized by accredited institutions. Independent free universities, on the other hand, subsist through other sources, usually modest tuition charges. Lichtman also notes that the "free" aspect of free universities does not necessarily refer to monetary cost, but, instead, to the educational process itself: "Students are free to participate and to drop out. . . . Instructors too are freed from content, space, and institutional sanctions to experiment." 3 Free universities of both types may be considered alternatives to the bureaucratization and limited scope of contemporary higher education.

The radical criticism of American education in the 1960s and early 1970s provided inspiration though not necessarily direction—for the free university movement. From grade school to graduate school, everything from curricula to pedagogical methods fell under attack. As a result, many Americans have become somewhat more sensitive to the numerous contradictions inherent in their public school systems. 4 Much of the criticism, however, has concentrated primarily on shortcomings of American education rather than presenting specific proposals for structural change and/or alternative approaches. Holt 5 and Kohl 6 for example, focused mainly on the successes and failures of individual teachers and their students. But, save for Illich 7 there has been little talk of any systemic overhaul. Moreover, even such an outspoken critic of public schools as Kozol has noted several shortcomings of their present major alternative—free schools. 8 What has seemed to be the underlying problem with American education? Briefly, Friedenberg 9 argued that
schools shouldn't be places where society sends people who don't want to be there. Following this thesis, the thrust of the
free university movement involves the creation of
educational agencies where people participate solely
because they want to. At present, its primary focus continues
to be at the post-secondary level.

An Overview of University for Man

University for Man (UFM) is a free university serving
Manhattan, Kansas, a community of approximately 47,000,
including college students.* In seven years, UFM has evolved
from a predominantly college student-oriented organization
into an agency currently offering educational experiences to
diverse clientele within the Manhattan area. This focus on
the entire community has become evident in several ways,
first, according to the most recent enrollment survey, approx-
imately 50% of the program's participants are other than
college students. A second measure—highly encouraging—
concerns UFM's sources of financial support. Although the
Student Governing Association of Kansas State University
(KSU) continues to allocate the major portion of operating
funds, 1973-1974 marked the first year partial support was
received from a local community organization—the
Manhattan chapter of the United Way. In addition, UFM
recently received its first non-local funds, a project grant
awarded by the Kansas Committee for the Humanities
(KCH).**

Since 1969, UFM has been under the direction of Sue C.
Maes, who coordinates the efforts of six additional staff
persons plus several volunteers. Though the staff is small,
around 200 free classes are offered every fall, spring, and
summer; thus the major input into this programming comes

*In the fall of 1966, a KSU instructor gathered together some
friends to create musical, art, and drama happenings each week.
That same semester another group was meeting regularly in a
student's home to discuss man in the year 2000. These two groups
became aware not only of each other, but also of several free
universities being organized in California. Nurturing the idea of
a similar educational agency, they approached the student govern-
ment for funds. Money was allocated for a small brochure featuring
seven courses—and UFM was created.

Though the mechanics of creating a free university lie outside the
scope of this article, the interested reader might consult Jane Licht-
man, Bring Your Own Bag: A Report on Free Universities
(Washington, D.C.: American Association for Higher Education,
1973), pp. 100-124, and Larry Magid and Nesta King, Mini-Manual for
Free Universities (Nebraska Curriculum Development Center, Annex
Hall, University of Nebraska, Lincoln, Nebraska 68508).

**The KCH is an independent group of citizens working in
cooperation with the National Endowment for the Humanities
(NEH), a federal agency created by Congress in 1965 and supported
by public appropriations and private contributions. The Kansas
Committee receives its funds from the NEH and regrants them to
support humanities programs throughout the state. The UFM
projects grew out of the Committee's theme for 1973-1974, "Kan-
sas in Transition: Human Dimensions of Community Development."
The program in Manhattan, Preserving a Sense of Community,
brought a humanistic perspective to bear on public policy issues of
concern to Kansas. Similar programs were created in Clay Center
and Atalina, two Kansas communities of less than 10,000
population.

On a Curriculum and Its Rationale

The curriculum at UFM is one of diversity: crafts, sports,
and interpersonal groups are integral parts of the program.
While most events involve practical application, UFM, to
meet its societal responsibilities, offers also a number
of classes concerned with "public issues." Of course, UFM as an
organization maintains—rather than an explicit political
posture—only an implicit social bias. By their very nature,
educational agencies of any sort can never be value-neutral,
albeit such an admission is quite uncommon among the exponents
of conventional institutions. Typically, administrators of such institutions define research and teaching
within the context of the status quo as value-neutral.
Alternative institutions, on the other hand, generally interpret
tacit acceptance of the status quo as indeed being a quite
partisan position.

Several class titles from the UFM catalogue might illustrate
its social bias: for example, "consumer education," "counter-
corporate farming," "women's consciousness-raising," and
"environmental ethics." When UFM was created, classes such as
these constituted more than half of the curriculum. Since the
community served had, for the most part, evolved through

***One popular location for some craft and other classes is the
UFM house itself. A rather large house near the KSU campus is not
only the home of a potter's wheel, wood lathe and the office, but
also of five staff persons.

****The term "political" is used here strictly in an "issue-
oriented," rather than electoral sense.
that phase of educational need, public issues classes are no longer in the majority. UFM's present curriculum reflects a diverse community's shifts of interest; a rather eclectic means of support demands that it do so.

UFM is primarily a dependent agency. Though tuition fees are strongly opposed by most of the staff—and have so far been avoided—alternative methods of increasing independence are actively being pursued. The Manhattan chapter of the United Way recently responded to these efforts by contributing funds for planned expansion in the area of community services. Such services include, for example, free training in secretarial techniques for low-income and minority persons. UFM has also been instrumental in the establishment of a drug education center, a telephone crisis intervention center, a community food cooperative, and a parole and probation volunteer assistance program.

Why has the staff rejected modest tuition or other fees to support classes and services? The reason, which is essentially philosophical, is also rather lengthy. In theory, if the programs offered are consistent with real community needs, participants, if able, would gladly pay a small fee. Indeed, this system is the case at a number of free universities****. In practice, however, there exist no methods for predicting these needs a priori, save those of "trial and error" and apocalyptic insights. Experience has shown that some UFM classes will develop a continuing popularity (for example, the "doctors series," in which local physicians discuss medical

****Boulder (Colorado) Free School and Denver Free University are two excellent examples of stable and growing community education programs which are operated totally from small tuition fees.
topics of concern to the general public). Others in a given semester will fold after one or two meetings. But which others—and why—has not proven predictable.

The forecasting of community needs must be undertaken independently from financial constraints. If not, the agency becomes locked into the position of stressing that which generates considerable revenue and devoting little time and energy to that which does not. The staff consensus is that supporting the program through tuition fees would intolerably constrain the freedom of experimentation which has characterized UFM since its beginnings. During its infancy in 1968, UFM could barely have offered seminars, say, criticizing the IndoChina War had people had to pay for them, since local public sentiment at that time tended to support or be indifferent to the war. In short, both the willingness to provide the publicly unpopular and the freedom to fail are integral parts of the UFM philosophy.

Not only does the staff express concern for the agency's freedom to experiment, but a similar freedom is currently afforded the program's participants. Since many people are unsure of what they want, the decision to operate without tuition thus becomes a financial factor encouraging participants to experiment. In this sense, UFM might be considered a paraprofessional community mental health program. A leisure-time "therapy" is offered which many conventional educational institutions seem unable to provide.

UFM enjoys the status of a non-profit corporation. As it is not in operation to make money, seldom are programs terminated solely because of small enrollments. Recently the Kansas Board of Regents cut back or abandoned a host of graduate-level programs which failed to produce an arbitrary number of trained graduates in those fields. This kind of action, ostensibly justifiable from the Regents' perspective, is fundamentally inconsistent with the philosophy of alternative institutions. Briefly, the UFM staff holds that individual, community, and societal needs change more rapidly than those responsible for such decisions seem to acknowledge. In contrast to more conventional educational systems, UFM is willing to undertake any class for which a capable leader will invest his or her time and energy to develop. Since many classes which have failed one semester have been successful during others, failure may not be the result of obsolescence but, instead, simply the consequence of faulty planning, mediocre leadership, etc. The free university style, then, is usually not to abandon a class, but rather to change leaders, format, or whatever is necessary to make it viable.

Despite its need to follow a more conventional educational format, Kansas State University is currently a staunch supporter of UFM, financially and otherwise. This relationship is essentially symbiotic: while UFM depends partly on KSU for funds, the state institution has gained much from the free university's success. For example, UFM initially proposed and organized "intersession" (a system of short courses between regular semesters), currently offered at KSU in both January and May. Also, the state university cites its sponsorship of the free university as a major effort in educational innovation, thereby mitigating pressures to reform its own structure. Finally, while defective projects become strictly UFM's problem, success is typically shared with the sponsoring institution. Not only does KSU occupy a

A SELECTED SAMPLE OF UFM CLASSES - 1974

- Advanced Photography
- Alternative Living Styles
- A Study of Ethics
- Beginning Woodworking
- Birds of the Flint Hills
- Counter-Corporate Farming
- Doctors Series
- Drugs: History, Facts, and Fiction
- Edible Native Kansas Plants
- Fiddlin' with Fiddles
- Gay Consciousness
- Horseshoeing and Hoof Care
- Introduction to Harp
- Japanese Cooking
- Laughing: A Short Course
- Liberation Theology
- Life Planning Workshop
- Making Your Own Stringed Instrument
- Manhattan Food Co-op
- Men's Awareness Group
- Methane Generators
- Native American Music
- Our Bodies, Our Selves
- People's Bicentennial Committee
- Raj Yoga and Hatha Yoga
- Rug Braiding
- Secretarial Techniques
- Sexual Health Care
- Southern Africa—Colonialism & Revolution
- Women's Consciousness Raising

****A serious question may be raised as to whether such an individually therapeutic focus is indeed most appropriate. Emphasis on providing instruction in individual craft-type activities, while quite valid in itself, may indirectly contribute to a breakdown in community cohesion. Philip Slater's critique of the "American Character" (The Pursuit of Loneliness: American Culture at the Breaking Point, 1970) begs consideration of the question: to what extent should a free university encourage the pursuit of activities which deny or discourage human interdependence? Within the Manhattan, Kansas, community, for example, human resources are available to teach almost anyone how to make or do almost anything. Should UFM emphasize individualism? Or should the focus be more toward cooperative activities, such as volunteer service programs, community free schools, food co-ops, dramatic groups and the like? At present, the issue of individual versus community-focused activities lacks a meaningful staff consensus. A rather precarious balance between these two aspects of the program is maintained. The issue, however, is by no means peculiar to UFM, but indeed one which seems to pervade the entire free university movement.
position from which to claim credit but, as was the case with
tersession, prosperous programs can be co-opted into the
formal institution's curriculum. Though considerations such
as these naturally contribute to a wistful UFM desire for
greater independence, the UFM staff is nevertheless quite
encouraged that the University has seen considerable merit
in the alternative institution's program.

Conclusion
In October, 1973, UFM hosted a national conference for
free universities, designed primarily for the well-established
ones. The purpose was twofold: to analyze the current
direction of the free university movement, and to exchange
insights concerning the countless practical problems quite
common to such agencies. During the conference it
became clear that UFM faced a problem as yet unknown to
most other free universities—the feasibility of expansion.
Numerically, UFM has stabilized its class offerings—around
200 classes seems to be all which can reasonably be provided
free of excessive bureaucratization, computerization, and/or
increased costs. Yet the agency's program is by no means
locally-bound.

It has long tried to provide various events for nearby
communities and neighboring Fort Riley, a major permanent
military installation 15 miles west of Manhattan. Last fall, for
example, a sample of the program was transported to
Chapman, Kansas, a small farming community about 35 miles
west of Manhattan. The response to the modest offering of
two classes was highly favorable. Providing experienced
class leaders for Chapman demonstrated to the folks out there how an alternative educational agency
might work in their own community. A slightly different
approach was established for Clay Center and Abilene, two
communities where UFM created public forum series funded
by the KCH grant in the spring of 1974. As communities begin
to discover their own resources, they can begin to develop
programs under their own local direction.

Unfortunately, limited resources preclude an extensive
amount of this type of expansion. At present, neither the
funds nor the personnel are available to expand the program
to other corners of the state. Having received a number of
requests from various Kansas communities to help create
UFM-type programs, UFM is currently seeking a federal grant
to begin such work.

UFM has an advantage over most other Kansas
communities in that numerous KSU faculty members have given
freely of their time to lead a variety of UFM classes. Communities
with smaller institutions—or none—may be somewhat handicapped in this respect. Yet the availability of
professional scholars is not crucial; every human community
possesses an enormous store of knowledge and skill. Its
citizens need only take time to discover their talented
members and encourage them to assume a new role:
facilitator of a learning experience.

While conventional educational programs assume that one
person knows the "answers" and somewhere between 6 and
600 people do not, free universities do not accept such a
distinction. Eliot Wigginton, a high school teacher in the
Southern Appalachians, who recently edited a collection of
articles intended to preserve and transmit a dying Appalachian
culture, has warmly articulated the principle that everyone
has something to contribute: "This book is dedicated to the
people of these mountains in the hope that, through it, some

Summary and highlights of these proceedings are being
made available through The New Schools Exchange Newsletter and
Edecentric magazine. Both of these publications are not only ones
which every library should handle, but journals which anyone
interested in alternative education should seriously consider.
portion of their wisdom, ingenuity and individuality will remain long after them to touch us all.

At UFM, the guiding principle is that everyone teaches and everyone learns:

All who participate in UFM, whether "teacher" or "student," are learners. One of the best ways to learn more about something is to try to teach it to another. Participants in UFM come from diverse backgrounds, have varied occupations, and live different lifestyles. Faculty wive policemen, college students, grandmothers, M.D.'s, "street people," professors, and high school students are likely to be enrolled in any UFM course.

The goal of free universities in general and UFM in particular is not only to provide diverse systems of educational experiences. Equally important, at least from a humanistic perspective, is to facilitate greater acceptance and understanding among people of different backgrounds and lifestyles. As free universities such as UFM make room for persons of different ages, backgrounds and beliefs, education can truly become community activity.

If the school reform movement has learned anything over the past two decades, it is that within any given school population there is enough diversity in learning styles to make diversity in learning programs a necessity. Thus, any school proposal—fabulous or otherwise—that does not offer alternatives is manifestly deficient.

Neil Postman and Charles Weingartner
The School Book, For People Who Want To Know What All The Hollering Is About
In some areas as many as 90 per cent of our Mexican-American children will not graduate from high school. They have been scholastically crippled by an educational system which demands they speak two languages fluently while their classmates only have to cope with one.

bilingual education comes to Kansas

by George Hughes

Dr. Hughes is an assistant professor of curriculum and instruction at the University of Kansas where he also serves as Director of Modern Language Education, Bi-Linguual Education, Education as a Second Language, and Migrant Education Programs. He has taught at the University of Nebraska and he also has taught Spanish in the public schools in Oregon for fifteen years. Dr. Hughes earned his Ph.D. at the University of Nebraska and his bachelor's and master's degrees at the University of Oregon. He has also studied in Mexico and Ecuador.

The discovery of bilingual education as a powerful social change agent is on the Kansas horizon. It has been long in coming, and is felt to be overdue by many educators, as well as political representatives of certain minority groups. Even since Kansas farmers discovered that their fertile soil would produce bumper crops of sugar beets, as well as the lucrative wheat, soybeans and corn, migrant workers in great numbers have been employed annually in the growing and harvesting of these crops. At first the migrants were largely "invisible," localized in the western fourth of the state, and were of little concern to the local citizenry because of the temporary nature of their residency. This ranged anywhere between three months to as brief a period as a few days, depending on the nature of the employment available. More recently, however, the need for many hands to help with the seasonal work has led to the appearance of sizable migrant populations in almost any area of the state. These areas have been uniformly unable to provide adequate housing for the workers and their families, who must often content themselves with shelter of the most rudimentary nature, some even living for extended periods in pickup-campers. This unhappy situation has forced them to live on the periphery of community life, frequently deprived of community services, and often actively rejected by the community members in general.

The ethnicity of the migrant community, approximately 98% Mexican-American by heritage, has been strengthened by the semi-isolation inflicted upon it. This can be viewed as either good, bad, or both, depending on one's point of view. Good, in that culture and language have been preserved fairly well intact. Bad, in that the members of the group feel the lack of a sense of "belonging" to a larger community, a state, or even the nation. The migrant children are most acutely affected, for them social rejection is most injurious. This rejection is doubly injurious when it occurs within the peer group, and this is the case whenever the migrant child finds himself settled in a community for those brief months in each year when his family is not following the harvest northward. His limited ability to communicate in English with his peers causes, in large part, this rejection. He is "different." He is "foreign" to his school mates. He is also made to appear "dumb" in the eyes of anglo students because he is usually below grade level in his academic work. Since he is asked to function in English, that is, read, write, and orally communicate in English, he is scholastically crippled. What happens after a few years of this torment and frustration has been happening to Mexican-American
children for generations. (Chicanos, if this term is preferred.) They become drop-outs. The figures that depict the rate of attrition among Mexican-American children have been printed and quoted repeatedly through various forms of media. I feel that this repetition should continue until a majority of the nation's general public is made aware of the plight of these children and is made to see the monumental proportions of this waste of human resources. In some areas as much as 90% will never graduate from high school and nearly one million Spanish-American children in the Southwest will never continue past the eighth grade. What has been happening in the Southwest is now beginning to happen in Kansas, Missouri, and Nebraska, because migrant workers are finding year-round employment, and so, are becoming permanent residents. Their numbers have been increasing at a rapid rate so that many school districts now have a sizable percentage of Spanish-speaking children in their student body year round. These school districts need help, and the federal government is beginning to answer that need.

Garden City District No. 457 in western Kansas has approximately 15.5% Spanish surname children enrolled this year among its six elementary schools. This percentage is expected to increase steadily, and so those charged with educating the children of the district have designed an ambitious and comprehensive bilingual, bicultural program to be implemented in the six elementary schools with the aid of some Title VII funding from the federal government. The impact of this program on the future of public education in Kansas can only be imagined at this time, but it is very possible that it could become a viable prototype for other school districts of similar makeup. The Garden City project can best be defined in this manner. A bilingual, bicultural program within designated kindergarten, first and second grades of the city elementary schools, and a bicultural program in grades K-6 of the six city elementary schools. This latter element is the most ambitious part of the program, in my opinion, and will have the most far-reaching effects. It will allow any child in the district, minority or non-minority, to be educated in a classroom setting where both languages (Spanish and English) and both cultures are emphasized. In effect this should enable a parallel development of the self-image and self-esteem of both minority and non-minority children. For the latter it will also allow for second language learning when the child is most apt and interested, and he will have numerous native-speaking models within his immediate peer group. In this shrinking world few will deny the value of being able to speak a second language, (and without an accent!) but the greatest value of all is that all children in a bilingual, bicultural program can grow into adulthood with an appreciation for the worth of the individual, and for the worth of culture(s) other than the dominant one. They will not be burdened with the prejudices that have been passed from one generation to another in the past; their prolonged exposure to another language and another culture will preclude that happening.

The Mexican-American children who have populated the Special Education classes (in this case, classes for slow learners), will no longer be required to perform the impossible task of learning their basic skills through the medium of a foreign language, but will be taught those skills in Spanish first, with immediate transfer to English. The difference between this approach and simply teaching English to Spanish-speaking children must be made perfectly clear. Although the teaching of English is an important part of any bilingual program, the true bilingual approach represents good conversation practice in that the emphasis is on the retention of skills with regard to both languages. Nothing is wasted. The language skills that the Spanish-speaking child brings to school are put to good use immediately in helping him to become a functioning citizen since both languages are employed as the medium of instruction. Besides this use of the child's first language as a valuable instructional tool, when one considers how many millions of dollars are spent each year in this country on foreign language instruction, it is only sound economic practice to give some attention to the preserving of the foreign language skills that so many of our young people already have.

Congratulations to Garden City, Kansas, and to all those districts in the Midwest that will follow suit in establishing these sensible, humanistic, and economically sound bilingual programs.

A society like ours, which puts so much of its resources into communications, inevitably overvalues communication. We begin to lose our sense of its proper values and proper boundaries. We begin to lose our sense of the difference between communication and expression. We begin to expect the impossible from the mere act of communication. We meet in conventions where people are expected to produce wisdom or knowledge out of their pooled ignorance or prejudices. We meet in committees, conferences, and discussion groups without knowing our purpose and then adjourn without knowing whether we have accomplished it.

The legal significance of tenure is reviewed in this article as it relates to the new and developing laws of due process. The authors suggest that "expectancy of re-employment" may become a new form of property right.

**tenure and due process**

by Joseph L. Mills and A. Bruce Hartung

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Dr. A. Bruce Hartung is head of the department of mathematics at Gaston College. He received his Ed.D. from Duke University in 1966.

The concept of "tenure" as we know it today has roots that are centuries old. Similar privileges, such as tax relief and personal protection, were extended to scholars as early as the Middle Ages. For example, the Holy Roman Emperor Frederick I decreed in 1158 that scholars in his domain should have safe conduct, protection from attack, and compensation for unlawful injuries. Various kings and church leaders also bestowed favors upon those of the academic community for centuries. Thus, over the centuries, tenure has come to denote an employment security device under which faculty members attain permanent status within the institution.

In recent years, tenure systems have been re-examined and more thought has been given to the concept of due process. Any institution concerned with its tenure policy would be ill-advised not to give equal attention to its due process procedures. Although the two concepts are closely tied, the significance of the concept of tenure reaches beyond the status itself and accrues to the procedures under which the status is granted and/or removed.

Virtually all of the recent cases of dismissal or nonrenewal of contracts which the Supreme Court has considered have been founded on the First and Fourteenth Amendments to the Constitution. These read, in part, as follows:

**Amendment I**

Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech.

**Amendment XIV**

No state shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any state deprive any person of life, liberty, or property without due process of law, nor deny to any person within its jurisdiction the equal protection of the laws.

Before reviewing several of the suits which have been adjudicated recently, certain aspects of these Amendments should be examined. Certainly, the freedom of speech clause of the First Amendment has been critical, but requires no explanation. However, the concepts of "liberty" and "property" mentioned in the Fourteenth Amendment should be investigated. The late Justice Felix Frankfurter once wrote that liberty and property are two great constitutional concepts left to gain meaning from experience. Certainly, "liberty" means more than just freedom from bodily restraint. Freedom to enter into contracts, freedom to choose one's occupation, freedom of movement, and freedom to worship...
are all denoted by the term "liberty." Likewise, the concept of "property" extends to more than just real estate, money or material goods—even to the expectancy of re-employment.

Distinction must be made between the judicial approaches to tenure in public and private institutions. In the private realm, tenure plans are considered to be contractual. In cases where the courts decree that tenure contracts have been breached and financial awards are made, these awards will not ordinarily be accompanied by reinstatement orders because in the private realm, courts do not decree specific performance of personal service contracts. However, tenure plans adopted by governing boards of public institutions are adjudged to be a form of sublegislation and have the effect of law. Hence, the finding that a tenure plan has been breached will usually be accompanied by an order to reinstate the affected instructor since the discharge would have been considered in violation of statutes.

In reviewing the logic of the Court, two landmark cases must be considered. In one, David Roth was hired in 1968 for his first teaching job at the University of Wisconsin—Oshkosh. Roth was given no formal contract although his notice of appointment was the equivalent of a contract. Regulations adopted by the Board of Regents required that non-tenured faculty be notified on or before February 1 of retention or nonretention for the coming year. Prior to February 1, 1969, Roth was notified that his contract would not be renewed. He was given no reason for the decision nor was he given an opportunity to challenge it.

In suit, Roth charged that the true reason for nonretention was to punish him for statements made by him which were critical of the university administration—an alleged violation of freedom of speech—and that failure to give him notice of the reasons and an opportunity for a hearing violated his right to procedural due process. Overturning the lower court decisions, the Supreme Court ruled that Roth had no such rights. The Court pointed out that no charges were made against Roth which might have damaged his standing and/or associations in the community. Neither had Roth demonstrated that the decision not to rehire him was due to his exercise of free speech. The terms of his contract of employment through June 30, 1969, were met and no state statute or university rule provided him any "property interest" in his position past that date. Thus, there were no rights to due process.

A similar, yet technically different, case (1972) involved Robert Sindermann, an instructor at Odessa (Texas) Junior College. Sindermann had taught for two years at the University of Texas and for four years at San Antonio Junior College. In 1965, he joined the faculty of Odessa College and taught for four years under a series of one-year contracts. During the 1968-69 school year, he was President of the Texas Junior College Teachers' Association and in that capacity openly disagreed with policies of his Board of Regents. In May, 1969, the Board voted not to renew his contract and issued a press release covering his alleged insubordination. Sindermann was provided no official statement of reasons nor was he provided a hearing.

Action was brought in federal district court charging that the decision not to rehire him was based on his public criticism of policies and thus was an infringement of his freedom of speech rights and that failure to provide a hearing was a violation of his right to procedural due process. Although the district court upheld the Board, the Court of Appeals reversed the decision. The Supreme Court, on a writ of certiorari, held that Sindermann's lack of tenure did not defeat his claims. It was pointed out that he had not yet shown that his nonretention was in retaliation for his free speech activities—for the district court had not made a proper investigation of this issue. However, his lack of formal tenure was highly relevant to his due process claim. He alleged that the college had a de facto tenure system and that he had tenure under that system. Whereas an expectation of tenure is not protected, the alleged de facto tenure policy did entitle Sindermann to an opportunity to prove the legitimacy of his claim. His claim was based on his reliance on the Odessa Faculty Guide which stated, in part, that:

Odessa College has no tenure system. The administration of the college wishes the faculty member to feel that he has permanent tenure as long as his teaching services are satisfactory, and as long as he displays a cooperative attitude toward his co-workers and his superiors, and as long as he is happy in his work.

It was judged that Sindermann should have been given a hearing to challenge the reasons for his nonretention owing to his "property interest" in his position. The Supreme Court upheld the Appeals Court's remand of the case to the district court for a full hearing on the issues.

Considering the Roth and Sindermann cases together, one may conclude that in the nonrenewal of a contract of a nontenured faculty member, due process requirements do not apply unless the individual demonstrates that the decision not to rehire him was based on his exercise of Constitutional rights. Regarding "property interests," the Fourteenth Amendment's due process provisions do not apply unless the instructor demonstrates that he has already acquired interests in specific benefits—e.g. tenure. The Sindermann case established that these interests may be in the form of a formal tenure policy or implied from words and conduct, i.e. a de facto tenure policy.

Certainly, dismissal of a nontenured faculty member during the course of his contract (not simply nonrenewal) would fall into the same category as termination of a tenured faculty member. In either case, procedural due process must be adhered to. Specifically, this means that the faculty member should have the following rights: (1) the right to a fair and written notice, delivered in person or by certified mail; (2) the right to a fair hearing, during which the instructor has an opportunity to testify and present evidence in his behalf; (3) the right to a fair tribunal, not including those who have brought charges; (4) the right to legal counsel; (5) the right to confront and cross-examine witnesses; (6) the right to remain silent; (7) the right to a record of the hearing; (8) the right of appeal to the institution's president and then to the board of trustees; and (9) the right of appeal to a civil court.

Current trends in educational law indicate that the status of tenure can no longer be viewed unilaterally, since courts are currently focusing greater concern on the due process procedures under which tenure is removed and/or contracts

continued on page 20
For truly effective in-service programs, first assess teachers' "felt needs" for additional preparation or updating in content and methodology, urges this educator, who's been involved with such activities for 11 years. Unfortunately, such assessment "is very seldom done." He describes its value.

in-service training
for professionals

by V. Ray Kurtz

Mathematics education is Dr. Kurtz' field; besides his student responsibilities, he estimates that since 1963 he has interacted with more than 1,000 teachers in in-service situations in Kansas and other states. Currently an associate professor of Curriculum and Instruction at Kansas State University, he holds bachelor's and masters degrees from Fort Hays Kansas State College (and taught there from 1963 to 1970) and a doctorate from the University of Nebraska. He also taught mathematics and science, and was a counselor, for all or part of six years in three Kansas schools.

Supervisors and teachers involved with in-service training know that far too many in-service activities fall short of accomplishing the desired goals. The reception of several inquiries during the past year with regard to "how to successfully carry out an in-service program," and the author's participation with more than 1,000 teachers in in-service programs during the past eight years have prompted the outlining of those procedures which have proved successful.

There are many forms of in-service training in which teachers may participate in order to improve their teaching skills. Included are such activities as professional reading, travel, research, attending summer session and extension course, and participating in curriculum development programs. Each of these activities adds greatly to a teacher's effectiveness; however, this article will deal primarily with those group in-service activities which take place in school districts.

Today a vast number of our teachers have achieved their educational goal of a master's degree and therefore no longer have the external motivational force which in previous years encouraged further study and growth. These are predominantly excellent teachers who are well prepared professionals. Their greatest need is to keep informed of those new programs and curriculum changes that would improve the teaching-learning process. Therefore, any in-service program for such teachers should be organized to build upon the already existing solid foundation of their knowledge and competence.

Diversity of Needs

Teachers in a system are so diverse that they will not all need the same in-service topic. For example, many elementary schools utilize various forms of team teaching and departmentalization in addition to other organizational methods which involve their teaching some subjects but not others. Obviously a teacher will not be enthusiastic about receiving in-service training in an area where he is not currently teaching. Additionally, since pre-service preparation varies greatly, some graduates receive strong preparation in teaching the various new curricula while other graduates receive a more traditional program.

If there is any place in our educational system where the progressive education concept of "felt needs" should be

utilized fully, it is in organizing in-service programs for professional teachers. An assessment of what teachers feel they need is actually quite easy to obtain, but for unknown reasons it is very seldom done. Too often the needs of the teachers are assessed informally and erroneously by the organizers of in-service programs. Therefore, the cardinal principle of a successful in-service program should be to assess the areas in which the teachers desire additional preparation or updating. A common check-list type of questionnaire will provide this information adequately.

Alternative Offerings

The results of this assessment may be used as a structural guide for the total in-service program. A simple tallying procedure may be used to determine where teachers desire help. Naturally there will be a wide range of what teachers desire, with some (for example) wishing help with recent trends in mathematics and others wanting training in behavior modification, while still others will want instruction on how to use the materials in a new science curriculum. This brings us to the second principle of in-service training: that of forming cluster groups where teachers have alternatives concerning groups they may attend or projects they may undertake.

The third principle is to establish some type of publication to inform creative teachers who want to know more about various areas in their profession about the availability of in-service topics based on their stated needs. One excellent way to promote interest is through an in-service bulletin—a "Preview of Coming In-Service Attractions"—which is periodically prepared and sent to teachers. In such a publication, results of district surveys might be given. Or, special sessions could be announced, as in this hypothetical case:

Some teachers who are using the new PQZX Science Program are encountering considerable difficulty in operating some of the apparatus which is included in each science kit. Therefore, to assist with this problem, three in-service sessions will be held in John Dewey Elementary School. The first meeting will be a group discussion of specific problems encountered with the science equipment. At the second meeting a consultant from the XZ Science Kit Company will demonstrate proper use of the apparatus. The final meeting will provide an opportunity for the participants to discuss improvements as well as continued difficulties. In order to accommodate as many teachers as possible there will be two sets of schedules as follows:

<table>
<thead>
<tr>
<th>Schedule 1</th>
<th>Schedule 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st meeting</td>
<td>Tuesday, Feb. 6</td>
</tr>
<tr>
<td>2nd meeting</td>
<td>Tuesday, Feb. 20</td>
</tr>
<tr>
<td>3rd meeting</td>
<td>Tuesday, Mar. 6</td>
</tr>
</tbody>
</table>

Teachers may feel free to attend any combination of meetings which fits their schedule. Each of these meetings will start at 4:30 and end promptly at 5:45.

An often overlooked technique of in-service training is the utilization of teacher leadership—the fourth principle. As one example, a very successful in-service adventure developed in a small city district when a group of first grade teachers decided to have their November meeting center around the use of math games and activities. When the district curriculum coordinator learned that there was a first grade teacher whose original enthusiasm for math had recently become rekindled by a summer in-service activity, he asked the teacher to chair a discussion of math activities and games. Through the use of a curriculum bulletin, the first grade teacher sent out an S.O.S. for help, asking her colleagues to send their favorite games and activities to her for duplication. The distributed publication which resulted became a highly sought-after document by those first grade teachers who missed the November meeting and also by second and third grade teachers. Such utilization of teachers in a system is too often an untouched resource.

In-service program organizers should be careful to avoid procedures that kill interest. One lethal approach, for example, would be to request all fourth grade teachers to assemble at 4:15 on January 23rd to participate in a discussion concerning individualization of the reading program. Those teachers who are in the process of establishing an individualized reading program will probably be pleased with such a presentation. But others might well be "turned off" — notably teachers who are already individualized or who departmentalized and do not teach reading. A more appropriate in-service topic for these latter teachers would increase their appreciation of the meeting.

Motivational Effects

Both intrinsic and extrinsic motivation should be used in an in-service program. The intrinsic motivation comes from the use of timely and appropriate in-service topics which teachers desire in order to become more effective. As previously stated, these topics are best chosen from the feedback of a check-list completed by the teachers. Extrinsic motivation can also be used as a positive inducement to teacher participation in in-service programs; an example would be the necessity to earn additional college credits for certificate renewal or advancement on the salary schedule. A procedure used less often but quite effectively by some school districts is the use of in-service credit or school board credit, which provides for a more flexible in-service program in that the participants may pursue activities for improvement which do not fit the traditional college credit procedure. This approach is almost a necessity if principle number two is followed in providing alternative in-service activities where the individual needs and interests of the teachers are to be met.

Growth Is Assumed

Members of the profession and laymen agree that teachers should grow professionally each year. Many salary schedules are based on this idea. Therefore, in-service programs should provide opportunities for such growth as well as for the recording of participation and in-service credit earned. If ample opportunity is given for in-service growth, it can be accepted that each teacher is to present at least one unit of in-service credit each year. As a fifth positive principle for in-service credit each year. As a fifth positive principle for
Theoretically, research management can lead to reduced volume but heightened quality of research publications and to the improvement of a university's competitive position.

latent functions of research management

by Alvin E. Keaton

Dr. Keaton is head of the department of philosophy at New Mexico State University. His areas of specialty, in addition to philosophy, include sociology and psychology as well as computer science. He has taught college level courses in those areas at New Mexico Highlands University, University of Oklahoma, and Kansas State College. He also taught science and math on the secondary level. His Ph.D. and M.A. degrees are from the University of Oklahoma and his B.S. is from Marshall University in Huntington, West Virginia. Dr. Keaton's interest in sociology and philosophy provides an unusual background for someone who has served extensively as an consultant in computer applications and systems analysis.

C. Wright Mills once said, "Most men experience their lives as a series of traps." Nowhere is this experience more poignant than in the area of policy planning, and no area of policy planning is more replete with the experience of entrapment than is education. Almost without exception, the stated goals of modern educational policy makers have not been achieved.

Today, the failure of educators to achieve the goals of policy makers is perceived as a failure in planning on the part of those who should "translate" vague philosophic ideals into precise goals (e.g., Malek, 1972). As a result, the literature is now full of formulae—monographs on competency-based programs, decision-making strategies, and so on. It is my expectation that "planners" are about to experience another trap.

The point is, planners are currently engaged in setting forth general formulae for implementing general formulae. This practice is nothing but hair of the dog. The problem with the philosophic ideals is not that they are vague but that they are general—and general principles always require interpretation when implementation is undertaken. Furthermore, these interpretations will be made by persons with diverse motives and understandings.

Let us try to approach the problem of improving American education from a different perspective—let us first ask what incentives presently exist for introducing an alteration in an institutional structure. Let us then consider the likely effects of the institutional alteration upon the patterns of life and work of individuals who function within that institution.

There are at least six incentives for implementing research management in the university:

1. Research support personnel can be more effectively deployed;
2. Research planning will be facilitated;
3. Both accountability and the appearance of accountability with respect to university-sponsored research will be improved;
4. Professors not now engaged in research will be encouraged to participate;
5. In general, the quality and efficiency of supervision with respect to research support personnel will be improved; and
6. The efficiency of professorial research-teaching trade-offs can be improved—this latest will help counter the developing trend of thought in some Federal agencies that they can do needed research more cheaply than can the university.
The way in which research is currently carried out on many university campuses makes rather inefficient use of laboratory technicians, secretaries, and other support personnel. A prime cause of this inefficiency is the relatively small size of each research project. The jobs which are created to carry out the project often do not fully occupy an individual for the contracted time block. Furthermore, the need for the employment of certain personnel will vary during the course of many projects and yet individuals must be contracted for the full time if they are to be available when needed.

With a research management program in effect, those persons charged with research management can, in light of ongoing and committed projects, plan projects which will allow utilization of personnel not fully utilized in the ongoing and projected work. Thus, through the facilitation of research planning, made possible through management, research support personnel can be more efficiently utilized.

A research management program, with its planned continuous use of personnel, will allow for the building of complete research support teams. With relatively secure full employment, such personnel will not be subject to the kinds of anxieties and uncertainties which currently exact a cost in terms of morale in many support groups.

Of course, it is quite well known that graduate students employed as part-time support personnel are often expected to plan their studies around the needs of a project they are employed upon. To some extent, this arrangement may reduce the inefficiency discussed in the last two paragraphs above, but under present conditions, no one is held accountable for full value being received for monies paid. Furthermore, if the work demand placed upon a graduate student is uneven over the course of time, then he should be compensated for having to plan his studies and his social life around the demands of the project. In order that the necessary degree of flexibility be maintained and the hourly pay norms currently in vogue be satisfied, job descriptions must have a somewhat vague character and so not only accountability but the appearance of accountability suffers. The current state of affairs thus tends to discredit research within the university in the eyes of persons outside institutions of higher learning. In other words, we are currently unable to legitimate research expenditures.

It is likely that professors not currently engaged in research projects would be more inclined to participate if they could be relieved of the management chores. Furthermore, there is no good reason to suppose that professors, in general, are particularly adept or either the task or personnel aspects of management. It is understandable that a person will be reluctant to engage in an activity for which he does not consider himself particularly suited. Research management would reduce the personal cost for many able persons in the carrying out of research projects.

While we have no good reason to suppose that professors are particularly adept at managing the activities of research support personnel, we can expect that a person specifically selected for research management will possess above average proficiency in the area. If we cannot make this assumption, then we have little reason for engaging in selection for management in general. At any rate, we educators must assume that there is some positive relation between training and performance.

Relieving the research professor of a task for which he may not be particularly well suited will improve the efficiency of the teaching-research trade off—not only for the obvious reason that part of the work which is now entailed in research would be carried on by someone else, but also because this management aspect of research would no longer intrude upon the teacher's time and thought.

If one accepts the veridical character of the posited incentives for instituting research management within the university, it becomes imperative that we consider the latent effects of such an action. I say imperative because it has become apparent, both to sociologists and to systems analysts, that the altering of forms of work organization can have ramifying consequences far beyond those for which the changes are instituted. These latent consequences of changes in work organization are largely the result of concomitant changes in the social character of work groups and the derivative alteration in interest patterns of individuals.

The long-range effect of instituting an organization within the university community capable of simultaneously realizing the six mentioned incentives will be the accentuation of local rather than cosmopolitan orientation in the members of an academic community. Because universities will be in direct competition with one another as...
research units, the members of any given university system will become more cohesive; it will be in their interest to function as a team. This assertion will prove to be true because each team member can only satisfy his goal of continued employment on the team by the continued existence of the team.

It should be pointed out that relatively small, highly integrated work groups come in time to satisfy many of the primary social needs of individuals. Research management will have the effect of creating groups wherein membership within the group will itself be rewarding—perhaps, in time, be of even greater consequence than the material benefits derived from membership. When this is the case, group norms come into being which are intolerant of individual actions detrimental to group interests.

The development of cohesive research teams whose members are locally oriented will increase interuniversity competition for scarce resources (the public funds). Because of the diverse and intermittent character of public funding in the foreseeable future, research management and its attendant latent effects will probably bring into being omnivorous research organizations. Perhaps an explication of why such "omnivorous" organizations will be best suited for competition under conditions which will prevail in the near future will bring into clearer focus some of the latent functions of research management.

If we imagine a group organized to produce only guns, it can, with all members participating, produce \( x \) number of guns. If a group is devoted to only the production of butter, it can produce \( y \) amount of butter. If these commodities are exchangeable in a fixed ratio and if we then represent the possible number of guns produced on one axis and the amount of butter on the other (see Fig. 1), we can calculate the unspecialized trade-off possibilities between the two commodities. This is accomplished by completing the hypotenuse (as shown in Fig. 2) and then, choosing a given amount of one commodity, erecting a perpendicular at that point and dropping a perpendicular upon the other axis from the point where our line intersects the hypotenuse.

Samuelson\(^3\) argues that by selective employment of persons better suited to one task or the other, the true production possibility frontier under optimization becomes an arc (see Fig. 3) so that there is a differential trade-off between guns and butter, as is shown in Figure 4. This last figure summarizes most of the argument in Figure 4. This figure optimizes a loss of rapid response on the part of the group to changes in external conditions because work patterns are institutionalized within the group. If we compare Figure 4 to Figure 2, we note that the production possibility frontier in the unspecialized society forms a secant to that of the specialized group. This suggests how we might estimate the trade-off between rapidity of response and optimized exploitation of a given demand mix. If we take a secant farther out on the curve representative of the production possibility frontier, as in Figure 5, we devise a representation of the gain in flexibility to exploit at near maximum a full half of the potential demand mix range.\(^4\)

Thus, the cadre of unspecialized research support personnel, which are compatible with and perhaps even more to a viable research management program, will have a vital function for the university as it attempts to accommodate to the structural demands of the larger society.\(^5\) Needless to say, these capacities of a system to accommodate to the demands of a larger system, which are conferred upon the accommodating system by some one of its subsystems, are what we mean when we refer to the latent functions of the subsystem.

Another important latent function of the institution of research management within the university will be the improvement in the quality and decrease in volume of research publications. This improvement will come about in the following way: Under conditions of competition between highly cohesive research teams, it is almost inevitable that research journals and other publications will be captured by some one of the competing groups. Since no group will then want to see work which might discredit that group published and because each group will have a stake in discrediting other groups, articles will be more closely examined prior to publication than is now the case.

Also, because the members of highly integrated research teams will be able to assay directly the worth of each team member to the group as a whole, there will be no need to employ such spurious evaluative criteria as number of publications. Thus both the opportunity and motivation to publish everything which a person can get published,
regardless of its quality, will be greatly diminished.

If research management results in even minimal improvements in the quality of research, while at the same time reducing the volume of research publications, the effect on the research and development effort in our society will be startling. Suppose (case 1), for instance, that 20 percent of the research articles which are currently published contain a significant fact. Suppose further, that an individual in some given discipline reads, on the average, 40 percent of the total publications for his discipline. On the assumption that he will encounter informative articles with the same frequency that they are represented in the population of articles, we can expect a given individual to encounter eight significant articles per one hundred available.

If now (case 2) the volume of publications could be reduced by 50 percent while the quality improved only to the point where 30 percent of published articles contained a significant fact and, with the same reading rate, the average worker would cover 80 percent of the published literature. On the average, each worker would encounter, as a consequence, twelve significant articles. While in moving from case 1 to case 2 there is a 17 percent loss in significant articles within the total system, each worker, nevertheless, becomes acquainted with 50 percent more significant articles. At first glance, it would appear that we have enriched the individual worker at the expense of the total information wealth of the system. I shall contend that this is true only in the short run.

Few of us would dispute the assertion that verbal interaction with fellow researchers can contribute to productive research. Consider the nature of verbal interaction under cases 1 and 2: In case 1, and accepting its assumptions for the sake of example, the average worker will have in his possession information from eight significant articles out of a population of one hundred. Therefore, if two workers attempt to converse, the facts from a maximum of only 16 percent of significant articles available can be held in common. In case 2, 48 percent of significant facts will be held in common. Thus, we may conclude that the probabilities of fruitful interaction will be three times as great in the second case as in the first case. We might, therefore, expect that the increased incidence of fruitful researcher interaction and concomitant increase in research production would, in the long run, more than offset the initial loss in total system facts in going in case 1 to case 2.

In closing, consider an incentive for research management of an entirely different order than those already described. If the institution of research management within a university should give that university a competitive edge, either real or apparent, over other universities; then, in order to survive, the other universities will have to conform. Furthermore, a competitive edge, once established, can be used to obtain an even greater competitive edge. Consequently, we can expect that those institutions which are first in the field will have every opportunity to remain first in the field.

FOOTNOTES
1. For example, see F. J. Roethlisberger and W. J. Dickson, Management and the Worker (Harvard University Press, 1939) and Peter Blau, Exchange and Power in Social Life (New York: John Wiley & Sons, 1964); also, The Dynamics of Bureaucracy (Chicago: The University of Chicago Press, 1955).
2. Robert Merton's distinction.
4. This idea is developed in W. Ross Ashby's Design for a Brain (London: Chapman and Hall, 1956).

in-service programs

continued from page 16

service programs, the specific details and guidelines of such a procedure should be formulated jointly by teachers and supervisors. A program as outlined requires considerable record keeping, but the advantages to be gained far outweigh the disadvantages to be encountered. In a given school district, the procedure could be handled at each building by a teacher committee operating under the guidelines of the district-wide policy. Such a local committee could decide, for example, that a 5th grade teacher who traveled in Yosemite National Park and took slides for use next year in a social studies unit had met his requirement of in-service credit. Each teacher's in-service record would eventually be submitted to the central administrative office.

Summary

The steps in providing a relevant in-service program for teachers involve 1) the assessment of areas in which teachers wish to receive help, 2) providing alternative ways for teachers to participate, 3) utilizing an in-service bulletin to announce the various programs, 4) utilization of teacher leaders to prepare and present in-service programs, 5) involvement of teachers in formulation of a policy of utilizing in-service credit for salary increments. These steps provide for an in-service program based on assessed needs rather than on outside prescribed topics.

tenure and due process

continued from page 14

terminated. It would seem prudent for institutions to provide a due process hearing to any faculty member who requests one or who challenges the decision to terminate the status of tenure or a contract. Under the developing law of due process, the status of tenure and even continuing contracts has been given new legal significance in light of the fact that "expectancy of re-employment" now constitutes a new kind of property right that institutions cannot capriciously take away.

EDUCATIONAL CONSIDERATIONS
changes in editorial responsibilities

Warren I. Paul, co-editor of Educational Considerations, is leaving his position as assistant professor of curriculum and instruction at Kansas State University to move to York, Pennsylvania. He will serve as assistant to the president for the Environmental Design Group for Education (EDGE) whose headquarters are in York.

Dr. Paul will relinquish his editorial duties to Sandra B. Ernst who is University Publications Editor at Kansas State University. Mrs. Ernst is completing a Ph.D. in curriculum and instruction at Kansas State University. She holds a master's in journalism from that university and a bachelor's in journalism from the University of Missouri.

Ms. Ernst has taught in the College of Education Instructional Media Center at KSU and in the Department of Journalism and Mass Communications. She has also worked with the Washington Pre-College Testing Program in Seattle where she developed high school and college counselor-student information programs. As Information Officer for the Urban Renewal Agency in Kansas City, Kansas, she edited a bi-monthly magazine, Change. She also has edited an 8-state regional newsletter published by the National Association of Housing and Redevelopment Officials.

A member of Phi Delta Kappa, Phi Kappa Phi, and Women in Communication, Inc., she is the current recipient of the Jo Caldwell Meyer grant for research into human understanding.