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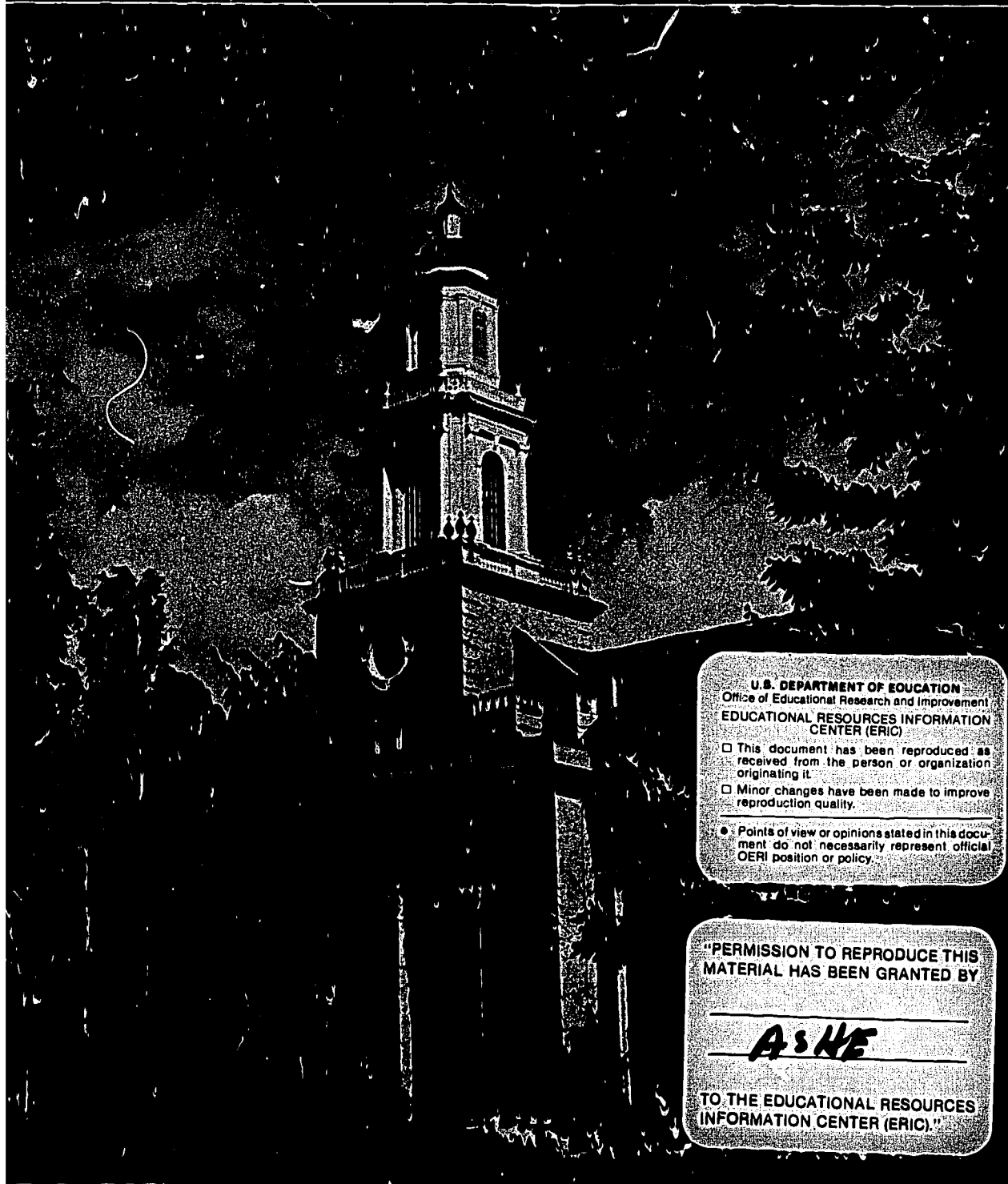
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ABSTRACT

An instructional resource handbook for graduate-level courses in the field of higher education is presented. Twenty-two members of a national higher education network wrote the first essay on "Course Syllabi as Instructional Resources," which reports on a survey of faculty in higher education programs and specifically on course emphases, major resources in use, syllabi models, and recommendations. Additional contents are: Robert Birnbaum's essay "Using Games and Simulations in Higher Education Programs"; James L. Ratcliff's essay "Telecommunications and Computer Databases," which focuses on uses in higher education and includes a bibliography and information on resources; John J. Gardiner's essay, "Associations as Instructional Resources," which identifies Washington-based associations that provide resources for use within specific areas of higher education; "Higher Education as a Field of Study: An Annotated Bibliography" by Judy Diane Grace which covers over 60 works useful to faculty and students; "Teaching in Postsecondary Education; An Annotated Bibliography" by Robert J. Menges, which lists over 100 professional journals and reviews approximately 180 other resources available on teaching higher education; information on videotape resources in "Shaping the Future of Higher Education: A Learning and Research Tool"; and a review by 22 individuals on The National Center for Research to Improve Postsecondary Teaching and Learning (NCRIPTAL). (SW)

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Handbook on TEACHING and INSTRUCTIONAL RESOURCES



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Edited by
John J. Gardiner

ASHIE

HANDBOOK ON TEACHING AND INSTRUCTIONAL RESOURCES

An instructional resource handbook for courses
in the field of higher education.

Edited by

JOHN J. GARDINER

OKLAHOMA STATE UNIVERSITY

ASSOCIATION FOR THE STUDY OF HIGHER EDUCATION
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ACKNOWLEDGMENTS

In 1982, the Association for the Study of Higher Education (ASHE) developed a handbook intended to help new and experienced teachers in higher education to locate resources they might find useful. ASHE's Committee on Curriculum, Instruction, and Learning sponsored the project. Don Tritschler served as editor of the first handbook; Robert Birnbaum chaired the Committee on Curriculum, Instruction, and Learning at the time of the handbook's development. The 50-page manuscript for the Instructional Resources Handbook for Higher Education was processed at Oklahoma State University.

The editor of the 1987 ASHE Handbook on Teaching and Instructional Resources would like to express his appreciation to the members of the Advisory Board for their valuable contributions to the preparation of this handbook.

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Thanks to Robert Birnbaum, Jack Schuster, Patricia Crosson, and Lynn Hossler, all of whom served as chairs of the Committee on Curriculum, Instruction, and Learning during 1982-86, for their support of this project. Thanks also to Jonathan Fife and Lynn Barnett of the Clearinghouse on Higher Education for their counsel and support throughout the process.

Special thanks to Sharon Phillips, Stillwater, Oklahoma, word processor without equal, for competence, patience, and attention to detail in the preparation of this manuscript.

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INTRODUCTION

After more than three centuries of fairly steady increases in enrollments, the most dramatic feature of the next 20 years, according to the Carnegie Council on Policy Studies in Higher Education, is the likelihood of a substantial decline in enrollments (Carnegie, 1980, p. 32). Attrition and retention of students have emerged as major concerns for American higher education.

In their 1980 report, Attrition and Retention: Evidence for Action and Research, Lenning, Beal, and Sauer identified strategies that institutions can enact to improve student retention. Foremost among these are improving faculty-student interaction and improving peer interactions (pp. 95-98). In another study, Beal and Noel identified the top positive factors influencing retention, in priority order, as the caring attitude of faculty and staff, high quality of teaching, adequate financial aid, student involvement in campus life, and high quality of advising (1980, p. 43). Close consideration of these factors leads to the conclusion that "interaction between faculty and students is one of the most important factors encouraging retention" (Ramist, 1981, p. 2). According to Wilson (1975), faculty-student interaction is the most important characteristic that distinguishes effective teaching. One important key to improving retention, therefore, may be the development of strategies that encourage interactions between faculty and students. These interactions could provide an atmosphere which promotes effective learning while it increases student retention. The future belongs to those institutions that make interaction and the quality of student life their primary emphases (Gardiner and Nazari-Robati, 1983; Gardiner, 1986; Gardiner, 1987).

This handbook and its component essays were born of collaboration. An advisory board identified two essays to be retained from the 1982 edition, as well as suggesting the substance, format, and authorship of several additional chapters. Two groups of twenty individuals gathered to write the first and concluding essays on course syllabi as instructional resources and on the parameters of teaching/learning research. The ASHE Handbook on Teaching and Instructional Resources was developed through extensive interaction.

The first essay on "Course Syllabi as Instructional Resources" was written by the members of a national higher education network. The essay reports on a survey of faculty in higher education programs that considered course emphases, including titles, major works and/or resources in use, syllabi models, trends, observations, and recommendations. Each member of the network wrote the subsection of the chapter related to his or her area of expertise. More comprehensive versions of the essay, along with exemplary syllabi, are available through the ERIC system. (See concluding section of Chapter One for additional information.)

The second chapter by Robert Birnbaum on using games and simulations in higher education courses appeared in the 1982 edition. The essay emphasizes teaching students the processes in which successful practitioners must engage, as well as raising issues regarding the training of faculty members to use these instructional techniques.

The third chapter by James L. Ratcliff considers telecommunications and computer data bases as they relate to higher education coursework. The author reviews the limited use of telecommunications and microcomputer technologies in higher education programs today and proceeds to recommend telecommunications technologies that offer promise for the future. A comprehensive review of computer applications in higher education and data bases as instructional resources follows, with excellent bibliography and resources in the area.

Chapter Four by John Gardiner also appeared in the 1982 edition. This essay serves as a guide to Washington-based associations, identifying those organizations which provide resources for use within specific areas of higher education.

Chapter Five by Judy Diane Grace presents an outstanding annotated bibliography of 120 works useful to faculty and students in higher education; Chapter Six by Robert Menges reviews resources available on teaching in postsecondary education. Menges, who serves as director of Northwestern University's Center for the Teaching Professions, is uniquely qualified to produce this focused synthesis.

Chapter Seven reviews the work of the National Center for Research to Improve Postsecondary Teaching and Learning (NCRIPAL) established at the University of Michigan in 1986. NCRIPAL's research, development, and dissemination activities concentrate on five aspects of college education that affect learning: classroom learning and teaching strategies, curricular structure and integration, faculty attitudes and teaching behaviors, organizational practices, and the use of technology in learning. This excellent essay reviews research findings in these areas of faculty concern.

A special videotape resource on "Shaping the Future of American Higher Education" is then presented. This handbook's editor served as chair of the 1984 conference, co-sponsored by the Association for the Study of Higher Education and the American Educational Research Association (Postsecondary Education Division), that resulted in this excellent videotape resource on higher education.

The 1987 ASHE Handbook on Teaching and Instructional Resource concludes with a call for suggested revisions and a form for ordering additional copies.

It is hoped by the editor and advisory board members that the 1987 handbook will be of value to faculty and students in higher education who are interested in locating resources to improve their teaching and learning.

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Chapter One

COURSE SYLLABI AS INSTRUCTIONAL RESOURCES

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 in Higher Education
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With Syntheses of the Various Specialties
 of Higher Education

Authored by the Following Individuals:

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During the winter of 1983, a survey of Association for the Study of Higher Education (ASHE) members was conducted by the Committee on Curriculum, Instruction and Learning regarding possible interest and/or support for the development of a clearinghouse for course syllabi in higher education. Over fifty percent of the ASHE members surveyed rated the feasibility of the idea as "high/very high"; over sixty percent rated the usefulness of the idea as "high/very high." Sixty-three percent of those surveyed were willing to contribute their own course syllabi for consideration; sixty-eight percent of those responding expressed an interest in obtaining the course syllabi of other ASHE members.

In considering the many helpful ideas offered by ASHE members, the thoughts of several people who completed the survey instrument were of particular value:

I've thought about this idea for years. Why does every professor need to develop a syllabus from scratch? I hope there would be an evaluation review of syllabi so that only good ones get into the system.

Meredith D. Gall
University of Oregon

Once a collection of syllabi was put together a paper should be developed that analyzes this material. This paper and a copy of each syllabus could then be submitted for inclusion into the ERIC system, thereby allowing access to microfiche or paper copy without expense to ASHE.

Jonathan D. Fife
George Washington University

I think this is a useful project; it should include a discussion of the disciplinary fields we use as a base for instruction.

Susan Cameron
Syracuse University

Avoid getting into an endless debate over an appropriate taxonomy for cataloging the documents. Have a small group, or even one person, make a decision about the taxonomy and if the ASHE board approves, do it. It's a fine idea.

John Reid
The University of Toledo

Publishing syntheses based upon one person's perusal of course materials as we did for the earlier issues of the Review of Higher Education is still a good idea. The recently published single case study is also important and useful. But making available the actual course plans, readings and assignments would be useful for our field--with so few textbooks and so little sharing of these things. Let's do it soon.

S. E. Kellams
University of Virginia

A task force was established to develop a clearinghouse for course syllabi in higher education: John J. Gardiner (chair), Jonathan D. Fife, and Jack H. Schuster. Lynn Barnett of the ERIC Clearinghouse on Higher Education participated in early planning activities and helped coordinate ERIC participation in the project. A taxonomy of higher education specialties was identified; one person was selected to represent each area of specialization. Specifically, each member of the network agreed to commit his or her time and effort toward the following:

- syntheses reviewing course syllabi received with an evaluation of what is happening in each area (e.g., course titles, emphases, major networks and resources in use, syllabi models, trends, observations), along with a few exemplary syllabi to be made available via the ERIC Clearinghouse on Higher Education by the end of 1986;
- abstracts for inclusion in an essay on "Course Syllabi as Instructional Resources," to appear in the 1986 edition of ASHE's Instructional Resources Handbook for Courses in the Field of Higher Education; and
- updates of the essay/abstract in four years.

In an interview the network coordinator conducted with David Riesman during the summer of 1985, the revered Harvard professor of sociology and student of higher education cautioned regarding "The danger with course syllabi." Serving as "the tail fin of the faculty," like the cars of the 1950s, course syllabi were "generally too long." Noted Professor Riesman, "Short, highly selective syllabi are best . . . with students expected to read several complete books/works." That sentiment seems to be shared by many members of the network as witnessed by their syntheses of course syllabi.

Thanks to each member of the network for taking on the challenge of representing his or her area of specialization. The product of the network's effort is now part of the ERIC System with abstracts of the longer essays following this introduction.

The process of building a network cannot fail because it is also the goal: the joining of purposes, friendships, agendas, and projects. Thanks to each of you--in the network and in the higher education community at large--for your participation and good work toward the development of this ASHE/ERIC Clearinghouse. Your help will be needed again in establishing the long-term viability of the project. Please continue to send course syllabi and suggestions to appropriate members of the network. Thanks again for your support of the ASHE/ERIC Clearinghouse for Course Syllabi in Higher Education.

ADULT AND CONTINUING EDUCATION

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Whoever said that Adult Education lacked coherence as a field of study would find ample evidence for that assertion in the syllabi that were submitted to the ASHE/ERIC Clearinghouse for Course Syllabi. While there is modest agreement on course titles, there is little consensus on what constitutes a basic reading list for graduate students preparing for careers in adult and continuing education.

Only four books appeared three or more times on the required reading lists of the 43 courses analyzed in this review:

Darkenwald, G. and Merriam, S. Adult Education: Foundations Practice (1982).

Cross, K. P. Adults as Learners (1981).

Knowles, M. S. The Modern Practice of Adult Education (1980).

Knox, A. B. Adult Development and Learning (1977).

This leads to the observation that there is no definitive overview of common knowledge that graduate students are exposed to in their graduate training in adult and continuing education.

There was somewhat more agreement on course titles. The most frequent course is the introductory or survey course, followed closely by courses in program planning, marketing, adult learning, and organization and administration of adult education. Larger departments frequently offered courses on aging/gerontology and on adult development.

It is difficult to discern any "trends" in this field of study, both because of the lack of consensus and because this is a first attempt to gather baseline data.

COLLEGE STUDENTS

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In general, courses on the college student aim to increase understanding of today's American college students by reviewing demographic data about college students; the changing relationships of students to colleges over the past 15-20 years; the nature of student communities, including nontraditional and minority groups; and the impact of college on students and their sociopsychological development.

The following are the most prominent objectives of the courses:

1. To explore demographic data about American college students, including trends with respect to: (a) age, (b) academic aptitude, (c) race, (d) religion, (e) ethnology, (f) social attitudes, (g) socioeconomic background, and (h) career expectations.
2. To study the changing relationships of students and colleges, including: (a) historical trends that have qualified the participation of students in the affairs of the college (in one course, drawing upon materials available from European universities of the period before the founding of American colleges); and (b) legal and ethical bases of student control and independence in the American college.
3. To develop a sense of: (a) the response of different student groups--traditional, nontraditional, "new," and minority groups--to traditional higher education settings, and to suggest ways in which those traditional settings might be altered to make the college experience more meaningful to newer student groups; and (b) the dynamics by which the qualities of the American student community are formed and modified on individual campuses.
4. To provide an understanding of: (a) the varied dimensions of student life and their implications for student development; (b) the types and sources of research and literature on student development theory; (c) the impact of the college experience on students, including outcomes such as competency and achievement, values, beliefs and attitudes, and career choice.
5. To suggest who will partake in higher education for the remainder of the twentieth century, and where the experience might occur, including new forms and new settings for postsecondary education.

The following readings were cited most often for use in courses about the college student:

Astin, A. W. Four Critical Years. San Francisco: Jossey-Bass, 1977.

Bowen, H. R. Investment in Learning. San Francisco: Jossey-Bass, 1979.

Brown, R. D. Student Development in Tomorrow's Higher Education--A Return to the Academy. Washington, D.C.: ACPA, Student Personnel Series No. 16, 1972.

Chickering, A. W. and Associates. The Modern American College. San Francisco: Jossey-Bass, 1981.

Cross, K. P. Beyond the Open Door. San Francisco: Jossey-Bass, 1971.

DeCoster, D. A. and Mable, P., Eds. Understanding Today's Students. San Francisco: Jossey-Bass, 1981.

Feldman, K. A. and Newcomb, T. M. The Impact of College on Students. San Francisco: Jossey-Bass, 1976.

Giroux, R. F. et al. College Student Development Revisited: Programs, Issues, and Practices. Washington, D.C.: American Personnel and Guidance Association, 1979 (revised edition).

Hanson, G. R., Ed. Measuring Student Development. "New Directions for Student Services" (no. 20). San Francisco: Jossey-Bass, 1982.

COMMUNITY COLLEGE

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Following a call for higher education graduate course syllabi issued by the Association for the Study of Higher Education in April, 1985, eleven syllabi were received and reviewed with a specific focus on the community college. The objective of the review was to identify elements of congruence and differentiation in the field with respect to course titles and emphases, major works and resources in use, syllabi models for consideration, common and unique dimensions of syllabi, and trends and observations. The most commonly used course titles were: "The Two-Year College" and "The Community-Junior College." Subject emphases common to graduate course syllabi included: history and philosophy of the community college, social context, mission and goals, types of two-year colleges, organization and administration, governance, academic programs, special programs and services, instruction, students and student services, faculty and staff, finance, facilities, and special problems and issues. Most syllabi reflect instructor efforts to provide a survey and overview of the two-year college in America through distributed readings, research papers and bibliographic summaries. Unique directions for the future center on the (1) application of concepts to practice and (2) analysis of issues and problems in the context of changing social and economic conditions through instructional techniques such as case studies, practitioner workshops, catalog analyses, college visitations, and simulation exercises. A variety of resources including books, monographs, periodicals, and research reports are used for foundation and supplementary reading. Exemplary syllabi are

included to illustrate methods of syllabi construction currently in use in college and university graduate courses devoted to the community college.

The major work used as foundation reading in community college graduate course syllabi is The American Community College by A. Cohen and F. Brawer. Secondary works identified in syllabi include Profile of the Community College by C. Monroe; The Junior College: Progress and Prospect by L. Medsker; Financing Community Colleges by W. Garms; Breaking the Access Barriers: A Profile of Two-Year Colleges by L. Medsker and D. Tillery; and Values, Vision and Vitality by E. Gleazer. Periodical and sourcebook readings are assigned by most professors as a supplement to foundation material in textbooks. Among the major periodicals and sourcebooks cited in most syllabi are the Community and Junior College Journal, Community College Review, Community College Quarterly of Research and Practice, NCRP Journal, New Directions for Community Colleges (Jossey-Bass), and the Horizons Monograph Series. Supplementary readings which are commonly recommended for the development of foundation knowledge in relationship to the community college are the following:

Alfred, R. L. Impacts of the Community and Junior College on Students. Iowa City: American College Testing Program, 1979.

Carnegie Commission on Higher Education. The Open Door Colleges: Policies for Community Colleges. New York: McGraw-Hill, 1970.

Blocker, C. B.; Richardson, R. C.; and Plummer, R. The Two-Year College: A Social Synthesis. Englewood Cliffs, New Jersey: Prentice-Hall, 1965.

Cosand, J. B. Perspective: Community Colleges in the 1980's. Washington, D.C.: American Association of Community and Junior Colleges, 1979.

Cross, K. P. Beyond the Open Door. San Francisco: Jossey-Bass, 1971.

Cross, K. P. Adults as Learners. San Francisco: Jossey-Bass, 1981.

Gleazer, E. G., Jr. This is the Community College. Boston: Houghton-Mifflin, 1968.

Gleazer, E. G., Jr. The Community College: Values, Vision, and Vitality. Washington, D.C.: American Association of Community and Junior Colleges, 1980.

Gollattscheck, J. F. et al. College Leadership for Community Renewal. San Francisco: Jossey-Bass, 1976.

Harlacher, E. L. The Community Dimension of the Community College. Englewood Cliffs, New Jersey: Prentice-Hall, 1969.

Koos, L. V. The Community College Student. Gainesville, Florida: University of Florida Press, 1971.

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Thornton, J. W., Jr. The Community Junior College (3rd ed.). New York: John Wiley, 1972.

Wattenbarger, J. L. and Cage, B. N. More Money for More Opportunity. San Francisco: Jossey-Bass, 1972.

Wilms, W. W. Public and Proprietary Vocational Training: A Study in Effectiveness. Lexington, Massachusetts: D. C. Heath, 1975.

In recent months, two new books have been published with considerable impact on the two-year college literature: Renewing the American Community College by William Deegan and Dale Tillery (Jossey-Bass, 1985) and The Community College Presidency by George Vaughan (ACE/Macmillan series on Higher Education, 1986).

These foundation works have become the subject of increasing interest among professors seeking up-to-date analyses of the stature and prospects for American two-year colleges. Alone, or in combination, they could become required reading in graduate education courses devoted to the community college.

COMPARATIVE/INTERNATIONAL

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In response to the ASHE call for syllabi in various fields, I received only two syllabi focusing directly on comparative and international dimensions of higher education. In addition to my own course, this accounts for three courses. I shall summarize these courses below. In addition to these courses, there is additional work in the area which may result in course content. For example, Professor Burton Clark at UCLA directs a program in comparative higher education studies and I believe that some academic course offerings stem from this program. Professor Robert Berdahl at the University of Maryland also has strong comparative higher education interests. Professor Thomas Eisemon at McGill University in Montreal has higher education as part of his courses in the field of comparative education. Thus, there is considerably more activity, both in terms of research and teaching, than this small number of courses that were reported indicates. I also have the impression that international consciousness in higher education is

increasing, perhaps exemplified by the fact that the 1986 meetings of the American Educational Research Association is focusing on international aspects of education.

Based on the materials sent to me, the following courses in higher education have a comparative/international focus:

1. "Historical and Cultural Perspectives in Higher Education." (Memphis State University, Instructor: Arthur Chickering.)

"The major substantive areas involve historical perspectives concerning different approaches to higher education elsewhere in the world. A focus is on understanding current issues in higher education in other countries and developing perspectives on current issues in American higher education by focusing historically on similar situations in other countries."

2. "International Adult Education and Social Transformation." (University of Michigan, no instructor listed.)

"Investigates problems facing postsecondary education and other adult education efforts internationally, using comparative methods and other pertinent techniques; different topics, such as adult literacy, cross-cultural transfer, and ways of reaching diverse populations, may be treated each time the course is offered."

3. "Comparative Higher Education." (State University of New York at Buffalo, Instructor: Philip G. Altbach.)

"A comparative focus on key issues in higher education that face American educators. Stress on such topics as the academic profession, student political activism, autonomy and accountability, the 'management of decline,' the politics of higher education, and others examined from the perspective of other countries. There is also an effort to present a broad historical overview of the development of the university in the West and in the developing countries of the Third World."

CURRENT ISSUES

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ASHE's "call" for syllabi in the "current issues" category, not supplemented by an additional request by myself, yielded six course outlines. Their titles are: (1) "Education in the Computer Culture: Leadership and Policy Issues," (2) "Higher Education and the Federal Government," (3) "Introduction to American Higher Education," (4) "Seminar in Higher Education in the United States,"

(5) "Purposes and Policies of Higher Education," and (6) "Current Topics in Higher Education."

Clearly, one is unable to identify major trends or suggest dominant foci on the basis of such limited data. But a few observations can be made on the bases of the syllabi. First, with one exception, the faculty appear to be teaching about a "higher education" that was, rather than that which is emerging or that which is. Second, the faculty seem committed to their courses in most cases. Third, the course topics appear to be rather predictable and not related to field-based issues. Fourth, the literature is primarily book rather than journal based and not research oriented.

To note that the course material speaks less to the present than to the past is not to suggest that it is "historical" in the proper sense of that term. Rather, much of it is dated in terms of the readings and meanings that are associated with them.

Although older sources may have great contemporary significance, with many examples in the syllabi, there are many contrary examples. In one syllabus, essential readings regarding the future were published in 1973, 1980, 1975, 1980, 1974, 1978, and 1979. One title, about science and technology, has been the focus of much contemporary scholarship and debate, none of which is referenced. In another syllabus the adult learning material appeared in 1980 and 1981, ignoring a vital current literature and the curricular trends material appears to be circa the late 1970s. In another syllabus, the "outcomes" section focuses on Astin's and Bowen's important books but ignores Pace's and others' more current work.

The faculty appear to be involved either as seminar leaders or lecturers and to use class involvement creatively in many cases. Some use group projects; while some faculty request seminar papers, others have a variety of interesting assignments, such as one which asks students to take Chronicle and journal articles and show the relationship between them. In two cases, the faculty appear to be overseeing their courses. One fifteen-week course has eight sessions devoted to visiting lecturers or group projects; another offering has ten. "Good work if you can get it."

Two of the courses are focused--one on computing and the other on federal relations. Of the four more "general" courses, one is heavily skewed to the faculty member's rather narrow research interest. The three remaining "general" courses deal with the following topics:

Course 1

Historical/Current Context
 Issues for the 1980s
 Program/Curricular Trends
 Adult Learning
 Undergraduate Education
 Financial Stress
 Collective Bargaining
 Faculty/Staff Development
 Community College
 The Ed.D. Dissertation Experience
 International Education Interchange
 The Future of American Higher Education

Course 2

History
 Organization and Governance
 The Presidency
 Faculty and the Curriculum
 Financing the Enterprise
 Research and Public Service
 Defining the Collegiate Experience

Course 3

Introduction to Higher Education
 Higher Education and Society
 The Purposes of Higher Education
 Institutional Roles
 The College Student
 The College Curriculum
 College Governance
 College Finance
 College Faculty
 Higher Education, the State and Federal Government
 Outcomes of Higher Education
 The Future of Higher Education

The overlaps and differences are obvious, although similar topics are treated differently through the readings assigned by various faculty. The courses are ambitious, maybe overly so, while they do not highlight other possible topics such as affirmative action, minority concerns, or university-industry relationships. These can be treated under other categories certainly, but why is a major heading a major heading and could it be argued that a study of, say, part-time faculty, might not also be the opportunity to examine those on tenure-track, financial issues, alternatives to tenure, etc.? The categories appear to be predictable and not very fresh or interesting.

Last, most course material comes from book sources, with some use of the Chronicle and Change. There is limited use of the journal literature and virtually no use of the research literature. There is also little emphasis on disciplinary contributions and the fields that seem to be ignored are psychology and social psychology.

There are many possible reasons for the use of "dead" rather than "living" scholarship, from the tolerance of the students to the reading habits of the faculty. It also takes longer to assemble relevant papers from current journals than to assign an easily available book. Given my role, my predictable bias suggests that journals be used more fully, since they reflect the issues as well as standards for student scholarship.

A richer assemblage of syllabi might allow for a richer analysis. ASHE members should be more responsive to the next request.

CURRICULUM AND INSTRUCTION

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The purpose of this brief essay is to sketch briefly and reflect upon major patterns across course syllabi for courses on college and university curriculum. This review draws upon the 12 syllabi submitted; no claim is made as to the representativeness of the sample. Further, all but one of the syllabi received were distinguished by their brevity and their focus on course content. Notwithstanding the limitations of the sample and of course syllabi in general, these syllabi provide a foundation for reaching several tentative generalizations about courses on higher education curriculum.

One of the most striking patterns across the syllabi concerns the widespread use of the trilogy sponsored by the Carnegie Foundation for the Advancement of Teaching: Missions of the College Curriculum (1977), Arthur Levine's Handbook on Undergraduate Curriculum (1978), and Frederick Rudolph's Curriculum: A History of the American Undergraduate Course of Study Since 1936. In the majority of courses reviewed, one or two of these volumes--Levine's compendium and/or Missions--provide the basic text for the course. While some supplementary readings are offered in most courses, most of these readings are taken from traditional texts such as Robert Hutchins' The Higher Learning in America and, in a few cases, recent reports such as the NIE report entitled Involvement in Learning.

A second pattern is the marked similarity across curriculum courses in terms of overall course content. Most courses include the following topics: historical and philosophical foundations, reforms and innovations, components (general education, professional/vocational education, major), curriculum planning and implementation, evaluation, and the dynamics of curriculum change. At the same time, there is some variation as regards the relative importance placed on various topical areas. In particular, some courses place major emphasis on general education, others stress historical foundations, and still others emphasize curriculum design and analysis.

In reflecting on the readings and topics indicated in the course syllabi reviewed, several telling observations can be made. First of all, as regards required and supplementary readings, I am struck by the extent to which the Carnegie trilogy is required reading and, which, in turn, has shaped both the content and structure of courses on curriculum. While these three books have arguably made an important contribution to the literature, I wonder why the recent higher education literature has been largely ignored. For example, the extensive scholarship of Arthur Chickering on adult learning and development has clear relevance for curricular content, curricular practices, and student learning. Yet this line of research, broadly defined to include the work of William Perry and David Kolb, has been given scant attention. In the same vein, course readings give little attention to recent journal articles, such as those by William Toombs and Anne Pratt on curriculum design. Moreover, the work of Maxine Green, William Pinar, and Elliot Eisener (among many others) on secondary-school curriculum has not been used as a springboard to enrich discussion of higher education curriculum. Useful supplementary readings on curriculum might be drawn in part from

journals and not exclusively concerned with higher education, such as the Journal of Curriculum Studies and the Journal of Curriculum Theorizing.

Secondly, there are a number of topics not included in most courses that merit consideration. In addition to learning theory, more attention might be given to relations between the structure of knowledge (including the disciplines) and curriculum development. In this area, the extensive scholarship of Joseph Schwab, Philip Phenix, and Stanley Elam might go a long way toward helping students wrestle with the epistemological issues which surely require consideration in the development of any program of study. Similarly, since few courses consider the management of the curriculum, more attention might be given to the administration, staffing, and resource allocation dimensions of curriculum development.

Given the growing interest in making curriculum more responsive to the needs of female and minority students, another topic which might warrant more attention concerns ways of adapting women's and minorities' perspectives to the content and shape of the overall curriculum. Another potential topic concerns the issue of the articulation between secondary schools and colleges and universities as regards curriculum development. Still another topic concerns trends and issues in graduate education. Within the last several years, numerous articles and reports have addressed each of these latter three topics.

In conclusion, there appears to be substantial agreement regarding course readings and major content areas across syllabi on college and university curriculum. Not least because the Carnegie trilogy has already become dated and ASHE has recently introduced a new reader on academic programs, it may be a propitious time for many of us (author included) to reexamine our courses on curriculum. In a preliminary way, this brief essay has identified several topics and considerations that might help to inform the design of courses on college and university curriculum.

EDUCATIONAL POLICY

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A review of course syllabi in the area of educational policy provides more evidence of ambiguity than insight into teaching in this area. Seven fully developed syllabi and three brief course descriptions were examined and it is clear that the subject of educational policy is treated rather differently among institutions. The syllabi and descriptions emanated from five institutions: Teachers College, Columbia; the University of Michigan; the University of Pittsburgh; St. John's University; and the University of Chicago. It is possible either that other higher education programs do not offer courses on educational policy; that they would have labeled such courses something else, such as public policy (see Schuster essay); or that they simply did not respond to the request for syllabi.

Of the syllabi and descriptions reviewed, one course is an introductory course in higher education looking quite broadly at "purposes and policies" in

higher education; two examine politics and policy analysis in education with little special attention to the higher education arena; and five examine the relationships between higher education and the federal government or state governments or both. One course focuses almost exclusively on the substance of higher education policies (e.g., curricular policies, fiscal policies, personnel policies); five emphasize the policy process usually at federal or state levels (e.g., structures, actors, modes of operation, key legislation); and two are concerned primarily with methods of policy analysis (e.g., defining the policy problem, developing and analyzing alternatives, cost-benefit analysis). Three courses pay attention to both policy issues and policy processes (two at state and one at the federal level), while two combine issues, processes and analytical techniques (one for higher education, another for all education levels).

The courses on federal government relations treat the broad issues of public policy for higher education, the nature of relationships between the federal government and higher education, legislative and budgetary processes, and the agencies and interest groups in the higher education policy arena. One course delves extensively into the area of federal support for academic science.

The course on state government relations emphasize the state role in the establishment of the state higher education system; the characteristics of the system; state level structures for decision-making, including state coordinating and governing boards; legislative and executive agencies; and processes for resource allocation, planning, program review, and interaction with private institutions. One course includes field trips to three state capitols.

Required reading for the five courses with detailed syllabi are quite diverse and it is clear that there is nothing approaching a "text" in this area. There are many overlaps among the supplementary reading lists provided for students, however. On the fundamental question of the relationship between higher education and the state, the following, along with various selections from the Carnegie Commission, Carnegie Council on Policy Studies, and Carnegie Foundation, appear frequently:

Bok, D. Beyond the Ivory Tower: Social Responsibilities of the Modern University. Cambridge, Massachusetts: Harvard University Press, 1982.

Hook, S.; Kurtz, P.; and Todorovich, M. The University and the State. Buffalo, New York: Prometheus, 1978.

Bailey, S. K. "Education and the State." Educational Record, Winter, 1974, 5-12.

Readings on the federal government and educational policy often include:

Finn, C. E. Scholars, Dollars & Bureaucrats. Washington, D.C.: Brookings, 1978.

Gladieux, L. and Wolanin, T. R. Congress and the Colleges. Lexington, Massachusetts: C. D. Heath, 1976.

Those at the state level include:

Millett, J. D. Politics and Higher Education. University, Alabama: University of Alabama Press, 1974.

_____. Conflict in Higher Education. San Francisco: Jossey Bass, 1984.

Berdahl, R. O. Statewide Coordination of Higher Education. Washington, D.C.: American Council on Education, 1971.

Readings from outside the field of higher education used for purposes of pursuing issues of politics, policy, and policy analysis include:

Allison, G. T. Essence of Decision: Explaining the Cuban Missile Crisis. Boston: Little, Brown, 1971.

Wildavsky, A. The Politics of the Budgetary Process (2nd ed.). Boston: Little, Brown, 1974.

_____. Speaking Truth to Power. The Art and Craft of Policy Analysis. Boston: Little, Brown, 1979.

Dunn, W. N. Public Policy Analysis. Englewood Cliffs, New Jersey: Prentice-Hall, 1981.

The above list gives the false impression that educational policy courses are "dated." While the "classics" do appear with the greatest frequency on reading lists, most syllabi include a preponderance of current articles and reports which vary with the specific focus of the course. Most courses require students to write one or two papers, but they are usually allowed to select the topic. In some courses a policy analytic paper is required.

It appears, then, that educational policy courses in higher education range from introductory courses utilizing the term "policy" to denote fundamental issues and purposes as well as complex social, economic and political relationships to mid-level courses which focus on federal and state relations and the process for formulating policy at these levels, to more specialized courses in which concepts of politics and methods of policy analysis are applied to the study of higher education at federal, state, and institutional levels. It would seem advisable to clearly distinguish between the more generic, "issues-based" use of the term "policy" and the more specific practices of policy formation and policy analysis.

FACULTY ISSUES

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The first observation to be made is that very few higher education doctoral programs devote an entire course to the subject of American college and university faculty. Only four such courses were identified: Blackburn's at Michigan; Altbach's at SUNY Buffalo; Weidman's at Pittsburgh; and Finkelstein's at Seton Hall (it appears that new courses on the professoriate are about to be established by Schuster at Claremont, H. Astin at UCLA; and Poppenhagen at Hawaii in 1986). Most

higher education doctoral programs focus on the professoriate segmentally in the form of courses on particular aspects of the academic professions that are most directly related to the training of higher education administrators. These include courses that focus: (1) explicitly on faculty's employment relationship with their organizations (e.g., academic personnel policies--terms of employment, tenure/promotion policies, faculty evaluation, retrenchment, etc.) (e.g., Lonsdale's at NYU); (2) on the form/model that the employment relationship might take (i.e., courses on faculty collective bargaining) (e.g., Birnbaum's at Teacher College); (3) on college teaching or teaching improvement (often courses that focus for the most part on curriculum and learning theory) (e.g., Austin's at Oklahoma State and Smith's at Florida); and (4) special current topics, such as "Ethics in the Academic Profession"; or faculty work performance (teaching research and service roles) at the University of Hawaii.

Some doctoral programs do attempt to treat the academic profession comprehensively, but do so as one part or section of a comprehensive, introductory survey course or seminar in higher education (e.g., Cresswell at Nebraska; Webster at Penn).

A Brief Description of the "Full Courses"

Among the doctoral programs that devote an entire course to the academic profession, how is the subject organized/conceptualized? An examination of the four full courses reveals a remarkable similarity/overlap in the principles of organization of the course material. The basic pattern is as follows: an introductory overview that attends to the historical antecedents of the modern academic role as well as the description of the current status of the profession (demographics--who are the professors); an examination of the academic career, including recruitment to the profession (professional socialization and career entry mechanisms; e.g., sponsorship); the career ladder and what determines how far and how fast one ascends (including job market activity and job changing); the core academic work activity/role components (i.e., teaching, research, and service) including participation in campus governance and in the life of the academic disciplines (at least one session devoted to each of these core functions); an examination of faculty/academic culture (the norms and values that guide work performance and rewards, including merit, professional autonomy, academic freedom/tenure); a sociological examination of the role that members of this occupational grouping play in the larger society, including a look at the participation of professors vis-a-vis other professional groups in political, religious, community and family life; a comparative examination of American professors vis-a-vis professors in other industrialized nations and third world nations as a means of identifying/clarifying the major assumptions that shape academic life in this country; some attention to particular subgroups of faculty (e.g., women and minority faculty or part-time faculty), and to particular issues related to faculty (e.g., faculty career development, faculty evaluation, ethics, etc.).

Beyond these common components, courses differ at the margin in terms of including explicit attention to theoretical frameworks/models for the study and understanding of faculty (Blackburn) and/or more highly developed emphasis on one of these areas than others (Altbach on comparative).

This similarity in organization/conceptualization is reflected in a remarkable similarity or convergence in the resource material employed. Among the general texts, the most frequently used was Finkelstein's The American Academic

Profession (Ohio State University Press, 1984), followed by L. Wilson's American Academics: Then and Now (Oxford University Press, 1979). Also used in at least one course was L. Lewis' Scaling the Ivory Tower (John Hopkins University Press, 1975); R. Chait and J. Ford's Beyond Traditional Tenure (Jossey-Bass, 1980); T. Caplow's and R. McGee's The Academic Marketplace. One also finds that in particular topical areas, certain resources/texts tend to be employed across the board. In the comparative area, it is Altbach's Comparative Perspectives on the Academic Profession (Praeger, 1978) and excerpts from J. Ben-David's work. In studying graduate student socialization/recruitment, it is Katz and Hartnett's Scholars in the Making (Ballinger, 1979). In studying rewards, it is H. Tuckman's work, most notably Publication, Teaching and the Academic Reward System (Lexington, 1976). For the work role, it is Austin's and Gamson's monograph on The Academic Workplace (ERIC-AAHE, 1983). For politics, it is Ladd and Lipset's The Divided Academy (McGraw-Hill, 1975). For ethics, it is D. Dill's special issue of the Journal of Higher Education, devoted to "Ethics in the Academic Profession."

Assignments/Course Requirements

Of the four courses for which data are available, three require either a research project (in one case, a group/class project) or an extended term paper related to the study of faculty and/or current issues in the academic profession. In addition, three of the four require either short papers and/or take home examinations. Moreover, all require extensive reading assignments beyond the text assigned.

The Part-Courses

Among the part-courses, virtually all focus on faculty for four or five sessions. There tends, however, as in the case of the whole courses, to be a remarkable congruence/overlap in the organization/content of those four-five sessions. They tend to focus on three basic areas: faculty development and faculty evaluation; faculty work experience/work role/work load; academic career trajectory/development/cycle/ladder/stages, including the reward system recruitment to the professions; and mobility. The readings tend to be quite diverse and differ from course to course, but are, broadly speaking, congruent with the full courses in the various topical areas.

FINANCE

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Institutions and Professors Submitting Syllabi

University of Arizona	Larry L. Leslie
Arizona State University	Richard Richardson
University of California, Los Angeles	William Zumeta
The Claremont Graduate School	Howard R. Bowen
Teachers College, Columbia University	Richard E. Anderson
University of Florida	Kern Alexander
University of Kansas	Yvonna L. Lincoln
University of Michigan	Richard L. Alfred
University of Minnesota	James C. Hearn
Vanderbilt University	John Folger
University of Virginia	Jay L. Chronister
University of Wisconsin, Madison	Richard A. Rossmiller

The prevailing purpose of a course in higher education finance appeared to be to provide an introduction to fiscal problems and issues in higher education. Some courses did, however, go beyond the introductory stages, suggesting a rather intensive analysis of the economics of higher education.

Examples

Provide prospective college and university administrators with a working knowledge of techniques and practices related to finance.

Give an introduction to fiscal issues for students interested in higher education administration.

Include a systematic study of the economics and financing of American higher education. Particular attention to be focused on the financial characteristics of colleges and universities--economic, social, and political--affecting the finance and budget practices of higher education.

Provide students of higher education with knowledge of core concepts, analytical tools, and research findings in the economics of education.

Provide students with fundamental financial knowledge essential to any position in postsecondary administration.

Course objectives were described in several ways; however, most prevalent was the desire to expose the student to the concepts and principles of economics affecting the financing of higher education and to create a familiarity with the relevant literature. At least one of the course descriptions taught by one of the most prominent professors in higher education stated course objectives dealing with certain primary issues: (1) What are the products of higher education? (2) In what quantities should these products be produced? (3) How should production be organized? and (4) How should the production be financed (i.e., who should bear the costs?).

One course description indicated that the major desired outcome is "to enable students to apply economic principles and concepts to administrative problem-solving." Another particularly well-constructed course, distinguishing between goals and objectives, stated the goal was "to have students reach a conceptual and practical understanding of the economic consideration underlying the finance of American higher education and the basic principles and processes of the fiscal management of college and universities." The objectives to achieve this goal included: (1) understanding the institution of higher education as a financial operation, (2) describing the interrelationship between institutional programming and financial support and management, (3) understanding and applying selected financial management models and strategies, (4) understanding major contemporary problems and issues, and (5) describing the sources and changing nature of financial support.

At least one course explained the course objectives in terms of outcomes or competencies expected of students upon completion. These included: (1) demonstrable skills in analyzing higher education in fiscal terms for financial planning and administration, (2) insight into budgeting and budgeting processes, (3) understanding of the budget as a planning instrument, (4) ability to examine, analyze, and develop financial statements, (5) knowledge of literature in the field, (6) sufficient understanding of issues to enable formulation of research designs for inquiry into fiscal issues, and (7) understanding of politics of higher education.

Most courses required that the student follow a syllabus with an outline of weekly topics and to prepare a paper (described in one syllabus as a "substantial" paper) on a related topic taken from a list of suggested topics. Generally, students were required to keep pace through assigned readings.

Evaluation of the student was usually based on scores of examinations (both mid-term and final), papers, class reports, and class participation.

Most of the reported courses employed extensive readings from journals, articles, and chapters in several books touching on higher education finance. Standard practice appeared to be for the students to read several articles and/or chapters from a variety of sources for each class meeting. There is no single text which covers the totality of higher education finance, including economic theory state and federal programs for distribution of resources, and budgeting and management practices. The texts most commonly used appear to be:

Bowen, H. R. The Costs of Higher Education. San Francisco: Jossey-Bass, 1980.

Bowen, H. R. Investment in Learning. San Francisco: Jossey-Bass, 1977.

Caruthers, J. K. and Orwig, M. Budgeting in Higher Education. Washington, D.C.: American Association of Higher Education, 1979.

In those courses where community college finance is analyzed, D. A. Brene-man's and S. C. Nelson's Financing Community Colleges (Brookings, 1981) was often used.

Other texts which appeared to be used rather extensively as supplemental texts were:

Levin, H. Cost-Effectiveness: A Primer. Beverly Hills, California: Sage, 1983.

Wildawsky, A. The Politics of the Budgetary Process (4th ed.). Boston: Little Brown, 1984.

The courses were generally conducted in seminars involving some limited lecturing by the instructor and, in some instances, extensive use of invited speakers. The guest speakers were usually practicing higher education administrators from within the institution or from other institutions in the immediate geographical area. Integral to many of the courses was the preparation and presentation of papers by the students. Topics for the papers were scheduled lectures and readings.

Three of the twelve institutions reporting courses in higher education finance offer two courses: Claremont, Columbia, and UCLA. In these institutions, one course is devoted to the economics of higher education--the theoretical and analytical bases supporting the theory of education as an investment. Much course content is devoted to the direct and indirect economic returns to human capital investment. The second course at these three institutions concentrates on resources, costs, and budgetary processes.

In those institutions having only one, the economic theory supporting higher education is discussed, though less extensively. Primary emphasis is on budgeting processes.

FOUNDATIONS/HISTORY/PHILOSOPHY

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In 1986, Random House Publishers announced that Frederick Rudolph's book, The American College and University: A History, was out of print. For most professors who teach graduate courses in the history of higher education, "out of print"

means "out of luck." Since 1962, this classic work has been at the heart of courses which introduce higher education students to the heritage of the American campus. News from publishers was analogous to the impact of the OPEC oil embargo on the American economy a decade ago: dependent consumers were caught unprepared.

Apart from the immediate panic of what to do about textbook orders for the forthcoming semester, this incident may well be the adversity which forces scholars to examine the state of the art in their teaching and texts. At the very least, it illustrates both the strengths and weaknesses of course syllabi in the history of higher education. On the basis of the twenty syllabi submitted to ASHE by instructors from higher education programs throughout the United States, the following profile and cluster of characteristics emerge:

- The history of higher education enjoys an impressive scholarly base and tradition of first-rate research and writing.
- Graduate courses in the history of higher education are vulnerable in that they are overly dependent on a few works which now may be either out of print or out of date--or both.
- There is a disturbing lag in the diffusion of knowledge from fresh, advanced scholarship to course readings.
- The history of higher education as a distinct topic has gradually, yet persistently eroded. The topic has gone from being the essence of many doctoral programs to a condition where it is peripheral even within seminars and syllabi.
- Dilution and erosion of the history of higher education as a syllabus topic promotes the risk of superficiality in the interpretation of historical episodes and issues.

Despite these storm warnings, the good news is that there now are excellent secondary sources recently published as articles and books which are readily available for revising the conventional wisdom on major topics in the history of higher education. Since 1970, there has been an impressive vein of lively, interesting research dealing with significant topics by a newer generation of historians. And, a substantial number of instructors continue to offer courses which clearly introduce excellent, fresh, historical scholarship on higher education. These are characterized by rigorous, imaginative, pedagogical approaches which incorporate the sources, methods, and logic of historical study into the analysis of past and present issues in higher education.

GOVERNANCE

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In an address to the 1984 Conference on Postsecondary Education, Clark Kerr noted the centrality of governance in the study of higher education. (See NCHEMS videotape series on "Shaping the Future of American Higher Education: An Organizational Perspective.") As conflicting demands for institutional autonomy and instructional accountability grew, the need to find solutions to the governance crises facing higher education increased. Herbert Simon observed that "The information-processing systems of our contemporary world swim in an exceedingly rich soup of information, of symbols. In a world of this kind, the scarce resource is not information; it is processing ability to attend to information." Too much of our information is disorganized; too little of the knowledge we need to make decisions is readily available. Information, accumulating at an exponential rate, has been creating a lag in meaning formation.

The study of governance, as described in the fourteen course syllabi submitted to the ASHE/ERIC Course Syllabi Clearinghouse, attempts to respond to the dilemma of an emerging information-processing society by focusing attention on the structures and processes surrounding decision-making in American colleges and universities, the influence and constraints on those structures and processes, and the theories and methods for improving and evaluating the effectiveness and efficiency of various governance mechanisms. Relationships between higher education and state governments and between higher education and the federal government also offer unique perspectives for the analyses of governance in colleges and universities.

The following fourteen people submitted course syllabi focusing on governance in higher education. Asterisks (*) have been used to designate the course syllabi that have been selected for inclusion in the AHSE/ERIC system.

Jerry Bailey--The University of Kansas
"The Governance and Administration of Higher Education"

*James L. Bess--New York University
"Governance of Colleges and Universities"

Robert Birnbaum--Teachers College, Columbia
"Issues in Organizational Theory and Administration in Higher Education"

John J. Gardiner--Oklahoma State University
"Governance in Higher Education"

Gregory A. Jackson--Harvard University
"Inquiry: Analyzing Decisions"

*Joseph F. Kauffman--University of Wisconsin, Madison
"Colleges and Universities: Their Organization and Governance"

Daniel Levy--Yale University
"The Politics of Higher Education"

*James L. Miller, Jr.--University of Michigan
"State Government-Higher Education Relations"

Marvin W. Peterson--University of Michigan
"College Organization and Administration"
"Governance, Planning, and Decision-Making in Higher Education"
(brief outline submitted)

Richard C. Richardson, Jr.--Arizona State University
"Administration of Higher Education"

Daryl G. Smith--Claremont Graduate School
"The Governance and Politics of Higher Education"

James L. Wattenbarger--University of Florida
"Higher Education Administration"

*John T. Wilson--University of Chicago
"Higher Education and the Federal Government"

James M. Yankovich--College of William and Mary
"Organization and Governance of Higher Education"

The syllabi selected for inclusion in the ASHE/ERIC clearinghouse collection identified course objectives, requirements, teaching approaches, and subareas of concern. Of the four syllabi, James Bess' course on "Governance of Colleges and Universities" offered a particularly integrated approach for a seminar in the subject area. Joseph Kauffman's syllabus, with its useful organizational rationale and insightful reading selections, presented an excellent alternative approach. The syllabi of James L. Miller, Jr. and John T. Wilson focused on higher education's relationship with state and federal governments. The ten remaining course syllabi were all worthwhile and helpful, but for reasons of space, were not included in the ASHE/ERIC system. If interested, please write directly to the author of any of these ten courses syllabi requesting a copy.

A collective definition of governance that results from considering the fourteen syllabi is that of a study of authority and power used in decision-making in the midst of internal and external forces which impact on an institution of higher learning. In reviewing resource materials most commonly used by instructors in the governance area, the following list emerged. (A more comprehensive list of books and journals used may be found in the ERIC governance essay.)

Astin, A. W. and Scherrei, R. A. Maximizing Leadership Effectiveness. San Francisco: Jossey-Bass, 1980.

Baldrige, J. V. Academic Governance: Research on Institutional Policies and Decision Making. Berkeley, California: McCutcheon Press, 1971.

Baldrige, J. V.; Curtis, D. V.; Ecker, G.; and Riley, G. L. Policy Making and Effective Leadership. San Francisco: Jossey-Bass, 1978.

Birnbaum, R. (Ed.). ASHE Reader in Organization and Governance in Higher Education (revised ed.). Lexington, Massachusetts: Ginn Custom Publishing, 1984.

Blau, P. M. The Organization of Academic Work. New York: John Wiley and Sons, 1973.

Cohen, M. D. and March, J. G. Leadership and Ambiguity: The American College President. New York: McGraw-Hill, 1974.

Corson, J. J. The Governance of Colleges and Universities. New York: McGraw-Hill, 1975.

Cowley, W. H. Presidents, Professors and Trustees: The Evolution of American Academic Government. San Francisco: Jossey-Bass, 1980.

Kauffman, J. F. At the Pleasure of the Board. Washington, D.C.: American Council on Education, 1980.

Keeton, M. Shared Authority on Campus. Washington, D.C.: American Association for Higher Education, 1971.

Mortimer, K. P. and McConnell, T. R. Sharing Authority Effectively. San Francisco: Jossey-Bass, 1978.

Perkins, J. A. The University as an Organization. New York: McGraw-Hill, 1973.

Sprunger, B. E. and Bergquist, W. H. Handbook for College Administration. Washington, D.C.: Council for the Advancement of Small-Colleges, 1978.

Walker, D. E. The Effective Administrator. San Francisco: Jossey-Bass, 1979.

Faculty interested in developing seminars in the area of governance might consider some of the resources and directions outlined in the syllabi found in the ERIC system. These materials offer useful insights for the design of a seminar on governance in higher education.

INNOVATIVE/NONTRADITIONAL

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There seems little doubt that Hermes would be intrigued by higher education courses dealing with the topic of innovation, or at least "the nontraditional," for these courses do indeed sit on the boundaries (and Hermes is that god) as well as lend themselves to interpretation--thus our word "hermeneutics." One way or another, each design in this sample of courses in the formal study of higher

education crosses boundaries, and illustrating this interpretation is largely a matter of providing a descriptive overview of shared characteristics, and then suggesting what implications these innovations might have for institutional administration.

What do these courses have in common? First, each course syllabus emanates from a context wherein the author has already envisioned a higher education of and for the future. A. Chickering at Memphis State, for example, envisions a "Future American College" (the course title), where adults can function without hassle and where learning is an overtly two-way street. Z. Gamson's "Innovation Process" and M. Jackson's "Urban Higher Education" (both from Ann Arbor) proceed in a loosely-coupled, external or open organizational system. My own "College Teaching" course at Montana State foresees a graduate college that can accommodate not only long distances but also extremely "pervious" (or at least porous) walls. Moreover, each of these highlighted courses tend to cross the boundaries of academic disciplines or fields of study: higher education and (1) cognitive psychology, (2) political science, (3) sociology, (4) anthropology, (5) futures and technology, and (6) world geography.

Another characteristic shared by these courses is that they "practice what they preach." That is, as courses whose topic concerns innovation, they employ nontraditional instructional strategies. A. Chickering uses individual learning contracts for each member of the class and he schedules the sessions of the course on occasional weekends in a Friday evening-Saturday format similar to Syracuse's "weekend warrior" program. A. Chickering, Z. Gamson, and I incorporate off-campus activities into our course designs: Chickering, in terms of students' attending a professional conference; Gamson, in students doing an organizational diagnosis on the campus of another institution; and I, in scheduling teleconference sessions as part of a self-paced course. In addition, these course designs invariably include group work so as to strengthen skills in interpersonal relationships; that is, students in these courses are required to learn with and from each other as well as to evaluate on another's work formally.

What are some implications for administering these courses? One of the most salient implications that I see for administering these courses concerns the interpretation of institutionally mandated forms that students use to rate teaching effectiveness. Results from these forms (e.g., Aleamoni or Oregon State) are often construed to mean that instructors ought to write course objectives that are always content-oriented and always chiseled in stone. Obviously, such an interpretation does not fit these courses in innovation, and any attempt to force a fit is likely to raise holy Ned with how each course has been conceptualized.

Furthermore, these courses strongly suggest that central administration must exercise less control and more flexibility and, simultaneously, give more trust and autonomy to organizational units in which the courses reside. That is to say, innovative instructional practices such as weekend scheduling, teleconferencing, off-campus visitation, and conference attendance will disturb, perhaps even destroy, existing boundaries, and so administrators responsible for keeping open the physical plant, registering graduate students at a distance or at least at times other than "9-5, M-F," budgeting so as to help higher education students attend professional conferences, and the like must be supportive in deeds as well as words.

In all, the courses in innovation are best described, I think, by the metaphor of having Hermes as their patron. Just as Hermes is the risk-taking god of

many things--of travelers and traders, transients and tricksters, as well as interpreters of boundary markings--so these risk-taking courses exemplify the many meanings of innovation. What they share is "at the edge" and they push us to reach for what we cannot quite yet grasp.

INSTITUTIONAL RESEARCH/PLANNING

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Institutional research has been defined as "research conducted within an institution of higher education in order to provide information which supports institutional planning, policy formulation, and decision making" (Saupe, 1981, p. 1). Analytical skills, familiarity with the institutional planning process, and an understanding of the role of information in decision-making are the basic requirements for effective institutional research.

Given these requirements, the range of knowledge required for institutional research and planning (IRP) cannot be taught in a single IRP course. Instead, IRP topics such as sampling techniques, costing studies, and the impact of college are most effectively taught in research methodology, budgeting, and student personnel courses. The institutional research and planning coursework establishes the linkages between these topics and introduces the student to the relatively few topics that are not taught in other courses (e.g., information theory), or which are given only slight attention (e.g., decision-support systems, environmental scanning and analysis, planning models). In summary, institutional research and planning is taught across the curriculum, with the IRP coursework pulling together related concepts and instructing the student in topics not taught elsewhere.

New problems and challenging imperatives are generating a revolution in college and university planning. Many institutions are discovering that they must increase their planning efforts if they are to control their own destiny (Keller, 1983). This attentiveness to planning is having a dramatic impact on institutional research and planning offices. Increasingly, IRP offices are expected to provide a variety of planning information, as well as arrange the process of planning. Institutional planning has emerged from informality to become a line function in many institutions (Norris and Mims, 1984).

This increased emphasis on planning has "trickled down" into the higher education curriculum, especially institutional research. Planning is a dominant theme in course titles and is a major course topic in most of the syllabi examined in this review. As the syllabi make clear, this instructional area is no longer just institutional research; increasingly, it is best described as institutional research and planning.

Two observations about the institutional research and planning curriculum are discussed in the previous paragraphs. The balance of this essay presents a concise and straightforward review of eight syllabi used in IRP core courses.

Three of the eight courses emphasize both institutional research and planning in the course title. Two others emphasize planning, two titles emphasize institutional research, and the final one stresses institutional assessment in the course title.

Most syllabi do not explicitly state the purpose of the course or provide a list of course objectives. This is somewhat disturbing since these are the primary ways for communicating to the students what they can expect to learn in the course. The syllabi with course objectives tended to emphasize: (a) understanding the role of institutional research and planning in institutional decision-making; (b) development of critical and rational thinking in using and interpreting data; (c) examining the institutional planning process and its relationship to the governance process; (d) understanding information and decision-support systems; and (e) development of skills in designing, critiquing, or administering an institution's organizational intelligence and planning function.

No syllabus lists required prerequisites, but some recommend courses or subject areas with which the student should be familiar. Knowledge of statistic techniques is recommended prerequisite in two syllabi. One of these two courses also recommends the student have completed, or take concurrently, core courses in Finance and Organization and Governance and be familiar with research design methods and issues.

Most syllabi list class participation and formal examinations as grade requirements for the course. Another requirement in almost all courses is a major project which composes 20 percent or more of the final grade. This project is usually a literature review, IRP report, or similar exercise.

Required textbooks are listed in most of the syllabi, but all courses tend to rely heavily on photocopied materials from the New Directions for Institutional Research series, the Association for Institutional Research, and reports published by the institution's IRP office. The most popular textbooks (used in two of the eight courses) are:

Jedamus, P.; Peterson, M. W.; and Associates. Improving Academic Management: A Handbook of Planning and Institutional Research. San Francisco: Jossey-Bass, 1980.

Keller, G. Academic Strategy: The Management Revolution in American Higher Education. Baltimore: John Hopkins University Press, 1983.

Course topics are included in seven of the eight syllabi. Course topics in three of the syllabi suggest that these three courses each emphasize a particular aspect of IRP. First, the course topics in the institutional assessment course stress the evaluation and assessment function of IRP (e.g., evaluating faculty, assessing the external environment). Second, topics in another course suggest an extraordinary emphasis on data collection and analysis; seven of the fifteen course topics contain the word "data" and several others are data-related topics (e.g., management information systems). Finally, one of the planning courses places a strong emphasis on strategic and operational planning; these two topics occupy about half of all class sessions.

One way to summarize the course topics is to consider them as two groups--macro topics and micro topics. Macro topics are more general and are applicable to a variety of IR functions. Examples include strategic planning, decision

support systems, and environmental scanning and analysis. The micro topics are more specific and generally are more applied than the macro topics. Examples of these topics include enrollment forecasting, faculty data, facility utilization studies, and cost studies.

References

Keller, G. Academic Strategy: The Management Revolution in American Higher Education. Baltimore: Johns Hopkins University Press, 1983.

Norris, D. M. and Mims, R. S. "A New Maturity of Institutional Planning and Information Management." Journal of Higher Education, 55 (November/December, 1984), 700-718.

Saupe, J. L. The Functions of Institutional Research. Tallahassee, Florida: Association for Institutional Research, 1981.

LEGAL ISSUES

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Higher Education Law is a rapidly changing field of study, with greatly expanding case resources and digest services. Unfortunately, the classroom materials have not developed accordingly, and through Fall, 1985, professors found themselves with four unsatisfactory alternatives:

- a 1979 casebook that had not been updated since 1982;¹
- a 1978 treatise that had not been updated since 1980;²
- a variety of other books, not updated since their publication in the late 1970s;³
- makeshift materials photocopied from court reporters and journals.

A 1984 study, Teaching Higher Education Law, reviewed the available texts and concluded: "Although the books noted in this section represent a diversity of approaches to teaching legal issues as they relate to higher education, a review of the materials presently available suggests a special need for reflection on the best methods for keeping textbook materials current. There is also a need for a comprehensive casebook especially created for introductory courses on law and higher education at the graduate level; and there will always be a need for new editions and new approaches to understanding the law of higher education"⁴

The study, as well as other materials gathered from law and education scholars, have established that higher education law courses tend to concentrate upon four major topics, and, depending upon the course materials and professors'

preferences, cover these areas in varying detail: the legal underpinnings of colleges, faculty legal issues, students and the law, and regulation of higher education. These four areas are found in the Edwards and Nordin text, and correspond to the division of Kaplin's text⁵. While each of the textbooks mentioned earlier treats these topics differently, they share several features:

1. Colleges as legal entities. Cases, commentary, and materials on the relationship of private institutions to the states, and the status of public institutions with varying amounts of autonomy. The approaches tend to be chronological, usually encompassing the Dartmouth case and cases in a state where the university has attempted to expand or clarify favorably its autonomy.

2. Legal issues concerning faculty. Issues concerning academic freedom, collective bargaining, affirmative action, and tenure are most frequently addressed here. Increasingly, matters of research and the legal implications for faculty are also addressed, reflecting the changing role of governments and industry in higher education funding.

3. The law concerning students. This section tends to be the largest, both due to the amount of litigation and to the evolving nature of the institutional-student relationship. The approaches here vary, but tend to incorporate the demise of in loco parentis and the rise of a contractual relationship. Inevitably, the reading includes Tinker, Horowitz, and Healy, and incorporates significant attention to Bakke and other student admissions and affirmative action cases. The Kemerer and Deutsch book and Millington text, of course, concentrate in the most detail upon student issues.

4. Government and campus. This area includes a range of items, not always treated similarly by the various authors reviewed or professors polled. However, the increasing role of the federal government in financing and regulating institutions is covered, as is the increasing role of states and other external bodies, such as accrediting agencies and the community. A reading of several dozen syllabi suggests that this large, fourth area is unevenly treated. In some courses, there is little time for such a treatment and the approach appears to be a grab-bag of loosely connected items, while in some courses, there is considerable depth evident in the detailed treatment of institutional relationships with state or federal governments. This is perhaps the area of greatest fluidity and variance, and potentially the place where most individual faculty preference is manifested.

In summary, this brief review updates Sorenson's extended survey of instructional materials, and finds four large areas of convergence among the several texts and syllabi reviewed. A major gap appears to be the need for a current and frequently revised casebook. Among the items listed in the reference list are the various texts employed by at least two professors responding to the surveys.

Endnotes

¹H. Edwards and V. Nordin, Higher Education and the Law (Cambridge: Institute for Educational Management, 1979), with 1982/83 cumulative supplement.

²W. Kaplin, The Law of Higher Education (San Francisco: Jossey-Bass, 1978), with supplement.

³P. Hollander, Legal Handbook for Educators (Boulder: Westview, 1978); F. Kemerer and K. Deutsch, Constitutional Rights and Student Life (St. Paul: W 1979); J. Millington, The Law and the College Student (St. Paul: West, 1979). Two other texts used by at least two classes were M. Olivas, Ed., The Review of Higher Education, 7(4) (1984) (special issue on Higher Education Law) and P. M and E. Gaffney, Church and Campus (South Bend: University of Notre Dame Press 1979).

⁴G. Sorenson, Review Essay: Teaching Higher Education Law (Monograph 84-2) (Houston: IHELG, 1984); reprinted in Review of Higher Education, 7(4) (1984), 295-319.

⁵As this entry was being prepared, a second edition of Kaplin's 1978/1980 text was published. While it is far more comprehensive than even his excellent earlier work, the eight chapters still fit this typology.

MANAGEMENT INFORMATION SYSTEMS

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Courses addressing the information requirements for colleges and universities offer content ranging from computer technology to information useful for various management decisions. Elements from the full range (hardware to information for decisions) were in the four syllabi reviewed. None of the syllabi, however, were for complete courses designed specifically for a study of information systems in higher education. Among syllabi examined, "information systems" was usually included as a part of a course on institutional research, on decision-making, or on the management and organization of colleges and universities.

Following the practice in the field at the present time, I do not recommend a separate course on management information systems. As described conceptually, I do recommend "information systems" as part of a course emphasizing information as it relates to the decision-making requirements. Two sections follow: first, a conceptual recommendation; then suggestions on course content, activities, and resources.

Recommended Conceptual Approach

With the widespread introduction of organizational behavior and strategic/contextual management concepts in higher educational curricula in the 1980s, an additional perspective on information requirements became evident. The "technically oriented" information requirements of the 1970's needed supplementation by "managerially oriented" systems. What this means exactly is still unclear; however, it is clear that the new information available to colleges and universities will cost less, is simplified, and is more directly related to the long-term success of the institution (see Cope, 1985; Rockart, 1983; Sullivan, 1985).

Most information systems, whether computerized or not, have been designed for operating purposes (e.g., paying bills and collecting funds); and control purposes (e.g., meeting affirmative action guidelines, determining unit costs); and to provide internal, historical information. Strategic choices, and the information required for assessing organizational behavior, require information largely in the form of intelligence about future external conditions, as well as opinions about the current conditions.

The information that is largely the subject of this syllabus, following Anthony's (1965) influential framework, serves three institutional purposes: operational, control, and contextual/strategic. The deficiencies now appear greatest at the contextual/strategic level. That is where planning capabilities are least developed because, as Heydinger (1983) has observed, college and university planning developed through four stages: (1) Budget Planning first, then (2) Goals and Objectives Planning, then (3) Forecasting, and finally (4) Strategic Planning. As each form of planning was adopted, supporting information systems were developed.

Operational information is maintained on a day-to-day basis in order to record and assure performance. As a highly accurate and detailed record of the past and present about students, expenditures, facilities, and so on, it has almost no strategic value. Operational information is gathered as unfocused by-products of operating system requirements. Reports from the operating system are essentially spin-offs from a system designed to perform routine, bottom-up, paper-work processing. This is the heart of a Management Information System (MIS), but is not adequate for a Decision Support System (DSS) as recommended later.

Information for the purposes of guidance and control involves year-to-year tactical decisions about the deployment of resources and their effective and efficient application. Here the issues are new staff positions, new or modified programs, assessment of affirmative action achievements, studies of student progress, and so on.

Information for strategic purposes aids in the delineation of alternative courses of direction that are three to ten years in the future. Strategy determines the nature and direction of the institution. Strategic choices relate to the scope of services, choice of those served, growth considerations, and the nature of relationships with other organizations. Strategic choices are about "what" in the "what/how" separation. Strategic/contextual information is in the form of unstructured "intelligence." Intelligence is future-oriented, quickly assembled, subjective, often delivered word-of-mouth from creditable sources. I am inclined to believe all technology-based information will be useless for strategy.

Therefore, operational information is for maintenance; information for control is for managing and guiding the institution; information for strategic purposes is for adjusting to developing new contextual situations. These three "levels" together approximate the Decision Support System (DSS) as described by Hackman and Libby (1981) rather than a Management Information System (MIS) as described, for example, by Bocchino (1972) and Long (1983). DSS recognizes the importance of the different kinds of information required for different purposes described in 1965 by Anthony: operations, control, and strategic.

References

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Hackman, J. D. and Libby, P. A. "Toward More Effective Strategic Planning: Annotated Readings About Planning, Human Information Processing, and Decision Support Systems." Planning for Higher Education, 9(4) (Summer, 1981), 40-46. (This whole issue is valuable for information.)

Heydinger, R. B. "Using External Information in Planning: Some Tools for Expanding Our Vision and Enhancing Our Strategic Thinking." (Paper presented at the Conference on Academic Renewal, Ann Arbor, Center for the Study of Higher Education, University of Michigan, June 12-14, 1983.)

Long, L. E. Manager's Guide to Computers and Information Systems. Englewood Cliffs, New Jersey: Prentice-Hall, 1983.

Rockart, J. R. "The Changing Role of the Information Systems Executive: A Critical Success Factors Perspective." Sloan Management Review, Fall, 1983, 15-25.

Sullivan, C. H. "Systems Planning in the Information Age." Sloan Management Review, Winter, 1985, 3-12.

A suggested syllabus for a seminar in the area has been proposed and is part of the longer essay in the ERIC system.

ORGANIZATION/ADMINISTRATION

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The collection of twenty-six course syllabi includes nineteen that dealt with organization and administration generally; five on administration in a specific context; and two business management courses.

The nineteen general courses encompassed thirty subtopics. The most frequent subtopic, models of organizational structure, was covered by eleven of the courses. Other common subtopics, covered by six to eight courses, were: power

and politics, organizational theory, leadership, decision-making, history, organizational goals, and external environment.

Most of the common subtopics appear to have value for both research-oriented and applied programs. However, programs that aim to prepare qualified administrators would do well to include several subtopics that are currently less common--especially effectiveness and pathology, conflict, roles, and values.

The nineteen general courses had very similar titles, so one is likely to assume that students have been exposed to some common body of knowledge--that "O&A" on one transcript is essentially the same as "O&A" on another. This is definitely not the case. Professors who teach O&A have an almost boundless supply of potential topics to cover, almost always in one short quarter or semester, and there is no particular pattern in their choices.

The five courses that dealt with special topics in organization and administration focused on human relations, academic affairs administration, personnel administration, academic department administration, and the organization and administration of professional schools.

Only about half of the courses used an overview text on organization and management; no such text emerged as a standard. Readings commonly included various journal articles, which is a sensible way to tailor the content to the purposes of the course and the special interests of the students.

Professors for these twenty-six courses used a wide variety of pedagogical approaches, but most of them stayed close to a reading and lecture/discussion format. Other activities included case analyses; writing a major paper; book reviews; guest lecturers; writing an original case study; experiential activities; and writing a short, topical paper.

Among the syllabi, a few are especially noteworthy:

Organizational Theory I and II (James Bess--New York University). The size and scope of the literature on organization and administration argue for a two-semester sequence that permits both a broad overview and selective depth. Students are encouraged to explore alternative readings and compare perspectives. Activities include case analysis and writing an original case study.

Higher and Postsecondary Institutions as Complex Organizations (Marvin Peterson--University of Michigan). Peterson provides a straightforward treatment of many basic topics, beginning with a bit of history and context for higher-education organizations and moving on to models for analysis and higher education in a broader system.

Higher Education Administration and Organization (David Holmes and Jeff Kaplan--University of Vermont). Holmes and Kaplan provide a creative approach through their text selections: the ASHE Reader (Birnbaum), Men and Women of the Corporation (Kanter), Academic Strategy (Keller), and a choice of Grant: A Biography (McFeeley), The Last Hurrah (O'Connor), or The Soul of a New Machine (Kidder).

The Administration of Academic Affairs in Higher Education (William Moore--Ohio State University). The range of topics in this course on a central function in higher-education administration is comprehensive, and the reading includes

material on women and minorities. The bibliography is diverse and intriguing. Moore uses a workshop to incorporate practice and simulation.

Administrative Behavior, Leadership and Personnel in Colleges and Universities (Joan Stark--University of Michigan). The syllabus is a model for other syllabus writers. A unique feature of the course is that each segment culminates in a product. For example, the overview of administrative behavior theories leads to identifying one's own administrative style/philosophy.

Case Studies in Administration Behavior in Higher Education (Joan Stark--University of Michigan). Stark uses about twenty case studies in this advanced course. Students are expected to apply to these cases what they have learned earlier. The emphasis on applications, practice in problem identification, and developing solutions could be invaluable to the future administrator.

PUBLIC POLICY

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There are easier tasks than defining what constitutes a higher education seminar on "Public Policy."¹ Indeed, the most striking characteristic of course syllabi relevant to the public policy aspects of higher education is their wide variation in concept and content. This divergence no doubt flows from quite different conceptions of just how important to students of higher education is some familiarity with the process and content of policymaking in the public sector. Accordingly, in some instances self-contained seminars are offered on the public policy aspects of higher education, while more often the topic is subsumed within a wider-ranging course.

In an effort to create some order out of the melange of a dozen remarkably different syllabi, the following comments touch on (a) diversity and scope, (b) a pedagogical note, and (c) bibliographic sources:

Scope. Courses with some public policy content are arrayed along a continuum beginning with those that deal exclusively with higher education public policy and ending with those that merely touch lightly on that topic. Found at one end of this continuum are such offerings as "Higher Education and the Federal Government" (John Wilson, University of Chicago) and "State Government-Higher Education Relationships" (Jerry Miller, University of Michigan); each is confined to either state- or federal-level policy. Some approaches span federal and state arenas (e.g., "Policy and Politics in Administration," Jerry Bailey, University of Kansas; "Public Policy Dimensions of Higher Education," Jack Schuster, Claremont Graduate School).

Several syllabi conceptualize the "politics" of higher education in a larger sense, thereby encompassing within one course the processes of policymaking (or "decision-making") that take place in both "internal" and "external" settings. The internal (i.e., intra-campus) politics of decision-making unquestionably

influence virtually every aspect of campus life, but one may question whether such matters of "governance" properly belong in the same domain as that of public policy. Whether one concludes that internal governance and external public policy are Siamese twins or third cousins, it is clear that some courses link the two together (e.g., Joseph Kauffman's "Colleges and Universities: Their Organization and Governance," University of Wisconsin-Madison). Still other offerings--general speaking, "overview" courses that include a public policy segment as one among numerous topics--are clustered at the other end of the continuum (e.g., "Purposes and Policies of Higher Education," Robert Birnbaum--Teachers College).

A comment is in order about courses on the economics or financing of higher education. Those syllabi are reviewed elsewhere for purposes of this syllabus clearinghouse project. It is worth noting, nonetheless, that such courses ordinarily have less to do with economics, as such, than with public policy issues broadly conceived. I suspect that no higher education "economics" course requires any economics as a prerequisite. Rather, these courses typically address broad, value-laden policy questions, such as who should attend college and who should pay. Some specialized courses are more narrowly targeted--such as a seminar on "Higher Education and the Labor Market" (William Zumenta, University of Washington)--and, while not precisely a public policy seminar, raise complex, important public policy issues.

The categories of policy areas identified in the syllabi are varied and endless. To name some topics broached in these courses: tax policy, tuition policy and student financial assistance, federal science policy, anti-discrimination/affirmative action policies, government regulation, "developing institutions," collective bargaining, labor market influences on public policy, international exchange programs, research policy (e.g., protection of human and animal subjects; classified and security-sensitive research), statewide coordination and planning, program review and approval, licensure, and standardized testing.

Pedagogy. Most syllabi reveal unremarkable course requirements and instructional strategies. An exception: at least one seminar--Jerry Miller's "State Government-Higher Education Relationships"--builds in a substantial site-visit component. This consists of one-to-three-day visits to each of three state capitals (in 1985, Lansing, Columbus, and Springfield) where students attend compactly scheduled meetings with key executive, legislative, and interest group actors in the higher education policy process.

Bibliographic Sources. Two points are worth noting here. The first has to do with the evident absence of any consensus about the most important sources. This should not be surprising; after all, so diverse are the course offerings that it is not feasible to identify staples that appear frequently among the syllabi. Furthermore, those who contemplate organizing a public policy seminar are aware of the frustrations encountered in locating good, timely material. Nevertheless, a sampling of sources, drawn primarily from the syllabi on hand, are listed below.

Second, a good many source materials that are valuable for providing insights into the nuances of the policy process consist of so-called fugitive materials. To illustrate, if one wishes to utilize current developments (for example, the reauthorization process for the Higher Education Act) for instructional purposes in order to dramatize for students the relevance and importance of the policy process, one obviously cannot rely on published books and articles. Useful sources would include, for instance, legislative committee reports, interest group

in-house analyses and newsletters, speeches by public officials, unpublished correspondence, court decisions, and executive department annual reports and memoranda. Even excellent libraries are unlikely to hold many of the most helpful contemporary materials.

The following sources are organized into three categories: those that concern themselves with public policy matters specific to higher education, those that describe the policy-making process in more generic terms, and some general references or guides that can be useful to the student. The inclusion or omission of a particular book or article should be understood simply as a reflection of this author's biases.

Higher Education Policy

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- The United States Budget in Brief. Washington, D.C.: U.S. Government Printing Office. Published annually.
- The United States Congress Handbook. Washington, D.C.: Action Committee for Higher Education. Published annually.
- The United States Government Manual. Washington, D.C.: U.S. General Services Administration. Published annually.

To summarize, the boundaries of higher education public policy are indeed fuzzy; accordingly, syllabi that address higher education public policy are notable for their wide-ranging differences in concept and content. Nevertheless, each course is based on the assumption, explicit or implicit, that the student of higher education can ill afford not to acquaint him or herself better with the public policy's profound and growing impact on American higher education.

Endnote

¹The only previous effort known to this writer to describe and assess course offerings in the higher education/public policy subfield is David D. Dill's "Teaching in the Field of Higher Education: Politics of Higher Education Courses," Review of Higher Education, Winter, 1979, 2(2), 30-33.

RESEARCH/EVALUATION

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The ERIC Clearinghouse on Higher Education currently has nine syllabi in the area of research and evaluation. These syllabi fall into the general areas of research design and methods, program evaluation, naturalistic inquiry, and institutional self-study. In the research design and methods area, courses are intended to either introduce students to a range of methodologies so that they will have a better understanding of what research is, what methods suit their interests and abilities, and what courses they will need to enroll in to prepare for their dissertations (Anderson and Thielens--Teachers College; Leslie, Arizona) or the courses are intended to culminate in a research proposal (Loadman--Ohio State; Morrison--UNC, Chapel Hill; Fairweather--Penn State). Blackburn (Michigan) attempts both, with students given an option of a final examination or presentation of a research proposal. The basic texts for these courses include Moore, Developing and Evaluating Educational Research; Orienstein and Phillips, Understanding Social Research; Loring and Harold, Proposal Preparation and Management; Handbook, Selltitz et al., Research Methods in Social Relations; the Kidder revision of Selltitz et al.; Campbell and Stanley, Experimental and Quasi-Experimental Designs for Research; and Glaser and Strauss, The Discovery of Grounded Theory: Strategies for Qualitative Research.

Yvonna Lincoln (Kansas) teaches "Naturalistic Inquiry in Educational Administration," using the Guba and Lincoln text, Effective Evaluation, supplemented by journal readings. This text is also used by Friedman (UNC-Chapel Hill), along with House's Evaluating With Validity and Popham's Educational Evaluation in a course on program evaluation. Morrison (UNC-Chapel Hill) teaches another section of that course using the Popham text supplemented by readings in research journals and texts. Both Friedman and Morrison require students to design evaluation proposals for a specific educational program. Lincoln requires two examinations and reports of the experience of using several qualitative methods.

Kells (Rutgers) teaches a course entitled "Institutional Self-Study, Planning and Evaluation in Postsecondary Education," and Peterson (Michigan) teaches "Institutional Research and Planning." Kells uses Jedamus and Peterson's Improving Academic Management; Keller's Academic Strategy; and Kell's Self-Study Processes. Students are expected to design an institutional self-study for a particular institution. Peterson uses Hopkins and Massey, Planning Models for Colleges and Universities; the New Directions for Institutional Research monograph series, and the Jedamus and Peterson text. Students must complete a project and a literature review of one area of the IR/planning literature.

SOCIOLOGY OF HIGHER EDUCATION

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We received only one syllabus for a sociology of higher education course. That was for a course taught by Floyd Hammack at New York University. The fact that we received only one syllabus for a sociology of higher education course probably means that not many such courses are offered in higher education programs. Certainly, however, there is abundant material available for anybody who wants to teach such a course. The following people, to name just a few, are American sociologists who have published one or more book-length works on the sociology of American higher education since 1950: Philip Altbach, Jessie Bernard, Peter Blau, Burton Clark, Irving Louis Horowitz, Christopher Jencks, Paul Lazarsfeld, Seymour Martin Lipset, Robert Merton, Talcott Parsons, David Riesman, Edward Shils, Neal Smelser, Martin Trow, and Logan Wilson.

It is worth noting that practically all of these people were situated, throughout most of their careers, outside higher education programs. It is unlikely that a list of distinguished people who, since mid-century, had studied higher education from a psychological perspective, or an historical one, would contain such a very large proportion who had spent their careers outside higher education programs. The reasons why so few courses on the sociology of higher education seem to be offered in higher education programs and why such a large percentage of people who have written important books about the sociology of higher education are located outside higher education programs are worthy of study in themselves.

STUDENT PERSONNEL ADMINISTRATION/ COUNSELING/HUMAN DEVELOPMENT

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In reviewing course syllabi, there appears to be little congruency among the 104 programs offering a degree in College Student Personnel at the master's and doctoral level. This may change, however, as the Council for Advancement of Standards (CAS), sponsored by professional associations in student affairs, has developed guidelines for preparation programs in student affairs. A document has been developed and sent to all participating associations for review and approval. The CAS document has been released and should be used as a reference in planning a program in this area. After reviewing the guidelines, it is my opinion that these

outlines should be followed in the development of courses in student personnel work. The CAS standards include two types of emphasis in the development of coursework--administration and student development.

The current status of courses in student personnel administration may be best described as varied. D. Meabon and H. Owens (1984), in the summer, 1984 issue of the NASPA Journal, state that there is little consistency in purposes, objectives, content, and emphasis on outcomes. This was supported in my review and request for copies of syllabi.

The most popular text is Student Services: A Handbook for the Profession, edited by U. Delworth and G. Hansen and published by Jossey-Bass in 1980. According to Delworth, the second edition is being developed and will be available in 1987. About one-half of the courses that use Delworth and Hansen as a basic text follow the outline in the table of contents. The other one-half of the courses use it as a text and supplement it with other books and reprints of journal articles.

Another popular choice among student personnel educators is to use a series of handouts in combination with campus speakers representing the various areas of student services. Most of the handouts are selected by the individual instructors from the Journal of College Student Personnel, the NASPA Journal, the Journal of Higher Education, and the NAWDAC Journal. Also included in this list are the 1937 and 1949 versions of the American Council on Education publication, "A Student Personnel Point of View."

Other books that are used as texts for introductory courses include D. G. Creamer's Student Development in Higher Education, published by the American College Personnel Association in 1980, and G. D. Kuh's new direction series entitled New Directions for Student Services: Understanding Student Affairs Organization (1983). Another book edited by W. Packwood entitled College Student Personnel Services (1977) was used in several courses but is out of print at the present time.

The survey course in Student Personnel Administration usually includes the following topical areas: historical perspectives in student affairs, developing a philosophy of student personnel work, professional standards and organizations, organizational structures and campus components, an introduction to student development theory, student environments, student characteristics, and student development programs.

Following the introductory course, many programs include a course(s) on student development theory and interventions. The most popular texts include: Chickering's Education and Identity (1982) and New Directions in Student Services: Applying New Developmental Findings (1972) by Knefelkamp, Widdick, and Parker. Also included in these syllabi are The Future of Student Affairs by Miller and Prince (1976) and Four Critical Years by Astin (1977).

The traditional approach in many of the courses relating to student development include topical discussion of the major theorists, followed by a discussion of intervention strategies based on the five theory clusters, including: (a) psychosocial theories, (b) cognitive development theories, (c) maturity models, (d) typology models, and (e) person-environment interaction models.

Some programs include specific courses on each of the cluster areas focusing on the particular developmental philosophy of the instructor or the campus program. Most tend to focus on the works of Chickering, Kohlberg, Perry, Gilligan, Erikson, Loevinger, and Piaget.

In addition to the student development course, programs often include a course on organization and administration of student personnel which include organizational theory, budgeting, and management. The majority of counseling courses are taught by other departments rather than by student personnel or higher education departments.

VOCATIONAL/TECHNICAL

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Individual Course Syllabi Summaries

Principles and Practices of Vocational Education

Principles of vocational education, its development, social and economic values and purposes, contemporary priorities, regulations, and scope and nature of the program components of vocational education are analyzed.

Objectives:

1. To gain an understanding of social, economic, and political formulations of vocational education.
2. To identify characters of program and become familiar with roles of personnel in vocational education, as well as trends and issues.

Text:

Evans, R. and Herr, E. Formulations of Vocational Education (2nd ed.) Columbus, Ohio: Charles E. Merrill, 1978.

Organization and Administration of Vocational Education

A general overview of vocational education, administrative structure, funding of vocational education, program structure and standards, method of determining needs, plant and equipment, in-service training components, advisory committees, as well as reporting and auditing.

Objective:

To gain expertise in understanding principles of organization and administration of vocational education.

No Text RecommendedDeveloping Curricula in Vocational Education

To develop prospective and currently practicing vocational teachers and administrative competence and skills needed to develop curricula in vocational education.

Objective:

To provide an overview of curriculum development, with emphasis on curriculum planning and sequency content, selection of material, and evaluation of curriculum.

Text:

Finch, C. F. and Crunhilton, J. R. Curriculum Development in Vocational and Technical Education. Boston: Allyn and Bacon, 1979.

Evaluation and Analysis in Vocational Education

Analyzing measurement and evaluation theory and techniques and developing a student and/or program evaluation instrument.

Objective:

To determine the rate of the measurement in evaluation, and develop assessment models in relationship program, team, personnel, and cost/benefit systems.

Texts:

Wentling, T. L. Evaluating Occupational Education and Training Programs (2nd ed.), 1980.

Boyd, J. L. and Shimberg, B. ETS, 1971.

The Emergence of Vocational, Technical, and Occupational Education in America Specialization Seminar

A two-phase independent study program combined with seminar sessions focused on the development of vocational/technical education and human resource development in vocational education.

Objectives:

To gain knowledge and demonstrate skills in the area of designing curriculum, analyzing available resources, and projecting trends in vocational education.

Text:

Total Guide furnished by Nova University.

Recommendations

More content that relates directory to practicum experiences in vocational/technical education for administrators should be provided.

Materials in finance and fiscal management should be developed with problem-solving techniques being required.

Emphasis on the developing of need assessments should be inserted in teacher/administrator training curricula and techniques for analyzing secured data with implementation strategies.

* * *

Sample course syllabi, along with more comprehensive essays, appear in the ERIC data base (ED 272 117 through ED 272 132). Syllabi are also available for on-site reference in the ERIC Clearinghouse on Higher Education's library collection. Microfiche (MF) and/or paper (PC) copies of the syntheses can be purchased from the ERIC Document Reproduction Service (EDRS), 3900 Wheeler Avenue, Alexandria, Virginia, 22304-5110. (See order form for complete information and prices at end of this handbook.)

adult/continuing education	ED 272 117
college student	ED 272 118
community college	ED 272 119
curriculum/instruction	ED 272 120
educational policy	ED 272 121
faculty issues	ED 272 122
finance	ED 272 123
foundations/history/philosophy	ED 272 124
governance	ED 272 125
institutional research/planning	ED 272 126
legal issues	ED 272 127
management information systems	ED 272 128
organization/administration	ED 272 129
public policy	ED 272 130
research/evaluation	ED 272 131
vocational/technical	ED 272 132

Chapter Two

USING GAMES AND SIMULATIONS IN HIGHER EDUCATION PROGRAMS

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Many higher education programs have as a major purpose the preparation of persons for advanced professional practice. In some ways, the curricular problems of such programs are not unrelated to those of other programs for training professionals. It is easy to teach about the subject through accepted techniques of lecture, recitation, seminar, independent study, and other commonly used devices; but teaching students the processes in which an successful practitioner must engage is much more difficult.

Medicine deals with this problem through an extensive internship, functioning in settings specifically designed to ensure that the student is exposed to a wide range of "field problems" under close supervision. Legal education on the other hand pays only brief attention to this through processes such as the moot court, and that profession has been increasingly criticized for its lack of concern for the preparation of its students for professional practice.

Higher education has taken several approaches. The easiest and perhaps most prevalent is to ignore the issue on the ground that the previous experience which most of our students bring to us has provided on-the-job training, making further attention to experience unnecessary. But we all know that having some experience is not the same as having the right experience, which in turn is not equivalent to "learning the right things from it. Real life experience can teach all kinds of bad habits which become difficult to correct and which probably cannot be usefully addressed solely through reading and classroom discussion.

Another approach is through the use of internships, externships, or field experiences. When done properly they can have significant educational value; they also can be expensive and time consuming, and their usefulness often depends upon factors beyond the control both of the student and the faculty member. Some of these activities are probably done poorly, in inappropriate (albeit available) settings, and with little supervision, control, or evaluation.

Games and simulations are another curricular approach to the problem of providing students with realistic situations structured to reveal significant interactions which lead to focused learning objectives established by a faculty member. These techniques are widely used in business, industry, the military, and other settings and would appear to have wide application to professional preparation in higher education as well.

The Committee on Curriculum, Instruction and Learning surveyed the ASHE membership this winter to determine the availability of game and simulation material related to the field of higher education, and the extent to which this approach was used in instructional programs.

The result was disappointing. There were only 45 responses out of approximately 650 queries sent, a dismal response rate of 7 percent. Of the respondents, three indicated that they did not use games or simulations in their teaching and had no interest in doing so; 22 said that while they did not use these techniques they were interested in learning more about them; and 19 indicated that they did use such materials. Of these, 14 indicated that their materials were developed enough to share with colleagues. The initial intention of the committee was to collect and publish these materials for the use of membership at cost. The low response rate suggests that there is no economically viable way of doing this.

Colleagues who have used games and simulations testify to their value in programs of advanced professional education and training. To some extent, the apparent lack of interest in these techniques by others may be a reflection of the difficulty of learning about the existence of appropriate materials. The purpose of this paper is to identify existing game and simulation resources which can be used as-is or adapted by faculty in programs of higher education as both an introduction to existing materials and a description of curriculum resources which have been specifically designed for this purpose.

Before discussing in greater detail the kinds of materials now in use, it would be useful to define briefly the structure and purposes of games and simulations. The Guide to Simulations/Games for Education and Training (Horn & Cleaves, 1980) describes them as "an activity undertaken by a player or players whose actions are constrained by a set of explicit rules prior to that game and by a predetermined end point. . . . Their elements comprise a more or less accurate representation or model of some external reality with which players interact in much the same way they would interact with the actual reality" (p. 7).

Games may include computer simulations, role-playing, problem-solving exercise, bargaining interactions, in-basket simulations, and similar activities. They are, by definition, interactive--that is, the players react to a planned environment or the actions of other players--and often actions taken by the players result in consequences that call for still further action. As in real life, there are many possible solutions to a problem; the "best" solution in a technical sense may not always be the most acceptable one and therefore may turn out to be the "worst," in which problems are often not solved but lead to other problems. Unlike real life, the environment within which the student actions take place is controlled, the behaviors and their consequences can be observed and critiqued to enable feedback which can lead to real learning, and in some games the situation can be repeated over time to demonstrate the changes in behavior which have taken place.

The wide-scale use of game and simulation techniques in a large number of settings has generated an exceptionally rich array of materials used in training and educational programs of many kinds. To the extent that colleges and universities share common characteristics with other interpersonal, intergroup and organizational settings, many of these materials could be used successfully with little or no modification in higher education settings. The survey asked respondents not to report on the use of such materials, but rather to indicate the use of materials which either had been originally created or had been modified specifically to meet the unique needs of higher education programs. This exclusion may therefore undercount the use of games and simulations now being used in the field.

Faculty in our programs have available to them several sources which describe in detail a number of games and simulations used in a wide variety of noncollegiate settings. These include the Handbook of Simulation Gaming in Social Education (Stadsklev, 1979), which lists, categorizes, and describes over 600 simulations; The Guide to Simulation/Games for Education and Training (4th Edition) (Horn & Cleaves, 1980), which lists, describes and evaluates over 1,000 games now available and contains useful summative essays; the series of Handbook of Structured Experiences for Human Relations Training (Pfeiffer & Jones, 1970), published by University Associates; and the Annual Handbook for Group Facilitators (Pfeiffer & Jones), published each year since 1972, also by University Associates. Many of the exercises presented in these volumes could be used as is or easily adapted to our use. The Second Handbook of Organization Development in Schools (Schmuck et al., 1977), prepared by the Center for Educational Policy and Management of the University of Oregon, presents a number of simulations created or adapted for school settings, and the translation to college and university settings would be relatively simple in most cases. Finally, several volumes exist which incorporate the use of games and simulations into a higher education framework. These include the Handbook for College Administration (Sprunger & Bergquist, 1977), and the Handbook for Faculty Development (volumes one and two) (Bergquist & Phillips, 1975 & 1977), published by the Council for the Advancement of Small Colleges.

A small number of simulations dealing with higher education have been in the past, or are now, commercially available. Edge City College, published by Urbandyne, was a four-year simulation of a college operation with complete role descriptions and schedules of activities. The recently completed The Academic Game, published by the Institute of Higher Education Research and Services at the University of Alabama, simulates faculty competition for status and focuses attention on problems of sex and rank in institutional politics.

Faculty who are intrigued by the concepts of gaming and simulation, but wish to learn more about the pedagogical aspects of their use before trying them, will find the Handbook of Simulation in Social Education (Part 1) (Stadsklev, 1974) to be extremely useful. Simple, concise, and free of jargon, it describes the rationales and processes of simulation and gaming, as well as ways in which materials can be designed and evaluated.

The survey also uncovered a small number of games or simulations specially designed by ASHE members to meet the instructional needs of programs in higher education. In total, 14 respondents described the use of 21 sets of materials. While some of them may not meet the strictest interpretation of the definition presented here, they all have some useful purposes, thus justifying dissemination of their existence to the ASHE membership.

By far the largest number of materials (13 of the 21) were related to organization and administration. Two other areas, budget and finance, and curriculum were represented by four games or simulations each. In some cases, the materials could have reasonably been included in more than one category.

The organization and administration games and simulations could be divided roughly. In the first category, the materials with which the players interacted were designed to replicate a real setting or represent a stylized one, but there was no strong conceptual orientation guiding the structure of the game or the activities of the players. These included a board game, "American Higher Education," developed by Steven Smartt at Southern Regional Education Board dealing

with principles of college and university finance and administration but relying on "more luck than skill" (perhaps thereby being more realistic than one would care to think); Arthur Browne's board game, "College Clout," developed at the University of Arkansas in which students representing constituencies try to accumulate as much influence as possible; "Gulf State College," an in-basket simulation used by John Andes at West Virginia University with exceptionally comprehensive briefing materials and data available through the University Council for Educational Administration; "Grants Management - A Model Day" developed by Margaret Arter at Palo Verde College to permit functional examination of the ongoing processes of a grants and contracts office; and Robert Birnbaum's "Role Playing Laboratory" used at Teachers College, Columbia University, to study the effects of roles, data, and stress on campus decision-making.

A second group of simulations deal with similar issues of organization and administration but are based upon some specific conceptual orientation which provides a unifying structure to the experience. Debriefing after the simulation would, in most cases, not only be used to examine the interaction critically, but also as an opportunity to consider the usefulness or appropriateness of a specific conceptual scheme. The paradigms used were variously drawn either from the field of education or from the applied behavioral sciences. Philip Chamberlain at Indiana University, for example, assigns students to different roles and then uses a specially designed instrument depicting collegial-humanistic and technical-analytical systems to demonstrate how different perceptions can lead to campus conflict. "Governance Inventory," a card-exchange game developed by Birnbaum based upon roles and institutional goals in five idealized governance models (bureaucratic, collegial, political, anarchic, and bargaining), has much the same function.

Darrel Clowes at Virginia Polytechnic Institute and State University has used aspects of contingency theory suggested by Thompson to design four paradigmatic types of college organization to which students relate specified environmental situations in a simulation entitled, "Structuring the Decision Process: Administrative Designs for a 2-Year College." The material is suitable for any institutional setting, however.

Charles Jenkins at SUNY-Brockport has designed three different games with conceptual bases. The first is a que-sort, followed by activity and discussion which focuses on exploring Herzberg's theory of motivation. The second is a card-exchange game dealing with aspects of personal leadership styles, and the third is a card game acquainting students with leadership contingency principles. Birnbaum has also developed a role-play simulation concerned with leadership, in which "deans" assigned authoritarian or democratic leadership roles work with faculty on a simple task. A data feedback design permits analysis of results related to individual commitment to, and satisfaction with, the results of the joint task.

Finally, Arter has utilized a series of activities related to organizational communications in which oral and written information is passed between individuals, and dyads consider communications issued related to listening, problem-solving, MBO, job descriptions, and evaluations.

The second major area in which simulations have been developed is budget and finance. There are almost certain to be materials available in addition to the four reported here, since it is difficult to conceive of a program in college and university finance which did not provide hands-on opportunities to

manipulate data under controlled conditions. The examples collected in the survey are probably typical, however, Of the four exercises, the only one which is computer based is reported by Brent Poppenhagen at Cleveland State University. Using the MICRO-U data base available from NCHEMS, teams of students compete to fine-tune a budget given a series of specified problems. The other three exercises include "Cost U," developed by Robert Huff and revised by Richard Featherstone at Michigan State University; the "College Budget Simulation Exercise," created by Robert Sullins at Virginia Polytech; and "Budget Exercise," developed by Clowes. To varying degrees, these exercises provide base data and budget formats within which budget requests are to be assembled. In several cases, structure or roles of participants are specified.

The last of the three areas in which the use of games and simulations has been seen is in curriculum development. The interaction developed by Jack Shuster and John Thelin at Claremont Graduate School, entitled "Great Debates: Historical Issues in Higher Education," has been placed into this category, even though it might appropriately be listed under history or philosophy. After reading primary source material, students are given roles of major historical figures and asked to debate issues related to those documents. Clowes has developed two curriculum-related activities. In one called "Curriculum Decision-making: A Simulation for Community Colleges," students are given an existing curriculum with productivity calculations and asked to reduce costs through a series of curriculum decisions. In the other curriculum exercise, students are asked to plan the curriculum of two- or four-year colleges while considering elements of curriculum design as well as the economics of academic administration. Finally, Clowes has developed a simulation titled, "A Case in Point," designed to demonstrate through role-playing the academic and social issues involved in developing remedial programs in higher education.

Depending upon your perspective, the findings of this survey can be seen either as pessimistic or optimistic. It is pessimistic in that it appears as if a relatively small number of faculty in higher education programs are utilizing an instructional technique that has met with wide approval in a number of other instructional settings. The lack of reported use of games and simulations in areas such as history of higher education, or comparative higher education is unfortunate but perhaps understandable; the lack of reported use in many courses related to policy analysis, management, administration, finance, and related areas is more disturbing. Perhaps the problem is not in its use, but in the method selected to collect the information. There is some evidence for this; for example, courses are now being offered in collective bargaining--an area requiring simulated negotiating activity--yet no such simulations were reported. Still, to the extent that the results even remotely reflected reality, it may be that even in those programs which have the preparation of skilled professionals as a major purpose, we are teaching people about higher education, rather than developing their ability to function effectively in leadership positions.

Still, there is room for optimism as well. The literature referred to earlier is recent, and we may be in the early stages of a discovery and adoption process. If so, we may look in the future for profound changes in the way instruction is carried on in higher education programs, as well as the raising of new issues concerning the training of faculty members to utilize this new instructional technology.

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Chapter Three

TELECOMMUNICATIONS AND COMPUTER DATABASES

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Every area of higher education is affected by new technologies. From the faculty office to the central administration of a state system of higher education, the number and form of new technologies, applications, and equipment is monumental, mystifying, and pervasive. Televised instruction, once relegated to the relative safety of the office of continuing education, now links major campuses in multicampus systems for regular instruction and administrative purposes. Electronic mail enables the institutional researcher to exchange information and data on a day-to-day basis, whereas before, such exchanges involved boxes of printouts (for the data) and yearly professional meetings (for the exchange of information and ideas). Large scale databases of literature and statistics are now accessed by faculty and graduate students using microcomputers; they are no longer the sole domain of librarians and/or computer gurus.

Across the nation, higher education faculty strive to prepare professionals for a wide variety of roles within colleges, universities, and related agencies and organizations. The students who enroll in higher education courses for professional development or to attain an advanced graduate degree in this field of study must be prepared to master the environment in which they will devote their professional lives. However, the revolution in telecommunications and computer technologies has yet to touch deeply the curriculum within higher education programs. While the applications of these technologies are widespread and growing within higher education (Lewis, 1983; Baldrige, Roberts, and Weiner, 1984), there is little evidence that students in higher education are prepared to utilize them. This chapter provides an overview of the applications of telecommunications and computer technologies to higher education research, instruction, and service. Where possible, the use of these technologies in higher education graduate programs or staff development activities is described.

Admittedly, there was a dilemma in writing this chapter. The information and evidence of the use of telecommunications and microcomputer technologies in higher education programs is scant. If applications of the new technologies in higher education programs were the sole source of information for this chapter, it would have been truly brief. On the other hand, the evidence of higher education use of telecommunications and computing over the past 50 years is quite extensive, and the variety and combinations of these technologies is growing rapidly. A comprehensive review of each technology within higher education would have consumed far more than a chapter. What has resulted is somewhat of a technological sampler, with allusions to applications within graduate programs of higher education. A more thorough treatment of telecommunications applications is provided by Lewis' (1983) Meeting Learners' Needs Through Telecommunication: A Directory Guide to Programs; a comparable resource on the variety of applications of microcomputers to higher education is Baldrige, Roberts, and Weiner's (1984) The Campus and the Microcomputer Revolution: Practical Advice for Nontechnical Decision Makers.

The Telecommunications Technologies

Video Technologies

Microwave (ITFS). The Stanford Instructional Television Network (SITN) offers graduate education to engineers and other high technology staff in 118 firms within a 50 mile radius of the university's Palo Alto campus. SITN uses four instructional television fixed service channels (ITFS) to provide live broadcasts of courses. ITFS is a "closed circuit" television broadcasting technology that delivers one-way video and audio transmission. SITN supplements the ITFS broadcasts with simultaneous two-way audio links to the instructional sites. Thus, groups of students at a business site in Silicon Valley can interact with the instructor and with students at other locations where the class is being conducted. Whole degree programs, such as the master's degree in electrical engineering, can be earned through SITN courses, while others, such as mechanical engineering, require use of campus-based laboratory facilities in addition to the SITN class sessions.

Microwave (Point-to-Point). The Indiana Higher Education Telecommunications System (IHETS) manages a video network using a combination of point-to-point microwave relays, ITFS video, and cable television and an audio network, the State Universities Voice Network (SUVON) to connect all public and independent colleges and universities and vocational-technical colleges in the state. Graduate programming in medicine, dentistry, nursing, pharmacy, engineering, speech and audiology, education, agriculture, and finance is provided.

Cable Television (Interactive). A long operating and noteworthy use of cable television and related technologies in graduate education is the South Carolina Educational Television Network (ETV). ETV uses open-circuit broadcast public television, closed-circuit television, public FM broadcasts, regular telephone service, and the audio talk-back features of the closed-circuit television to provide graduate instruction. This network connects the nine University of South Carolina campuses and the ten technical colleges, as well as public schools and hospitals throughout the state. Complete M.B.A. and master's in engineering programs are offered over the closed-circuit network, supplemented by video cassette lessons.

A 1980 follow-up of students enrolling in the ETV classes found that adult learners placed great importance on the convenience and flexibility the system provides in their learning. ETV also found its adult learners to be more highly motivated than traditional campus-based students. At least one faculty member must recognize the effectiveness of ETV before an academic department will begin to consider participation in the production and delivery of television courses. ETV learners especially value the interaction with faculty that the closed-circuit television mode provides (Lewis, 1983, pp. 215-217).

Electronic Blackboard. Similar in structure to Stanford's SITN distance education program is the electronic blackboard system at the University of Illinois at Urbana-Champaign. This two-way audio and two-way visual system permits the instructor and students at seven instructional sites to send and receive pictures and verbal discussion in problem-solving and computational class activities. Most of the students enrolling in the electronic blackboard system are pursuing a master's degree in engineering and are full-time employees located at one of five businesses near the remote instructional sites. Each

classroom has one or more electronic blackboards, television monitors which communicate the instructor's writing, and an audio system for full class interaction. Special advising days are established for students enrolled in this program. Materials to be used for the classes are mailed in advance from the Urbana campus. The system permits the interaction of on-campus and off-campus students.

Since its inception in 1974, class enrollments have steadily grown. Administrators of the program find that faculty teaching styles must be compatible with the capabilities of the system for optimally effective instruction to occur. Also, the interaction between on-campus and off-campus students enhances the instruction through the inclusion of an older, more experienced student population (Lewis, 1983, pp. 199-200).

Audio Technologies

Since 1980, the Higher Education section at Iowa State University has used audio teleconferencing technology to provide: (1) graduate courses, (2) inservice programs, and (3) meetings for professional organizations. Iowa State has also provided consultation to colleges, universities, consortia, and professional organizations (including AAHE, AERA-J, and ASHE) in the effective design of educational programming using the medium.

New York University, Iowa State University, the University of Iowa, and Oklahoma State University are among those that have used audio telephone conferencing (audio conferencing) to provide regular graduate instruction. NYU classes involve sites in New York City, Long Island, and Puerto Rico; interactive audio conferencing is supplemented by the use of one-way slow-scan television, enabling the instructor to use visuals with the classes at remote sites. The Iowa State University and University of Iowa classes include three or more sites and any of the 28 community college campus locations in the state. Iowa State University's higher education classes have also included students and guest presenters from other states; one-third of each class is in face-to-face class sessions on the weekend, wherein the students and instructor meet in a common location; two-thirds of the class are two to three hour audio conference seminars, scheduled after work hours for the convenience of part-time students.

Ratcliff (1983, 1983-84) described the inservice programming for college trustees provided by the Iowa State program. The medium was used to accomplish four inservice goals: intercommunication, dissemination, accessibility, and relevance. Aside from the annual meeting of trustees' associations (such as the Association of Governing Boards (AGB) and the Association of Community College Trustees (ACCT)), there was little opportunity for trustees of different colleges to communicate and share common ideas and concerns. Similarly, the dissemination of information about national trends and issues in higher education is limited to association journals, newsletters, and meetings. Using audio teleconferencing, statewide meetings of trustees have provided for inservice education, connecting the trustees with exemplary programs and national expertise in topics relevant to local and regional concerns. In this way, two-way communication among trustees, dissemination of practices and expertise, and access to relevant information was facilitated using audio teleconferencing.

The University of Southern California and Iowa State University doctoral students have experimented with a joint doctoral research seminar. The informal sessions of the seminar allow for students to exchange research ideas and

information. Virginia Tech (VPI and SU) faculty have used audio conferencing to meet with off-campus student groups to plan programs of study and to discuss preliminary examinations.

There are four ways to use the telephone for audio conferencing. First, there is the dedicated line; the community colleges of Iowa, for example, have a telephone line which links all the colleges; classrooms and meetings rooms are equipped for audio conference sessions. A second way to audio conference is through a teleconference bridging switchboard. This switchboard need not be located anywhere near the conferencing sites; AAHE, for example, has used telephone bridging switchboards in Colorado, Connecticut, and Iowa to conduct audio conference workshops. If a college or university does not have a telephone bridging switchboard (and many do!), time on someone else's switchboard can be rented. A third way to audio teleconference is through the conferencing capability of your college telephone system; such systems often allow for conferencing of three to six sites external to the campus. Lastly, there are the telephone companies: AT&T, Sprint, MCI, and other firms will provide conferencing capabilities for a fee.

Audio conferencing must be carefully planned to capitalize on the strengths of the medium (direct personal communication) and to minimize its weaknesses (lack of visual and material cues). Monson (1978) and Williams (1978) have provided guidelines for conducting audio conference sessions; Ratcliff (1984) has outlined considerations in the regular planning of programming using the medium.

Recording Technologies

One application of videotape technology is the Colorado State University (CSU) Resources in Graduate Education (SURGE) program. SURGE provides graduate study in business administration, computer science, and the natural sciences by videotaping live, for-credit classes on the CSU campus and then distributing them two days later for viewing at worksites. The goal of SURGE is to provide distance learners with a learning experience similar to that experienced by on-campus students. While the student interaction with peers and with the instructor is lost in a videotape, SURGE faculty supplements the medium by visiting the worksites where the distant learners are located. Additionally, the off-campus students are encouraged to telephone the instructor during his/her regularly scheduled office hours for consultation, assistance, and guidance. SURGE faculty report that they are able to maintain a travel schedule to student worksites and still maintain their course schedule, since their on-campus class doubles through videotape for instruction with the off-campus group (Lewis, 1983, p. 119).

Another application of videotape instruction at the graduate level is the Textile Off-Campus Televised Education (TOTE) program, which began in 1976. TOTE, like SURGE, uses color video cassettes of regular on-campus classes for its off-campus students. The cassettes are sent to distance education students along with a course syllabus. TOTE courses resemble traditional correspondence study, with faculty members corresponding with students through the mail and over the telephone. All TOTE students are required to have at least one face-to-face meeting with the course instructor.

The success of a TOTE student seems to hinge on self-discipline. Like correspondence study, students may fall behind in their work. However, this

program reports high persistence among its students; success is attributed to the high motivation of working adult students and the consultation and assistance program by the TOTE coordinators at remote sites (Lewis, 1983, pp. 163-164).

Computer Applications in Higher Education

Administrative Applications

One of the administrative concerns about telecommunications and computer-based technologies in higher education is how to assess decisions relative to the planning, purchase, implementation, and evaluation of such innovations on campus. Carey (1984) provided a lay guide to the assessment of the planning and evaluation of an electronic text system for universities. Included in the assessment model were procedures for identifying equipment costs, staffing needs, production timetables, and cost recovery options. Students of higher education can use Carey's assessment guide to build a model for services in a particular college or university.

Case Studies of Academic Computing

The case study method of instruction has frequently been advocated for classes in higher education. Case studies on the applications of computers in colleges, therefore, may be useful resource materials for such classes. Hunter (1978) provides a case study of the use of computers as teaching and learning tools at Dennison University (Ohio) over the past 13 years. Issues such as student access to computing, costs and equipment decisions, and the process of defining computer literacy on campus are described.

The case study of academic computing at Bennett College (Hunter and Kearsley, 1981) profiles the organization and administration of computing facilities at a minority institution. The development of academic computing over 16 years is traced in the study.

Databases and Networking

The campus director at Central Community College in Columbus, Nebraska, is completing his dissertation in higher education at the University of Michigan. A faculty member at a college in Frederick, Maryland, is working on hers at Pennsylvania State University. A university administrator in Puerto Rico is pursuing his degree with the higher education program at New York University. These people are part of the growing ranks of higher education graduate students who are full-time employees and part-time students located at great distances from a research library and from their faculty advisors. "Computer networking," the process of linking two computers together to exchange information, can be helpful to higher education programs in a number of ways.

Computer networking can be helpful to higher education faculty and graduate students at each step of the research process (Tallon, 1982). Each of the major bibliographic databases (BRS, DIALOG, ORBIT) have established evening services for microcomputer operators. What this means is that the higher education graduate student, regardless of location, can access the ERIC document and journal bibliography, the Dissertation Abstract International Database (DATRIX), and thousands of other information sources worldwide from their homes. Such

services are also available through popular gateway services, such as Compu-Serve's IQUEST search service.

Computer networking can be a powerful supplement to telecommunications-based distance education programs. For example, the West Virginia College of Graduate Studies uses a statewide library network and on-line research literature search capabilities to make it possible for graduate students in any part of the state to have the advantage of research facilities (Lewis, 1983, p. 233). The use of databases by distant learners at three campuses of the State University of New York has been examined by Allen (1980).

Once students or faculty members are familiar and practiced in conducting their own search services, some of the major limitations caused by not being on-campus can be eliminated. However, skill and knowledge of how to conduct effective searches must be developed in the researcher.

Once the higher education student or researcher has conducted his or her literature search and has obtained relevant demographic, educational, and other statistical information, treatment of the data can commence. Small data sets can be analyzed on a microcomputer using popular statistical packages, such as SPSS/PC or Northwest StatePak. Popular spreadsheet and integrated software programs contain mean, standard deviation, and variance functions, enabling the construction of statistical analyses by entering the formulas for a particular method into the spreadsheet.

Larger data sets can be constructed on the microcomputer, proofed, and then transferred ("downloaded") to the university mainframe research computer for analysis. For example, a part-time doctoral student (who was also a full-time college administrator) at a college 60 miles from Iowa State University, used a microcomputer and a modem at his campus to access the ISU mainframe computer to use the SAS statistical package in his research data. Shale and Milinusic (1985) described a system for the entry and analysis of descriptive research at the Athabasca University, a distance education institution of higher learning. The FEHR-Practicum, a computer-simulated program for teaching research and evaluation methods, assists students in the preparation of preliminary surveys, evaluation proposals, budgets, and final reports. Shiffler et al. (1978) reported the relative success of the FEHR-Practicum in teaching students these research and evaluation skills. Students no longer need to be physically present at the research university in order to use its computational facilities, but such students need to develop skills in using a microcomputer, telecommunications software, and a modem in order to analyze research data from a distance. Tougler and Seidner (1984) described a computer-based instructional package to teach students to transfer files between microcomputers and a VAX computer at Boston College.

Perhaps the most familiar microcomputer is for word processing. Research articles and dissertation drafts can be constructed on the microcomputer and sent through a spelling and grammar checker, thereby reducing the demands on the student, the thesis editor, and the faculty on that student's graduate program of study committee. Coupling the microcomputer and telecommunications further enhances this capacity. Documents created at a distance can be sent over telephone lines to the university, where a laser printer can produce text, tables, and graphics with near typeset quality.

Joint authorship and sharing of manuscripts between campuses is also possible using electronic mail. GEDUCOM and BITNET are networks allowing for the exchange of text information between college and university campuses. Pierce and Cooley (1985) demonstrated that writers at Northern Illinois University and the University of Pittsburgh could co-author an article describing the use of the AERA Forum on CompuServe. Shackel (1983) evaluated a system to facilitate the writing, refereeing, acceptance, and publication of a professional journal using a computer support system.

The American Educational Research Association, Postsecondary Division (AERA-J), maintains interest groups on the electronic network of CompuServe. This network holds promise for the sharing of information between students and professors, between researchers and practitioners for point-to-point, across a state, across the United States, and internationally. Jim Morrison, at the University of North Carolina (Chapel-Hill), has conducted seminars on computer networking using the AERA Forum on CompuServe. Similarly, the 50 scholars across the country who are selected each year to receive Kellogg Fellowships are linked through a computer network to share ideas and information. One no longer waits for the annual professional meeting to exchange ideas and information with colleagues; computer networking promises to augment the interchange at professional meetings by enabling on-going dialogue among researchers over the balance of each year. Likewise, faculty on campus can communicate regularly and effectively with students in diverse and remote locations using electronic message systems and networks (Quinn et al., 1983).

Databases as Instructional Resources

There are over 100,000 electronic databases worldwide which are accessible by microcomputer and telephone modem. The contents of the sources, their services, and how to access them is the focus of the publication, Database End-User. This monthly journal provides valuable reviews to the professional researcher. Additional special databases have been developed by institutional researchers and may have application to teaching and research in higher education.

On the popular gateway service, CompuServe, is CACI's "Instant Demographics." This service provides social, economic, and educational data for any census division, county, zip code, or state in the country. CACI can also develop a mailing list on gummed labels of households of a given location, educational, or demographic profile. These lists are generated from large scale consumer research organizations such as Gallup, R. L. Polk, and Metromail, as well as U.S. Census data. The information can be delivered to the researcher on-line, on an IBM-PC compatible diskette (Lotus 1-2-3 format), or in a printed report.

One large scale database is the Higher Education General Information Survey (HEGIS). Andrew (1984) provides a useful and detailed description of the database, its contents, and its potential for researchers interested in secondary data analysis.

A smaller database is that developed by Batson (1985), which describes the types and frequency of legal cases involving faculty issues. Batson's purpose was to use the database for advanced administrative planning and forecasting; however, the case descriptions may provide a valuable resource in the teaching of legal aspects of higher education.

Another special database is that developed as part of the IDEA faculty evaluation system at Kansas State University (Cashin and Perrin, 1978; Cashing and Slawson, 1977a, 1977b). Contained in the IDEA database are the ratings of over 500,000 students who evaluated over 24,000 courses at 152 colleges and universities using this system of measuring faculty performance.

Conclusion

This chapter has presented a brief overview of a variety of telecommunications and computer technologies and their relationships to graduate education and to higher education as a field of study. No claim is made that the programs, practices, and strategies described are representative or comprehensive of the research, development, and deployment of the new technologies.

The extensiveness of the new technologies on campus and their relative absence from both the curriculum and the instructional process of graduate programs of higher education is indicative of a serious lag. For those graduate programs oriented toward the scholar, the study of the impact of technological change on campus should be included in the curricular and research agendas of higher education programs. For those programs whose goal is the preparation of practitioners, the need to incorporate computer and telecommunications technologies in the content and the process of education is even more compelling. The references and resources sections which follow should provide some guidance to those who wish to incorporate computer and telecommunications innovations into the study of higher education.

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Resources and Contacts

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(217) 333-6634

Mary Lou Allen, Asst. Dean
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Network
401 Durand Bldg.
Stanford University
Stanford, CA 94305
(415) 497-3616

Databases and Networking

BRS Technologies
1200 Route 7
Latham, NY 11219
(518) 783-1161

University Microfilms Int.
Dissertation Abstracts
300 N. Zeeb Road
Ann Arbor, MI 48106
(800) 732-0616

CompuServe, Inc.

EasyNet

5000 Arlington Centre Blvd.
Columbus, OH 43220
(800) 848-8990

Database End-User
Meckler Publishing
11 Ferry Lane, West
Westport, CT 06880
(203) 226-6967

DIALOG Information Services, Inc.
3460 Hillview Avenue
Palo Alto, CA 94304
(800) 324-2564

134 N. Narbeth
Narbeth, PA 19072
(215) 664-6972

Trinet, Inc.
9 Campus Drive
Parsippany, NJ 07054
(201) 687-3965

U.S. Dept. of Education
ERIC Processing & Reference
Facility
4833 Rigby Ave., Suite #301
Bethesda, MD 20814
(301) 656-9723

Chapter Four

ASSOCIATIONS AS INSTRUCTIONAL RESOURCES

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Alexis de Tocqueville's conclusion in the 1830's that Americans were a nation of joiners appears valid today. The American people still look to associations as powerful tools to help get things done. In their essay on the emergence of higher education as a field of study, Paul L. Dressel and Lewis B. Mayhew noted:

As scholarly fields mature and gain acceptance, they acquire trappings which symbolize their status as disciplines--scholarly associations restricted to those with at least rudimentary competence in the field. . . . Here higher education as an evolving field again reveals its youth (p. 5).

While groups such as the Association for the Study of Higher Education (ASHE) offer promise of evolving into disciplinary associations, at the present time they require only an interest in the subject for membership and thereby do not fully satisfy the criterion identified by Dressel and Mayhew. Therefore, it would seem appropriate in a handbook on instructional resources to be used by teachers of American higher education to consider the materials offered by many diverse associations which serve American higher education.

The scope of this chapter will be limited to an identification of national associations which provide resources for use within specific areas of higher education. The author is indebted to Stephen K. Bailey* and Lauriston R. King for their pioneering work on educational associations headquartered in the Washington, D.C., area; to Jonathan D. Fife and to Joan S. Stark for their efforts at categorizing areas of involvement of national associations; and to editors of directories identified in the bibliography for their comprehensive listings and descriptions of the nation's higher education associations.

The Washington Establishment

Most higher education associations of national scope are headquartered in Washington, D.C.; most of the available literature on the subject is, therefore, focused on the national capital.

Dependent upon definition, there are somewhere between two hundred and fifty and three hundred education associations, organizations, and institutional representatives located in or near the nation's capital. All told, these associations, organizations, and agents purport to speak for more than 70 million people who are engaged or deeply involved in the

*The author wishes to thank Stephen K. Bailey, Thomas A. Karman, Donald W. Robinson, and Donald Tritzschler for reviewing the chapter and for offering helpful suggestions.

American educational enterprise--one-third of the nation's population (Bailey, p. 6).

In 1973, Roger W. Heyns, then president of the American Council on Education (ACE), referred to the 200 associations and agencies that were the constituent and associated members of the ACE, along with another dozen or so associations of major scope as "the national educational establishment" (p. 93). That rationale influenced future studies of educational associations which were limited to the Washington, D.C., areas, even though "less than half of the post-secondary educational associations recognized by the U.S. Office of Education are even located in Washington" (Bender & Simmons, p. 8). The development of a national influence center for higher education at One Dupont Circle only heightened the sense of center.

Michael A. Murray presented a conceptual framework for examining higher education associations based on constituent interests (pp. 81-85). Viewed as a cluster of loosely interrelated organizations, at the core of the cluster were the "Big Six" associations representing the range of public and private, graduate and undergraduate institutions. The American Council on Education spoke for the National Association of State Universities and Land-Grant Colleges (NASULGC), the American Association of State Colleges and Universities (AASCU), the National Association of Independent Colleges and Universities (NAICU), the Association of American Universities (AAU), and the American Association of Community and Junior Colleges (AACJC). All of the "Big Six" associations are located in Washington, D.C.; five of them at One Dupont Circle. The ties of higher education associations to the national capital and to One Dupont Circle are reinforced by this conceptual framework, as they are by typologies developed by others (Bailey, pp. 6-29; King, pp. 19-37). While American higher education associations are in fact decentralized and fragmented, reflecting the political system of which they are a part, their locus of power is One Dupont Circle, Washington, D.C.

This chapter will focus on national higher education associations headquartered in the Washington, D.C., area. Regional groupings of educational institutions not located in Washington, D.C., such as the Western Interstate Commission for Higher Education (WICHE), will not be considered; national associations of individuals not headquartered in the capital, such as the Association for Institutional Research (AIR), will not be included. Organizations such as the ERIC Clearinghouse on Higher Education, while not technically associations, will be considered because they are located in the Washington, D.C., area and because they provide significant instructional resources.

Associational Resources

Associations came into existence because of common problems, interests, and needs of members. Members are attracted initially and are willing to pay their dues and become heavily involved, so long as problems are solved and needs are met. But if needs are not met, they drop out (American Society of Association Executives, 1970).

Constituent support is ultimately a function of performance that is valued --the quality of service that an association renders to the publics it purports to serve. Higher education associations provide both tangible and intangible

services. The intangible services are akin to what C. P. Snow observed at the end of The Masters, a novel of university life in which a group of thirteen fellows of Cambridge College are engaged in the political process of electing a new leader. At the conclusion, the protagonist, Lewis Eliot, reflects,

When I arrived in the college, I had already moved about a good deal among the layers of society; and I had not come to the end of my journey yet. I had the luck to live intimately among half-a-dozen different vocations. Occasionally, among men who had never been near the place, I thought that a good many of them would have found in the college the least anxious and the most comforting lives, and some, more surprisingly, the freest (p. 374).

Higher education associations, at their best, provide their clientele with intangible resources: reduced anxiety through protection from public harm, increased comfort through support of favorable legislation, and increased academic freedom through support of the quest for knowledge and understanding. To the degree that American higher education associations provide these intangible cli-resources to the people they serve, and to the degree that they respond to their clients' needs with appropriate tangible resources, their future will be insured.

This chapter offers a finder of the tangible resources by listing associations under the substance of each service they provide. The means by which they provide such services to higher education are through publishing journals, newsletters, proceedings, papers, directories, bibliographies, course outlines, fact sheets, manuals, monographs, and books; identifying, researching, analyzing, and reporting on issues of concern; producing films, tapes, and other audio-visual materials; and sponsoring professional development activities such as conferences, conventions, workshops, placement services, and speaker bureaus. Associations serving American higher education are currently providing timely instructional resources for teachers of higher education. But which associations are providing what services for which areas of concern to higher education faculty?

Using the results of the 1977 ASHE Membership Survey, Samuel Kellams (pp. 39-44) identified a list of areas important to higher education faculty. Earlier identifications by Jonathan D. Fife and by Joan S. Stark (Associations in the Washington, D.C., Area, pp. 1-37; Stark and Austin, pp. 1-9) were then applied to this list, which resulted in the table presented in this chapter. The author accepts responsibility for any inadequacies of the table; he shares with others credit for any contribution to the identification of associations as instructional resources. In the words of Bailey, "the various associations mentioned in the text are meant to serve as examples. The omission of any given organization should not be construed as indicating a judgment about its value or importance" (p. xiii). Any suggestions for additions, deletions, or revisions of associations within categories would be appreciated by the author.*

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The Directory of Education Associations, published annually by the U.S. Department of Education, lists the names, addresses, and telephone numbers of national educational associations and their chief officers. If no address appears in the directory for an association, it is the same as that of its officers.

D. S. Akey's Encyclopedia of Associations offers the most comprehensive listing of specific resources available through each of the higher education associations. The Council for Advancement and Support of Education publishes a concise, annual directory which identifies major resources available through Washington-based associations. The ERIC Clearinghouse on Higher Education has developed A Directory of Higher Education Associations in the Washington, D.C., Area which is distributed to the primary information officers of Washington area associations. That directory identifies the membership, clientele served, areas of specialization, major on-going projects, regular publications, and special resources of major higher education associations in the Washington, D.C., area. Essays in A. S. Knowles' International Encyclopedia of Higher Education offer an in-depth look at several higher education associations and their resources.

Higher Education Areas and Associations

accreditation (excluding specialized accrediting bodies)

Council of Graduate Schools in the United States
 Council on Postsecondary Accreditation
 ERIC Clearinghouse on Higher Education
 ERIC Clearinghouse on Teacher Education

administration and organization

American Association for Higher Education
 American Association of Colleges for Teacher Education
 American Association of Collegiate Registrars and Admissions Officers
 American Association of Community and Junior Colleges
 American Association of State Colleges and Universities
 American Association of University Professors
 American Conference of Academic Deans
 American Council on Education
 Association for the Study of Higher Education
 Association of American Colleges
 Association of American Universities
 Association of Governing Boards of Universities and Colleges
 College and University Personnel Association
 Council for Advancement and Support of Education
 ERIC Clearinghouse on Higher Education
 National Association for Women Deans, Administrators, and Counselors
 National Association of College and University Business Officers
 National Association of State Universities and Land-Grant Colleges
 National Association of Independent Colleges and Universities

adult and continuing education

Adult Education Association of the United States of America
 American Association for Higher Education
 American Association of Collegiate Registrars and Admissions Officers
 American Association of Community and Junior Colleges
 American Society for Engineering Education
 American Society for Training and Development
 Association of American Colleges
 Association of Physical Plant Administrators of Universities and Colleges
 Council of Independent Colleges
 (Council for the Advancement of Small Colleges)
 Council of National Organizations for Adult Education
 National Association for Public Continuing and Adult Education
 National Science Foundation
 Directorate for Science Education
 National University Continuing Education Association

admissions/financial aid

American Association of Collegiate Registrars and Admissions Officers
 College and University Personnel Association
 National Association for Women Deans, Administrators, and Counselors
 National Association of College and University Business Officers
 National Association of Student Financial Aid Administrators

alumni

Council for Advancement and Support of Education
 ERIC Clearinghouse on Higher Education

attrition

American Educational Research Association
 American Association of Collegiate Registrars and Admissions Officers
 Council of Independent Colleges
 (Council for the Advancement of Small Colleges)

collective bargaining

American Association of University Professors
 American Conference of Academic Deans
 American Federation of Teachers
 Association of American Colleges
 College and University Personnel Association
 ERIC Clearinghouse on Higher Education
 National Education Association

community colleges

American Association of Community and Junior Colleges
 American Association for Higher Education
 Association of Community College Trustees

community development

American Association of Community and Junior Colleges
 Association of American Colleges
 National Community Education Association

comparative education

College Entrance Examination Board
 Office of International Education
 ERIC Clearinghouse on Higher Education

corporate relations

American Association of State Colleges and Universities

curriculum

American Association for Higher Education
 American Association of Colleges for Teacher Education
 American Association of State Colleges and Universities
 American Conference of Academic Deans
 American Council on Education
 American Educational Research Association
 American Society for Engineering Education
 Association for the Study of Higher Education
 Association of American Colleges
 Council of Independent Colleges
 (Council for the Advancement of Small Colleges)
 ERIC Clearinghouse on Higher Education
 National Science Foundation
 Directorate for Science Education

facilities

Association of Physical Plant Administrators of Universities
 and Colleges

faculty (general)

American Association of University Professors
 American Conference of Academic Deans
 Association of American Colleges
 Council of Independent Colleges
 (Council for the Advancement of Small Colleges)
 ERIC Clearinghouse on Higher Education

faculty/staff development

American Association for Higher Education
 American Association of Colleges for Teacher Education
 American Association of State Colleges and Universities
 American Association of University Professors
 American Conference of Academic Deans
 American Educational Research Association

American Society for Engineering Education
 Association of American Colleges
 College and University Personnel Association
 Council for Advancement and Support of Education
 Council for the Advancement of Small Colleges (Council of
 Independent Colleges)
 ERIC Clearinghouse on Higher Education
 ERIC Clearinghouse on Teacher Education
 National Science Foundation
 Directorate for Science Education

finance

College and University Personnel Association
 Council for Advancement and Support of Education
 Council of Independent Colleges
 (Council for the Advancement of Small Colleges)
 ERIC Clearinghouse on Higher Education
 National Association of College and University Business Officers

future planning

American Association of State Colleges and Universities
 ERIC Clearinghouse on Higher Education

goals/missions/purposes/functions

American Association for Higher Education
 American Association of Community and Junior Colleges
 Association for the Study of Higher Education
 Association of American Colleges

governance

American Association of State Colleges and Universities
 American Association of University Professors
 American Council on Education
 Association of Community College Trustees
 Association of Governing Boards of Universities and Colleges
 Council of Independent Colleges
 (Council for the Advancement of Small Colleges)
 ERIC Clearinghouse on Higher Education

government relations/federal issues

American Association for Higher Education
 American Association of Collegiate Registrars and Admissions Officers
 American Association of Community and Junior Colleges
 American Association of State Colleges and Universities
 American Association of University Professors
 American Conference of Academic Deans
 American Council on Education
 American Society for Engineering Education
 Association of American Colleges
 Association of American Universities

Association of Physical Plant Administrators of Universities
and Colleges
Council for Advancement and Support of Education
Council of Graduate Schools in the United States
ERIC Clearinghouse on Higher Education
National Association of College and University Business Officers
National Association of Independent Colleges and Universities
National Association of State Universities and Land-Grant Colleges

graduate/professional education

American Association of Collegiate Registrars and Admissions Officers
American Society for Engineering Education
Association of American Colleges
Association of American Law Schools
Association of American Medical Colleges
Association of American Universities
Council of Graduate Schools in the United States
ERIC Clearinghouse on Higher Education
International Council on Education for Teaching
National Council for Accreditation of Teacher Education
National Science Foundation
 Directorate for Science Education

health/medical services

Accrediting Commission on Education for Health Services Administration
American Association of State Colleges and Universities
Association of American Medical Colleges
Association of University Programs in Health Administration
ERIC Clearinghouse on Higher Education

history

Association for the Study of Higher Education

humanities

American Association of State Colleges and Universities
ERIC Clearinghouse on Higher Education

institutional histories

American Council on Education
 Library on Higher Education Policy and Administration

institutional research

American Association of Collegiate Registrars and Admissions Officers
Council of Independent Colleges
 (Council for the Advancement of Small Colleges)
Council of Graduate Schools in the United States
ERIC Clearinghouse on Higher Education
National Institute of Independent Colleges and Universities

international programs

American Association of Collegiate Registrars and Admissions Officers
 American Association of Community and Junior Colleges
 American Association of State Colleges and Universities
 American Council on Education
 Division of International Educational Relations
 American Society for Engineering Education
 Association of American Colleges
 Association of American Universities
 Council for International Exchange of Scholars
 Council of Graduate Schools in the United States
 ERIC Clearinghouse on Higher Education
 International Council on Education for Teaching
 National Association for Foreign Student Affairs

law

American Association of University Professors
 American Association of College and University Attorneys
 Association of American Law Schools
 College and University Personnel Association
 ERIC Clearinghouse on Higher Education
 National Association of College and University Attorneys
 National Institute of Independent Colleges and Universities

management procedure

American Association of Collegiate Registrars and Admissions Officers
 Association of Physical Plant Administrators of Universities
 and Colleges
 College and University Personnel Association
 Council for Advancement and Support of Education
 Council for International Exchange of Scholars
 ERIC Clearinghouse on Higher Education
 National Association of College and University Business Officers

minority groups

American Association of University Professors
 American Society for Engineering Education
 College and University Personnel Association
 Council for Advancement and Support of Education
 Council of Graduate Schools in the United States
 ERIC Clearinghouse on Higher Education
 National Association of College and University Business Officers
 National Science Foundation
 Directorate for Science Education

policy analysis

American Association of State Colleges and Universities
 American Council on Education
 Library on Higher Education Policy and Administration

Association of Physical Plant Administrators of Universities
and Colleges
ERIC Clearinghouse on Higher Education
National Institute of Independent Colleges and Universities

public relations and development

American Council on Education
Committee for Full Funding of Education Programs
Council for Advancement and Support of Education
Council of Independent Colleges
(Council for the Advancement of Small Colleges)

scholarly research

American Council on Education
Division of Policy Analysis and Research
American Society for Engineering Education
Association for the Study of Higher Education
Association of American Universities
Council of Graduate Schools in the United States
ERIC Clearinghouse on Higher Education
National Science Foundation
Directorate for Science Education

state relations/statewide coordination

American Association for Higher Education
American Association of State Colleges and Universities
American Council on Education
Association of Governing Boards of Universities and Colleges
National Association of Independent Colleges and Universities
National Association of State Universities and Land-Grant Colleges

student personnel services

American Association of Collegiate Registrars and Admissions Officers
National Association for Women Deans, Administrators, and Counselors
National Association of Student Financial Aid Administrators

teaching

American Association of University Professors
American Society for Engineering Education
Council of Independent Colleges
(Council for the Advancement of Small Colleges)
Council of Graduate Schools in the United States
ERIC Clearinghouse on Higher Education
ERIC Clearinghouse on Teacher Education
International Council on Education for Teaching

testing

American Society for Engineering Education
Council of Graduate Schools in the United States

urban education

American Association of State Colleges and Universities
Committee of Urban Program Universities

women's issues

American Association of University Professors
American Association of University Women
American Society for Engineering Education
Association of American Colleges
College and University Personnel Association
Council for Advancement and Support of Education
Council of Graduate Schools in the United States
ERIC Clearinghouse on Higher Education
National Association for Women Deans, Administrators, and Counselors
National Science Foundation
 Directorate for Science Education

A century and a half seems to have increased American dependence on associations. Not only are associations a way to get things done, but they help Americans cope with the increased complexity of their environment. The inquiries of associations into the issues of higher education extend the scope of an individual teacher's grasp of a rapidly changing field of knowledge. Whether associations which serve American higher education reach full maturity and boast a scholarly membership or whether they tackle the current problems of higher education in a somewhat less scholarly manner, they represent a powerful resource for learning.

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"Associations as Instructional Resources" first appeared in ASHE's Instructional Resource Handbook in 1982. Since that time, an excellent monograph has been written on the subject of Washington, D.C. and its higher education organizations:

Bloland, H. G. Associations in Action: The Washington, D.C., Higher Education Community. ASHE-ERIC Higher Education Report No. 2. Washington, D.C.: Association for the Study of Higher Education, 1985.

Chapter Five

HIGHER EDUCATION AS A FIELD OF STUDY:
AN ANNOTATED BIBLIOGRAPHYJudy Diane Grace
University of Maryland, College ParkHIGHER EDUCATION AS A FIELD OF STUDY
Conceptual Examination

Carr, William D. "A Survey Analysis of Doctoral Graduates in Higher Education as a Specialized Field of Study." Unpublished doctoral dissertation, Florida State University, 1974.

Surveying graduates from four time frames (1963, 1966, 1969, 1972), the researcher found that they differed significantly in reference to 1) the type of degree awarded, 2) functional areas of employment in pre-, current, and post-doctoral positions, 3) hierarchical levels of positions, and 4) number of publications. A significant relationship existed between fields of master's study and subfields of doctoral work and between subfields of doctoral study and areas of pre- and post-doctoral positions.

Cowley, W.H. Interview. "Don of Higher Educationists: In Search of a Discipline." College and University Business, v 46, n6 (June 1969), 61-64.

Cowley outlines his convictions regarding the establishment of Higher Education as a discipline and outlines his plans for a taxonomy for the study of Higher Education. Additionally, he comments extensively on administrators' characteristics and training.

Currie, Jr., Andrew C. "An Investigation and Identification of Higher Education as a Graduate Field of Study and Research." Unpublished doctoral dissertation, Ohio State University, 1968.

Surveying 35 full professors of Higher Education to identify the 14 "most important" books in the field, the researcher determined the words and symbols that are unique to the field. Tests of recognition were then given to students in a variety of fields, based on the assumption that if unique vocabulary existed, students from fields other than Higher Education would not be able to identify the language. The researcher concluded that Higher Education was in the early stages of development and had not yet developed many unique concepts.

Dibden, Arthur J. "A Department of Higher Education: Problems and Prospects." Educational Record, 46, 3 (Summer 1965), 209-216.

At the time of this study, about 90 departments existed. A history of the study of Higher Education is given along with a rationale for formal programs of study. Specific problem areas such as the distinctive contents and boundaries of the discipline are addressed. Prospects on these problems suggest future action for departments of Higher Education.

Dressel, Paul L. and Mayhew, Lewis B. Higher Education as a Field of Study: The Emergence of a Profession. San Francisco: Jossey-Bass, 1974.

This is the classic text on the subject of Higher Education as an emerging profession. Culminating over 25 years of research interest, Dressel and Mayhew discuss the history of the field, provide descriptions and analyses of typical programs, address the complexities and issues facing the field, and present recommendations on prospects and needs. A comprehensive bibliography is included.

Ewing, John C. "The Development and Current Status of Higher Education as a Field of Graduate Study and Research in American Universities." Unpublished doctoral dissertation, Florida State University, 1963.

Among the findings of this study are: Higher Education as a specialized field of study and research began in 1920 and interest and influence has increased steadily. Instruction in the area generally encompasses 1) general description and analysis, 2) administration and organization, 3) curriculum, 4) student personnel services, 5) college teaching, and 6) junior college education. Important adjuncts in the field include the centers and institutes for the study of Higher Education. There is a discernible trend to integration with other education disciplines.

Fincher, Cameron, Ed. "Higher Education : An Emerging Discipline and the Need for Reform." Journal of Research and Development in Education, v6, n2 (Winter 1973) 1-3.

This journal issue is specifically devoted to addressing Higher Education as an academic discipline. Various substantive issues are addressed, by Burnett, Peterson, Kellams, and Silverman, in particular.

Harclerod, Fred F., ed. Higher Education: A Developing Field of Study. Iowa City: ACT, 1974.

The collection of essays presents pivotal discussions of the professionalization of the field vis-a-vis knowledge base (Clark, Silverman), programs, and functions of professors (Anderson, Duryea). Sponsored by APHE, these papers presented at the third annual conference demonstrate that Higher Education was developing as an "important field of study."

Miller, Jr., James L., ed. Scholarship and Teaching in the Field of Higher Education. Proceedings of the annual meeting of the Association of Professors of Higher Education (APHE), (Chicago), March 1973. (ED 088 301)

Five papers are divided among three topical areas of concern: the field, teaching methods utilized in programs, and an informal history of the APHE. Topics concern the isolation of higher education professors as scholars; an introductory overview of programs in the field; the administrative internship as an out-of-class methodology in leadership development; and the use of informal internships.

Sagan, H. Bradley. "The Study of Higher Education from the Perspectives of Behavioral Science and of Professional Practice." Paper presented at the Annual Meeting of the Association for the Study of Higher Education (Washington, DC), March 25-26, 1983. (ED 232 557)

An approach to classifying the subject matter of Higher Education is discussed. It is suggested that to study higher education is to study behavioral patterns such as educational management, resource acquisition and allocation, and instruction. A classification of the subject matter should begin with a definition of the observed behaviors and then define entities such as students and institutions, linking perspective principles with a descriptive knowledge base drawn from the behavioral sciences and other disciplines. Attention is also drawn to the similarity within higher education and organizations, and the need to specify various levels of behaviors.

Slaughter, Shelia and Silva, Edward T. "Service and the Dynamics of Developing Fields." Journal of Higher Education, v54, n5 (Sept./Oct. 1983), 481-499.

The dynamics of developing fields of inquiry are examined to define the academic status of Higher Education. Comparisons are made with the emergence of the social sciences, and options for Higher Education are explored. The authors suggest that professionalization confronts students with moral choices about how to use their knowledge and skills.

Smith, Barbara. "Toward a Theory Base for the Study of Higher Education: A Methodology Using Citation Patterns and Content Analysis to Identify a Community of Higher Education Specialists and a Vocabulary in Which They Communicate." Unpublished doctoral dissertation, University of Kentucky, 1975.

According to the results of this study, a community of Higher Education Specialists exists. Citation and content analysis were performed on SSCI (1973) to determine cross citations and the exclusive attribution of annotated and bibliography to Higher Education affiliates. Theory construction might develop from paradigms borrowed from the social sciences.

Williams, Don. "Whither the Study of Higher Education?" Review of Higher Education, v7, n2 (Winter 1984), 175-178.

The idea that people committing themselves to lifetime careers in academe should take some coursework in Higher Education retains its appeal, according to the author. However, rarely does this appeal become so strong so as to make this a graduation requirement.

Young, Burns Byron. "The Rise and Development of Instructional Courses in Higher Education." Unpublished doctoral dissertation, Stanford University, 1952.

At the time of this study, over 30 universities offered courses in Higher Education. The history of the development of these course is given.

GRADUATE PROGRAMS IN HIGHER EDUCATION

Multiple Program Surveys

Barak, Robert J. "Graduate Study Programs in the Field of Higher Education: A Brief Guide for Prospective Students." Paper presented at the Annual Conference of American Association for Higher Education (Washington, DC), 1973. (ED 085 044)

This brief guide is based on a recent survey of the field of higher education and is intended to provide an overview of available programs for prospective students. This document includes: degrees offered, programs offered, admission and graduation requirements, and placement. The appendix contains a list of institutions offering Higher Education graduate programs.

Basil, Susan R. "An Analysis of Doctoral Programs in Higher Education: A Comparison of Curricula, Program Characteristics, and Graduates' Perceptions." Unpublished doctoral dissertation, West Virginia University, 1980.

Four programs were examined. Consistent curricula were found, indicating a core program's existence. However, the typology suggested by Dressel and Mayhew (1974) was not identifiable in the sample. Graduates reported satisfaction with their preparation.

Crosson, Patricia H. and Nelson, Glenn M. "A Profile of Higher Education Doctoral Programs." Review of Higher Education, v9, n3 (1986), 335-357. (ED 245 604)

A descriptive profile of 72 U.S. doctoral programs for the study of Higher Education is presented. Attention is directed toward program goals, academic offerings, organizational structure, faculty and student characteristics, and admission and degree requirements. Appendices include a questionnaire, a list of participating institutions, and titles of academic programs.

Dill, David D. and Morrison, James L. "Ed.D. and Ph.D. Training in the Field of Higher Education: A Survey and Proposal." Review of Higher Education, v8, n2 (Winter 1985), 169-186.

The findings of this survey indicate that almost half of the programs in Higher Education do not distinguish between objectives or research requirements for these degrees. The authors suggest the degrees should be different and outline the points of distinction.

Ewing, John C. and Strickler, W. Hugh. "Progress and Development of Higher Education as a Field of Professional Graduate Study." Journal of Teacher Education, v15, n4 (1964), 397-403.

The history of Higher Education as a field of graduate study is reviewed. The current (1963) status is described in terms of institutional (87) and course (560) offerings. The courses are classified in broad subject areas. The emergence of institutes and centers for the study of Higher Education is noted.

Fife, Jonathan D. and Grace, Judy Diane. "A Profile of Student Expectations of Graduate Programs in Higher Education Administration: A Marketing Approach." Paper presented at the annual meeting of the Association for the Study of Higher Education, San Antonio, February, 1986.

A survey of students in the fifty largest doctoral programs in Higher Education Administration presents a demographic profile of students as well as student expectations of program outcomes in terms of skills and career options. Perceptions of curricula effectiveness and program strengths and weaknesses are discussed vis-a-vis marketing concepts.

Grace, Judy Diane. "Higher Education as a Profession: A Curriculum Analysis." Unpublished doctoral dissertation, University of Arizona, 1984.

This study explores the nature and definitions of a profession for the purpose of determining measurable criteria upon which the degree of professionalization of an occupation can be weighted. The results of this study confirm the existence of several criteria determining the emergence of Higher Education as a profession: a service orientation is present and there exists a unique set of skills and knowledge. Specifically, comparisons are made with the consistency of curricula in law, medicine, business, and library science professions education.

Keim, Marybell C. Rockey. "Exemplary Graduate Programs in Higher Education." Education Research Quarterly, v8, n3 (1983), 4-11.

This study identified the 10 most outstanding graduate programs in Higher Education by sampling professors and then describing and analyzing the characteristics of the exemplary programs. Faculty was cited as the most commonly mentioned strength of programs. Major changes anticipated in the next five years concerned research and curricula.

Poppenhagen, Brent W. and Dunn, Melvin. "Preparing Mid-level Professionals for the Future in Postsecondary Education." Review of Higher Education, v3, n1 (Fall 1979), 31-41.

Higher Education programs and how they can best serve the increasing need for educational practitioners are discussed. Market demands and specific educational needs are examined.

Richardson, Jr., Richard C. and Walsh, Richard T. "Differences and Similarities in the Practices of Institutions Offering the Ph.D. and Ed.D. Programs in Higher Education." Tempe, AZ: Arizona State University, Department of Higher and Adult Education, 1978. (ED 198 748)

The difference between the Ph.D. and Ed.D. degree programs were studied as a follow-up to 1960 and 1970 surveys of graduate institutions. The trend toward similarities between the two degree programs indicated in the previous surveys was continued. The only major difference concerns the administration unit: a majority of Ph.D. programs are administered by the graduate college, while Ed.D. programs are administered by the graduate college or the college of education. References are included.

Rogers, James F. Higher Education as a Field of Study at the Doctoral Level. Washington, DC: American Association for Higher Education, 1969.

The rapid expansion of programs to study Higher Education at the doctoral level represents an awareness of the need to know more about the organization of colleges and universities and how to deal more effectively with the problems they face. The principal concern of this study was to document the incidence and scope of offerings in Higher Education at the doctoral level. The data show erratic distribution of course offerings, leading the researcher to conclude that Higher Education was in an "adolescent stage" of program development. The results also show a concern with student personnel work and the lack of a truly interdisciplinary approach to the field.

Shorr, Mariyln and Hoogstra, Lisa, Comps. "Directory of Higher Education Programs and Faculty, 4th edition." Washington, DC: Association for the Study of Higher Education, August 1984. (ED 248 805)

A directory of graduate-level programs and centers for the study of Higher Education and college faculty in these programs is presented. Individual programs are listed as are faculty members. Codes indicate research and teaching interests. This updates 1979 and 1982 versions of a directory.

Single Program Reviews

Bizzoco, Bruce D. "An Analysis of the Curriculum in the Doctoral Program of Administration/Higher Education at the University of Alabama." Unpublished doctoral dissertation, University of Alabama, 1984.

A study was conducted to determine whether the courses that comprise the curriculum in the program of Administration/Higher Education at the University of Alabama provide relevant information and a systematic progression of knowledge and skills as perceived by alumni, students, and faculty. The faculty indicated there existed an overlap in course content. Students reported that skills were being developed in courses. Additionally, the study comments on the lack of literature on analyzing curricula.

Center for the Study of Higher Education, University of Virginia. "Graduate Student Handbook." Charlottesville: University of Virginia, 1980. (ED 197 667)

The handbook provides general information for prospective applicants to the graduate program at Virginia. Information is given about degree programs, admission and graduation requirements, financial aid, administrative procedures, and dissertations. Forms are appended.

Davidson, Edgar O. "Philosophical Emphases in the Development of Graduate Professional Education at the Pennsylvania State College with Reference to Other Collegiate Programs." Unpublished doctoral dissertation, Pennsylvania State College 1953.

Among the findings of this study in particular relationship to Higher Education are the following: 1) there exists an increasing feeling of the need for core courses to broaden the cultural base prior to specialization; 2) there is a concern that training should be more

functional; and 3) field study or problem situation should be used in training.

Earthman, Glen I. and Pinkey, Jr., Hercules. "The External Cooperative Doctoral Studies Program: A Model for Reducing the Shortage of Black Higher Education Faculty and Administrators with Earned Doctorates." nd. (ED 139 743)

Federal City College (FCC) and Virginia Polytechnic Institute and State University have planned and implemented a cooperative program to provide advanced graduate training to faculty and staff at FCC leading to the Doctor of Education degree. The program is designed to facilitate professional development without persons having to take leave from their positions. Although individualized, the program's common elements include: professional core of seminars and laboratory studies in Higher Education, a series of institutes, tutorials, externships, and discussions with outside experts and personnel, and formal training in doctoral-level research and evaluation techniques. Both institutions' participants termed the program a success.

Fincher, Cameron. "Self-Assessment Report: The Doctoral Program in Higher Education at the University of Georgia." Athens, Georgia: Institute of Higher Education, University of Georgia, 1983. (ED 248 741)

Based on the results of a self-assessment survey administered to faculty, graduates, and current students, a list on concerns is presented. Students were concerned with jobs, financial aid, and grade averages. Faculty were concerned with rank, full versus part time employment, and non-instructional tasks. Alumni were concerned with reasons for gaining degree and productivity. The practices and philosophy of various aspects of the program are discussed. A bibliography is included.

Institute of Higher Education, University of Georgia. "The Care and Feeding of the Futures: Annual Report 1978-79." Athens, Georgia: University of Georgia, 1979. (ED 180 281)

Progress in the 10 years since the doctoral program in Higher Education was begun and events during the AY 1978-79 are reported. Differences between expectations and realities of the program are discussed. The future is described as uncertain and challenging.

Institute of Higher Education, University of Georgia. "The View from an Inside Closet: Annual Report 1977-78." Athens, Georgia: Institute of Higher Education, 1978. (ED 163 843)

This annual report discusses teaching duties of the professional staff, the doctoral program in Higher Education, internships, workshops, the summer scholar seminar, the law seminar, faculty development, and the research and writing project. A bibliography of publications and research is included.

Specific Issues Concerning Programs

Bickel, Sarah L. "Female Aspirants to Higher Education Administration: Barriers Anticipated, Strategies Utilized." Unpublished doctoral dissertation, University of Northern Colorado, 1980.

This study investigated perceptions of women aspiring to positions as Higher Education administrators. Information provided in the study identified: biographical and career planning information, barriers to employment and advancement anticipated by female doctoral students, methods and strategies new professionals intend to employ in order to overcome barriers, and those barriers perceived as gender related. Among the strategies are the development of individual competencies through training and practice, the encouragement of organizational change, and the seeking of support from professionals within the organization.

Budig, Gene A. and Others. "The Place of Women in Departments of Higher Education Administration." Phi Delta Kappan, v65, n9 (May 1984), 625.

A survey of the participation of women in programs at seven universities reveals that women constitute 45 percent of the enrollment and that their rate of placement has been high. However, due to less attractive employment activities and fewer scholarships, the future rate of participation is uncertain.

Coffman, Phillip H. "Should Personality Characteristics Be Considered in the Training and Selection of Administrators?" Journal of the College and University Personnel Association, v29, n3 (Fall 1978), 47-50.

A study compares personality traits of Higher Education doctoral candidates with other doctoral students and with normative populations. Personality characteristics are concluded to be important, and majors in Higher Education resemble more closely the desired characteristics of college administrators than those in the general population.

HIGHER EDUCATION PROGRAM FACULTY ISSUES

Cooper, Jack H. "Special Problems of the Professor of Higher Education." Review of Higher Education, v4, n1 (Fall 1980), 25-32.

Higher Education as a field of teaching, research, and science has some special problems to which professors must relate: the isolation of the researcher from colleagues, the organization isolation of the department, and the lack of a strong force in terms of numbers of students. Problems will persist.

Johnson, John A. "A Profile of Faculty of Doctoral Programs in the Study of Higher Education in the United States." Paper presented at the annual meeting of the Association for the Study of Higher Education (Washington, DC), March 2-3, 1982. (ED 219 044)

Selected findings are presented: the identity of personal characteristics, educational background, work experience, and career positions. Attention is also directed to faculty perceptions of various elements relevant to the study of Higher Education, including faculty qualifications, important criteria in evaluating programs, and the establishment of a list of outstanding programs.

Newell, L. Jackson and Morgan, Don A. "The Evolving Higher Education Professoriate: Implications for ASHE." Review of Higher Education, v7, n1 (Fall 1983), 67-83.

An analysis of the changing characteristics and values of ASHE professors, based on a review of the historical record, a recent survey of the membership, and an earlier study is presented.

THE CURRICULUM OF HIGHER EDUCATION GRADUATE PROGRAMS

Course Syllabi

Nelson, Glenn M. and Others. "Graduate Courses in the Field of Higher Education: Selected Syllabi. Occasional Paper No. 4." Pittsburgh: Pennsylvania Institute for Higher Education, Pittsburgh, June 30, 1981. (ED 210 983)

Syllabi from graduate courses in the field of Higher Education are presented. They are grouped into the usual areas of concentration in programs. The syllabi include a course description, requirements, schedule, evaluation modes, readings, and additional references.

Introductory Courses

Crosson, Patricia H. "Core Seminar in Higher Education." Review of Higher Education, v6, n2 (Winter 1983), 149-60.

An introductory course required of all new doctoral students in Higher Education at the University of Pittsburgh is a two-term, multi-credit course that involves 50 students and 25 faculty annually. The seminar's purpose, instruction, and organization are described and related to substantive issues of program curriculum.

Dressel, Paul L. and Thompson, Mary Magdala. "College Teaching: Improvement by Degrees." Iowa City: ACT, 1974. (ED 191 402)

Current development in the preparation of college teachers were examined based on interviews, observations, and a review of program details and student reaction to them. An overview of the circumstances that focus on college teaching and issues specific to the Doctor of Arts degree and alternative track Ph.D. and Ed.D. programs are presented.

Kellams, Samuel E. "Teaching in the Field of Higher Education: Introductory Courses." Review of Higher Education, v3, n2 (Winter 1980), 26-31.

Various approaches to teaching introductory courses in Higher Education are reviewed. Textbooks and readings are discussed as well as some case examples given. A list of introductory courses offered at several institutions is included.

Teaching Techniques

Birnbaum, Robert. "Games and Simulations in Higher Education." Simulation and Games, v13, n1 (March 1982), 3-11.

Identified are existing game and simulation resources that can be used by faculty in graduate programs in the field of Higher Education to provide students with experiential learning in three areas: organization and administration, budget and finance, and curriculum planning.

Finkelstein, Martin J. and Davis, William J. "The Case Method of Instruction in the Preparation of Higher Education Leaders." Review of Higher Education, v1, n2 (Winter 1978) 31-37.

The prevalence of the case method in preparing Higher Education leaders is examined through the Case Use Inventory. The case method may not be widely implemented among graduate Higher Education programs.

Specific Courses

Dill, David D. "Teaching in the Field of Higher Education: Curriculum and/or Instruction Courses." Review of Higher Education, v2, n1 (Fall 1978) 35-39.

Courses in curriculum and instruction representing philosophical, design and evaluation, and professional development orientations are cited. It is suggested that a general tendency in all of these courses appears to be away from description and analysis and toward the development of skills of design, evaluation, and instruction.

Dill, David D. "Teaching in the Field of Higher Education: Management Courses." Review of Higher Education, v1, n3 (Spring 1978), 39-44.

Various approaches to teaching Higher Education administration are discussed. Some courses emphasize organization theory and analysis, control, or management of change and conflict. Observations are made as to what special management skills may be especially appropriate to Higher Education.

Hamlin, James and Others. "Design and Development of a Curriculum for Higher Education Administration." Paper presented at the annual meeting of the Pennsylvania Educational Research Association (University Park), April 30-May 1, 1979. (ED 188 512)

It is proposed that the study of Higher Education must provide the student and future administrator with opportunities to explore both traditional and new administrative roles in management of institutions. Using a systems approach to organization structure and functions, ten learning

objectives are outlined: problem resolution and decision-making, resource planning and allocation procedures, evaluation of organizational units, long-range planning, effective communication, analyzing long and short range impacts of decision-making, ethical standards, understanding human behavior and organizational climate, task orientation, and sensitivity and respect for colleagues.

Haynes, L.J. "Skills of the Effective Academic Administrator: Structuring the Curriculum." Review of Higher Education, v8, n4 (Summer 1985), 8-16.

Focusing on the literature on organizational administration, courses are suggested for the training of academic administrators. Specific skills and knowledge areas are given and grouped into areas.

Shoenberg, Robert. "Literature and Academic Administration: A Proposal for a Course Not Found in the Higher Education Curriculum." Liberal Education, v67, n1 (Spring 1981), 10-18.

Besides giving examples of the complexity of human interactions, the study of literature can give the college administrator a sensitivity to the particular circumstances of individual cases and to the tone and symbolic meaning of administrative actions.

Stanton, Charles M. "Teaching the History of American Higher Education." Review of Higher Education, v3, n3 (Spring 1980), 24-27.

Suggestions are given and experiences related to the content and organization of a graduate course in the history of Higher Education in the United States. Course rationale, objectives, teaching methods, and syllabus development are discussed.

Thelin, John R. "Higher Education's Useful Past: A New Use for Liberal Studies." Liberal Education, v42, n4 (December 1976), 568-75.

An introductory course that is required of all students of Higher Education at Claremont Graduate School, entitled "Historical and Philosophical Foundations of Higher Education," is discussed.

Thelin, John R. "Stepping in by Looking Back: Using History to Introduce the Study of Higher Education." Review of Higher Education, v3, n2 (Winter 1980), 32-34.

A course in the history of education introduced into a doctoral program for future administrators and planners at the University of Kentucky illustrates the potential contribution of liberal arts disciplines to graduate preparation for the professions.

Travelstead, Will. W. "An Appraisal of Degree Programs of Academic Administration in Higher Education in Selected Colleges and Universities." Unpublished doctoral dissertation, Southern Illinois University, 1974.

This study is concerned with those degree programs in Higher Education that claim to prepare academic administrators for careers in postsecondary institutions. The empirical research on the programs' purpose, admissions criteria, curricula, faculty, and graduates is preceded by a short history of higher Education as an area of scholarly inquiry. Also included is a

philosophical discussion of some of the issues in attempting to prepare academic administrators.

THE LITERATURE

Higher Education Journals

Bayer, Alan E. "Multi-method Strategies for Defining 'Core' Higher Education Journals." Review of Higher Education, v6, n2 (Winter 1983), 103-113.

Three analyses were used to determine "core" journals in the field of Higher Education: frequency of publishing Higher Education focused articles, frequency of citation to keywords in Higher Education, and journal rankings by Higher Education professionals. Little correspondence among the results was found.

Silverman, Robert J. "Journal Manuscripts in Higher Education: A Framework." Review of Higher Education, v5, n4 (Summer 1982), 181-96.

Types of articles appearing in education journals are categorized and explained, and three Higher Education journals' contents in 1975 and 1980 are examined for type, content, and percentages and numbers of articles. The journals were judged to be lacking in inquiry, theory, and humanism based on the results of the analysis.

Dissertations

Bensimon, Estela, Comp. ASHE Directory of Doctoral Dissertations. Washington, DC: Association for the Study of Higher Education, March 1984. (ED 240 937)

A directory of 173 doctoral dissertations in progress or completed in the early 1980's at 36 universities is presented. Each entry identifies the title of the dissertation, the author, the sponsoring professor, the institution, and the date.

Bibliographies

Barak, Robert J. Research in Postsecondary Education, 1974: An Inventory of Research by Professors and Students in the Field of Higher Education. Iowa City: ACT, 1974.

This inventory on research in postsecondary education is included for its manifestation of the attempt to collect and classify the research of the field. Some indexed articles deal directly with Higher Education as a field of study.

Kelsey, Roger R., Comp. AHE Bibliography on Higher Education. Washington, DC: Association for Higher Education, 1963 through 1972.

These collections are lists of publications on exhibit at the annual conferences. Most citations are on higher education; a few deal directly with Higher Education.

Mayhew, Lewis B. The Literature of Higher Education. Washington, DC: American Council on Education and National Education Association, 1965 through 1971. (See ED 024 326 for example)

These narrative summaries, reprinted from various sources, provide commentaries on publications on higher education with a few articles specifically addressing the field of Higher Education.

Quay, Richard H., Comp. On the Nature of Higher Education as a Field of Study: A Bibliography of Lewis B. Mayhew. Public Administration Series: Bibliography P-1165. Monticello, IL: Vance Bibliographies, March 1983. (ED 227 789)

A bibliography of approximately 90 materials authored or co-authored by Mayhew from 1950 to 1979 on the nature of Higher Education as a field of study is given.

Quay, Richard H., Comp. Research in Higher Education: A Guide to Bibliographies, (2nd edition). Phoenix: Oryx Press, 1985.

The appendix of this work contains a brief listing of articles related to the study of Higher Education as a field of study.

White, Jane N. and Burnett, Collins, W., Eds. Higher Education Literature: An Annotated Bibliography. Phoenix: Oryx Press, 1981. (ED 213 277)

An annotated bibliography on programs and phenomena in two and four-year accredited, degree-granting institutions is presented. Appendices include selected professional journals, definitions of terms particular to Higher Education, programs in Higher Education, legislation affecting higher education, major associations, and addresses of publishers. An author and subject index is provided.

COMPILER'S NOTES

The inclusion of a citation in this bibliography is based solely on the compiler's judgment of its usefulness in presenting a perspective on the development and parameters of the field of Higher Education. I do not claim to be able to judge the excellence or accuracy of each entry. The bibliography is of course not comprehensive, and I regret any oversight of significant works.

My thanks are given to Dr. Fred F. Harclerod of the University of Arizona whose gift of several original materials in the field instigated this compilation. I am also indebted to my research colleague Dr. Jonathan D. Fife of George Washington University for his help in categorizing the various works included herein.

Chapter Six

TEACHING IN POSTSECONDARY EDUCATION:
AN ANNOTATED BIBLIOGRAPHYRobert J. Menges
Northwestern University

This bibliography deals with several facets of the pedagogical enterprise in higher education: (a) teachers and learners, (b) teaching-learning procedures, (c) evaluating learning and instruction, (d) professional development of college teachers, and (e) periodicals and bibliographies on college teaching. The present work selectively updates a more comprehensive 430-item bibliography, "Teaching-Learning Experiences for College Students and Other Adults: A Selective Annotated Bibliography" (5th ed.) (1985). The Center for the Teaching Professions, Northwestern University, 2003 Sheridan Road, Evanston, IL 60201 (\$5.00).

Teachers and Learners

American Association of University Professors. "Joint Statement on Rights and Freedoms of Students." AAUP Bulletin, 54, 1968, 258-261.

Student rights and freedoms are discussed with regard to freedom of expression in classrooms and in publications, appropriate academic evaluations, and proper records and disciplinary proceedings.

Arrowsmith, W. "The Future of Teaching." In C. B. T. Lee (Ed.), Improving College Teaching. Washington, D.C.: American Council on Education, 1967, 57-71.

A humanistic definition of the teacher and the context for teaching. "At present the universities are as uncongenial to teaching as the Mojave Desert to a clutch of Druid priests. If you want to restore a Druid priesthood, you cannot do it by offering prizes for Druid-of-the-year. If you want Druids, you must grow forests. There is no other way of setting about it."

Astin, A. W. Four Critical Years: Effects of College on Beliefs, Attitudes and Knowledge. San Francisco: Jossey-Bass, 1977.

More than 200,000 students in 300 institutions provided data for this American Council on Education study. After controlling for the effects of maturation, Astin found that college produces many changes in students: "a more positive self-image as reflected in greater interpersonal and intellectual competence, and they develop more liberal attitudes toward social issues. At the same time, they show less religiousness and altruism and show reduced interest in athletics, business, music, and status." He notes several trends in higher education, such as more commuters and expansion of the public sector, which are likely to decrease these effects.

Axelrod, J. The University Teacher as Artist. San Francisco: Jossey-Bass, 1973.

Briefly distinguishes between the didactic mode of teaching (the teacher-craftsman) and the evocative mode (the teacher-artist). Elaborates the evocative mode using detailed case studies.

Becker, H. S., Geer, B., and Hughes, E. C. Making the Grade: The Academic Side of College Life. New York: Wiley, 1968.

A participant observation study of university student life. The dominant theme of the student culture is found to be concerned for grades.

Bess, J. L. (Ed.). "Motivating Professors to Teach Effectively." New Directions for Teaching and Learning (No. 10), 1982.

Authors of these 10 chapters link theoretical notions about motivation to career and organizational variables and to types of feedback systems.

Bess, J. L. "Integrating Faculty and Student Life Cycles." Review of Educational Research, 43, 1973, 377-403.

Discusses student and faculty developmental needs, how they may be integrated, and implications for the organization of colleges and universities.

Bonner, J. "Systematic Lesson Design for Adult Learners." Journal of Instructional Development, 6, 1982, 34-42.

Research on particular characteristics of adult learners is discussed using the Gagne-Briggs model. Characteristics include adults' memory and reaction time, their greater wealth of experience, lack of confidence as students, and so on.

Broudy, H. S. "Historic Exemplars of Teaching Method." In N. L. Gage (Ed.), Handbook of Research on Teaching. Chicago: Rand-McNally, 1963, 1-43.

A comparative analysis of the teaching styles of Protagoras, Socrates, Isocrates, Quintilian, Abelard, the Jesuits, Comenius, Pestalozzi, Froebel, and Hebart.

Chickering, A. W. Education and Identity. San Francisco: Jossey-Bass, 1969.

Several dimensions of young adult development are described: developing competence, managing emotions, developing autonomy, establishing identity, freeing interpersonal relationships, developing purpose, developing integrity. Implications are drawn for institutional organization.

Chickering, A. W. and Associates. The Modern American College. San Francisco: Jossey-Bass, 1981.

More than 30 chapters in this volume discuss the students; the curriculum; educational practices and environments; and administration, governance, and institutional development. One of the best single resources on colleges and universities as institutions for teaching and learning. Most relevant to "the learner" are Chapters 1-14 and 29.

Claxton, C. S. and Ralston, Y. Learning Styles: Their Impact on Teaching and Administration. AAHE-ERIC Higher Education Research Report (No. 10), 1978.

Reviews definitions and ways of assessing learning style (e.g., Witkin, Grasha-Reichmann, Kolb) and discusses implementation for postsecondary education.

Cohen, A. M. and Brawer, F. B. The Two Year College Instructor Today. New York: Praeger, 1977.

More than 2,000 faculty members, predominantly in the humanities, completed a questionnaire in this carefully conducted survey. Their preparation, concerns, beliefs, and attitudes are described in detail.

Creamer, D. G. (Ed.). Student Development in Higher Education: Theories, Practices and Future Directions. Cincinnati, OH: ACPA Media, University of Cincinnati, 1980.

This volume was prepared by the American College Personnel Association for student service professionals. Of general interest are chapters on theories underlying student development, student development in small and in large institutions, organizational development, and the notion of a student development transcript.

Cross, K. P. Adults as Learners. San Francisco: Jossey-Bass, 1981.

Who are the "adult learners," why do they engage in formal or nonformal learning, and what forms do their learning activities take? Cross reviews research on these questions and provides her own model of motivation for adult learning.

Entwistle, N. and Ramsden, P. Understanding Student Learning. New York: Nichols, 1983.

Reports a five-year study of college students' experiences and styles of learning and how they differ by department. Distinguishes deep versus surface approaches, meaning versus reproducing orientations, and so on.

Feldman, K. A. (Ed.). College and Student: Selected Readings in the Social Psychology of Higher Education. New York: Pergamon, 1972.

Reprints more than a score of articles about students and student culture as well as about other aspects of higher education.

Fink, L. D. "The First Year of College Teaching." New Directions for Teaching and Learning (No. 17), 1984.

Nearly 100 first-year teachers were surveyed (30 of them also interviewed and observed in the classroom). Additional data from colleagues and students. Responsibilities are described (teaching loads are heavy) and recommendations are offered (more feedback is desired).

Gmelch, W. H., Lovrich, N. P., and Wilke, P. K. "Sources of Stress in Academe: A National Perspective." Research in Higher Education, 20, 1984, 477-490.

A stratified sample from 80 institutions responding to a mailed questionnaire. Stressors which relate to time and/or resource constraints were rated as most important. Stressors were similar across disciplines and across the functions of teaching, research, and service, although teaching was reported to be the most stressful activity.

Heath, D. H. "A College's Ethos: A Neglected Key to Effectiveness and Survival." Liberal Education, 67, 1981, 89-111.

"Ethos" is based on student and faculty perceptions of their institution's attributes. Data from a variety of schools show that faculty are often in disagreement with each other and with their students about these attributes. Such lack of self-awareness reduces the institution's potential for survival.

Knefelkamp, L., Widick, C., and Parker, C. A. (Eds.). "Applying New Developmental Findings." New Directions for Student Services (No. 4), 1978.

Separate chapters on the following student development researchers and theorists: Erikson, Chickering, Perry, Kohlberg, Loevinger, D. Heath, and R. Heath.

Knox, A. B. Adult Development and Learning: A Handbook on Individual Growth and Competence in the Adult Years. San Francisco: Jossey-Bass, 1977.

A 700-page discussion, mostly in nontechnical language, of influences on adult growth and change and on conditions fostering effective learning for adults.

Levine, A. When Dreams and Heroes Died: A Portrait of Today's College Student. San Francisco: Jossey-Bass, 1980.

This analysis of Carnegie Council survey data finds college students to be more materialistic, cynical, competitive, and individualistic than social and humanitarian.

London, H. B. The Culture of a Community College. New York: Praeger, 1978.

Extensive participant observation analysis examines congruence between student and faculty values on the one hand and institutional functioning on the other.

Pace, C. R. Measuring Outcomes of College: Fifty Years of Findings and Recommendations for the Future. San Francisco: Jossey-Bass, 1979.

This book reviews and synthesizes several lines of research. Studies of achievement by undergraduates during college and by alumni after college yield positive results on a variety of criteria and measures. Such findings support the value of higher education. Other studies document relationship between institutional goals and student outcomes. Findings would likely be stronger with more powerful research designs.

Parker, C. A. and Schmidt, J. A. "Effects of College Experience." In H. E. Mitzel (Ed.), Encyclopedia of Educational Research (5th ed.). New York: Free Press, 1982, 535-543.

Significant academic, psychological, and economic gains are associated with the college experience, although important methodological problems limit much of the research.

Pascarella, E. T. "Student-Faculty Informal Contact and College Outcomes." Review of Educational Research, 50, 1980, 545-595.

"Significant positive associations exist between extent and quality of student-faculty informal contact and students' educational aspirations, their attitudes toward college, their academic achievement, intellectual and personal development, and their institutional persistence."

Perry, W. G. Forms of Intellectual and Ethical Development in the College Years. New York: Holt, Rinehart and Winston, 1970.

Elaborates a provocative series of developmental stages derived from extensive research with students at Harvard. Student interviews provide supporting evidence.

Ralph, N. "Stages of Faculty Development." New Directions for Higher Education (No. 1), 1973, 61-68.

A five-stage model of faculty growth derived from interviews shows increasing complexity both in their views of knowledge and in their interpersonal relationships.

Riesman, D. On Higher Education: The Academic Enterprise in an Era of Rising Student Consumerism. San Francisco: Jossey-Bass, 1980.

The author is concerned with declining faculty influence and the increasing influence of students as consumers. He discusses ways institutions of several types can improve information provided to students and what students can do to improve their educational experience.

Schuman, D. Policy Analysis, Education, and Everyday Life: An Empirical Reevaluation of Higher Education in America. Lexington, MA: Heath, 1982.

Intensive interviews with college students lead to provocative insights about "the impact of college education on everyday life" and to recommendations for radical change in higher education (and in the way policy analysis is conducted).

Thielens, W., Jr. "Undergraduate Definitions of Learning From Teachers." Sociology of Education, 50, 1977, 159-181.

Interviews with students "suggest that students may not always saliently define the classroom as a learning arena, and indeed, that students can readily define interaction with instructors, when it objectively engenders learning, in terms which take no notice of the learning."

Weathersby, R. P. and Tarule, J. M. Adult Development: Implications for Higher Education. AAHE-ERIC Higher Education Research Report (No. 4), 1980.

Both lifecycle (e.g., Gould, Levinson) and hierarchial (e.g., Loevinger, Perry) approaches to adult development are explicated. Applications to students, faculty, and instruction.

Whitman, N. A., Spendlove, D. C., and Clark, C. H. Student Stress: Effects and Solutions. ASHE-ERIC Higher Education Research Report (No. 2), 1984.

Reviews definitions and incidence of stress in undergraduate, graduate, law, and medical groups. "The key to reducing distress is providing students with a feeling of control over their education, information about what to expect, and feedback regarding what can be done to improve their performance."

Wilson, R. C., Gaff, J. G., Dienst, E. R., Wood, L., and Bavry, J. L. College Professors and Their Impact on Students. New York: Wiley-Interscience, 1975.

Large scale study of teaching effectiveness and outcomes of higher education. Faculty-student interaction emerged as a critical variable. (Some results also in Journal of Higher Education, 44, 1973, 605-621.)

Teaching-Learning Procedures

Baron, N. S. Priesthood and Pedagogy: Examining Presuppositions. EDUCOM Bulletin, 20(4), 1985, 13-16.

Argues that educators from traditional disciplines resist incorporating computers into their teaching and research efforts because of three presuppositions which underlie most higher education: (a) that liberal arts education is essentially nonvisual, (b) that most teaching is a one-to-many relationship exemplified by the lecture, and (c) that academics must specialize in one narrow area.

Beard, R. M. and Hartley, J. Teaching and Learning in Higher Education. London: Harper and Row, 1984.

This text for college teachers nicely balances practical advice with discussions of research, particularly scholarly work done in Great Britain.

Bok, D. "Looking Into Education's High-Tech Future." EDUCOM Bulletin, 20(3), 1985, 2-10, 17.

In a broad-ranging essay, Harvard's president discusses "the power to transform the university" which new technologies, at least in theory, possess. "At the very least, universities should manage to use technology to engage students in a more active process of thinking and problem solving that will help them learn more effectively."

Boud, D. (Ed.). Developing Student Autonomy in Learning. New York: Nichols, 1981.

These essays, by scholars from outside America, deal with how students in higher education can learn "without the constant presence or intervention of a teacher." Addresses issues of peer teaching, the authority problem, and assessment. Case studies are drawn from history, engineering, medicine, psychology, architecture, and nursing.

Briggs, L. J. and Wager, W. W. Handbook of Procedures for the Design of Instruction (2nd ed.). Englewood Cliffs, NJ: Educational Technology Publications, 1981.

A compendium of exercises and examples for course planning, particularly appropriate in situations where instruction is more materials-centered than teacher-centered. Chapters are correlated with such texts as Gagne and Briggs' Principles of Instructional Design.

Brown, G. Lecturing and Explaining. London: Methuen, 1978.

The characteristics of lectures and explanations are analyzed and exercises are provided to strengthen professors' analytic skills and presentation techniques. A practical and specific text for use by individuals as well as groups.

Buxton, T. H. and Prichard, E. (Eds.). Excellence in University Teaching: New Essays. Columbia, SC: South Carolina University Press, 1975.

Twenty-five essays and an annotated bibliography. Most chapters describe instructional plans and procedures with illustrations from a variety of disciplines.

Cahn, S. M. (Ed.). Scholars Who Teach: The Art of College Teaching. Chicago: Nelson-Hall, 1978.

Outstanding teachers discuss teaching in their disciplines: history, English, mathematics, science, social science, foreign language and literature, and music. The editor provides a chapter on grades and examinations.

Change Magazine. Guide to Effective Teaching. New Rochelle, NY: Author, 1978.

Eighty-two articles from the Change series, Reports on Teaching, are reprinted under these categories: lecture, computers, simulation, peer teaching, self-pacing and modules, case studies, multi-media, field study, research, and problem solving. Most of these analytic case studies were written by professional journalists. Benson Snyder contributed an original introduction for this collection.

Chickering, A. W. Experience and Learning: An Introduction to Experiential Learning. New Rochelle, NY: Change Magazine, 1977.

Experiential learning raises problems of resources and assessment. The basic concepts and mechanisms of experiential learning are examined through exposition of theories and through case studies. Costs and policy implications are also discussed.

Clark, R. E. "Reconsidering Research on Learning From Media." Review of Educational Research, 53, 1983, 445-459.

A highly critical, extensive review of research which concludes that there are "no learning benefits to be gained from employing any specific medium to deliver instruction."

Conrad, C. F. (Ed.). ASHE Reader on Academic Programs in Colleges and Universities. Lexington, MA: Ginn, 1984.

Selective set of 21 articles useful for courses on curriculum in postsecondary education.

Cooper, C., Orban, D., Henry, R., and Townsend, J. "Teaching and Storytelling: An Ethnographic Study of the Instructional Process in the College Classroom." Instructional Science, 12, 1983, 171-190.

This detailed description of teacher-student classroom interaction draws upon direct observation, videotaping, questionnaires, and interviews. Substantively, the significance of storytelling is explored; methodologically, the value of ethnographic methods in college classroom studies is analyzed.

Cross, K. P. Accent on Learning. San Francisco: Jossey-Bass, 1976.

Discusses recent work on effective teaching, including procedures for individualizing learning (e.g., mastery learning), instructional implications of research on cognitive styles, and curricular experiences for learning interpersonal skills.

Day, R. S. "Teaching From Notes: Some Cognitive Consequences." New Directions for Teaching and Learning (No. 2), 1980, 95-112.

Information in teachers' notes can take a variety of forms (e.g., outline, major points, pictures, tree diagrams). Advantages and disadvantages of these approaches are discussed.

Dillon, J. T. Teaching and the Art of Questioning. Bloomington, IN: Phi Delta Kappa, 1983.

Presents advantages and disadvantages of conventional questions for recitation and discussion. Alternative approaches are introduced and illustrated. (See also Journal of Teacher Education, 32(5), 1981, 51-55 and 32(6), 1981, 15-20.)

Dunkin, M. J. "Research on Teaching in Higher Education." In M. C. Wittrock (Ed.), Handbook of Research on Teaching, (3rd ed.). New York: Macmillan, 1986, 754-777.

A comprehensive, current, and thoughtful review of research on teaching methods and research on evaluating and improving teaching.

Eble, K. E. The Craft of Teaching San Francisco: Jossey-Bass, 1976.

Observations on various teaching formats and tasks from a professor of English. Chapter topics include lecture, seminar, discussion, assignments,

grades, and so on. Also deals with the proper preparation of college teachers.

Ellner, C. L. and Barnes, C. P. (Eds.). Studies of College Teaching: Experimental Results, Theoretical Interpretations, and New Perspectives Lexington, MA: Heath, 1983.

Histories of college teaching and of research on college teaching are followed by reports of several original studies. Application of literary criticism as well as descriptive and quantitative methods leads to some provocative findings, including: most classroom talk is professor talk (about 80%); classroom discourse at the lowest cognitive level occurs twice as much as at all other levels combined; professors ask few questions, and about four out of five questions are at the lowest cognitive level; students' verbal participation shows an inconsistent relationship to course outcomes.

Epstein, J. (Ed.). Masters: Portraits of Great Teachers. New York: Basic, 1981.

Originally published in the American Scholar, these 16 essays convey impressions that memorable teachers made as recollected by their students. Contributors include Edmund Wilson on Christian Gauss, Sidney Hook on Morris Cohen, Victor Barnouw on Ruth Benedict, and John Wain on C. S. Lewis.

Ericksen, S. C. The Essence of Good Teaching: Helping Students Learn and Remember What They Learn. San Francisco: Jossey-Bass, 1984.

Practical, research-based advice for planning and presenting course content in ways that enhance learning, retention, and enthusiasm. Also discusses teacher as evaluator, counselor, and mentor and how to assess and sustain the quality of teaching over time.

Fisher, F. D. "Teaching, Scholarship, and the Computer: Perspectives of a Generalist." AAHE Bulletin, 35(3), 1982, 3-6.

Examples show that the computer can enrich teaching, rather than cause it to become dehumanized or simplistic, if educators modify traditional notions of productivity and instruction.

Flournoy, D. M. and Associates. The New Teachers. San Francisco: Jossey-Bass, 1972.

Reflective essays by college teachers in a variety of fields who search for congenial teaching styles and experiment with many approaches.

Foley, R. P. and Smilansky, J. Teaching Techniques: A Handbook for Health Professionals. New York: McGraw-Hill, 1980.

Brief chapters on lecturing, classroom questions, group discussion, manual tasks, clinical problem solving, and instructional design. Includes checklists and rating forms for evaluation and an annotated bibliography. Although illustrations are drawn from the health professions, most content is applicable across the curriculum.

Ford, N. "Recent Approaches to the Study and Teaching of 'Effective Learning' in Higher Education." Review of Educational Research, 51, 1981, 345-377.

To what extent can effective learning be taught? The answer is still quite tentative, but research reviewed here, much of it done outside America, shows progress in measuring qualitatively different levels of understanding and the learning processes which lead to understanding.

Frederick, P. "The Dreaded Discussion: Ten Ways to Start." Improving College and University Teaching, 29, 1981, 109-114.

Effective discussion depends upon good planning. These practical suggestions deal with identifying questions or issues for discussions, using student pairs or small groups, and employing techniques such as debate and role playing.

Fuhrman, B. S. and Grasha, A. F. A Practical Handbook for College Teachers. Boston: Little, Brown, 1983.

This book synthesizes theoretical knowledge, research findings, and the authors' consulting experience into a handbook of applications. The text deals with learning theory, personal values about teaching, student learning styles, and teaching and evaluation techniques. Exercises and self-analysis questionnaires stimulate readers to reflect upon and modify their teaching practices.

Gagne, R. M. and Briggs, L. J. Principles of Instructional Design (2nd ed.). New York: Holt, Rinehart and Winston, 1979.

This approach to instructional design, presented by its leading theorist, is built around five categories of learning outcomes: intellectual skills, cognitive strategies, verbal information, motor skills, and attitudes. Other chapters deal with media, group and individual instruction, evaluation, and so on.

Gamson, Z. F. and Associates. Liberating Education. San Francisco: Jossey-Bass, 1984.

Undergraduate education should liberate students by cultivating critical awareness, sharpening skills of inquiry and analysis, and improving self-assurance and confidence. This FIPSE-sponsored project reports on 14 programs which pursue those goals.

Garrison, R. (Ed.). "Implementing Innovative Instruction." New Directions for Community Colleges (No. 5), 1974.

First person essays describe innovations in freshmen composition, psychology, learning resource centers, poetry, and history.

Gayeski, D. M. and Williams, D. V. "Interactive Video in Higher Education." In O. Zuber-Skerritt (Ed.), Video in Higher Education. New York: Nichols, 1984, 64-74.

Describes hardware and software for this new instructional technology and discusses its use in course development and delivery.

Goldsmid, C. A. and Wilson, E. K. Passing on Sociology: The Teaching of a Discipline. Belmont, CA: Wadsworth, 1980.

Issues related to teaching sociology are discussed in this volume of more than 400 pages, but much of the content is applicable to other disciplines (e.g., preparing a syllabus, the development of critical thinking). Several chapters are devoted to the ends of teaching, the means of teaching and the extent to which the means achieve the ends. Extensive bibliography.

Grant, G. et al. On Competence: A Critical Analysis of Competence-Based Reforms in Higher Education. San Francisco: Jossey-Bass, 1979.

Using competence-based curriculum in liberal arts and professional studies requires distinctive teacher roles, teacher-learning methods, and evaluation procedures. These and other issues are discussed in the context of five campus programs.

Gross, F. L. Jr. "Teaching Cognitive-Moral Development in College (A Generalist Approach)." Journal of General Education, 32, 1981, 287-308.

Reviews theories of Kohlberg and Perry. Describes class activities, including film and literary sources, designed to help students think about moral judgments at more "advanced" levels.

Gullette, M. M. (Ed.). The Art and Craft of Teaching. Cambridge, MA: Harvard-Danforth Center for Teaching and Learning, Harvard University, 1982.

As a guide for beginning teachers at the college level, the essays in this volume deal with lecturing, questioning, section leading, grading, and so on. Contributors were participants in a seminar offered for the Center by C. Roland Christensen.

Henderson, E. S. and Nathenson, M. B. (Eds.). Independent Learning in Higher Education. Englewood Cliffs, NJ: Educational Technology, 1984.

The first dozen years of the British Open University are documented through a wide variety of course development projects.

Hill, W. F. Learning Through Discussion: Guide for Leaders and Members of Discussion Groups. Beverly Hills, CA: Sage, 1969.

This manual prepares the reader to use a nine-step procedure (map) for group discussion. The value of clear leader direction is emphasized and criteria are given for effective groups and effective group members.

Hyman, R. Improving Discussion Leadership. New York: Teachers College Press, 1980.

Highly practical suggestions for planning and conducting classroom discussions. Six skills are detailed (contributing, crystallizing, focusing, introducing/closing, questioning, supporting), with examples and exercises for each. Tools for evaluation discussion are appended.

Joyce, B. and Weil, M. Models of Teaching (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall, 1986.

Systematic presentation of two dozen approaches to teaching, each based on extensive theory and research. The families of models include information processing (e.g., inquiry training, advance organizers), personal (e.g., synectics, awareness training), social (e.g., role playing, jurisprudential), and behavioral (e.g., contingency management stress reduction). Several models for thinking about models are also presented.

Karp, D. A. and Yoels, W. C. "The College Classroom: Some Observations on the Meaning of Student Participation." Sociology and Social Research, 60, 1976, 421-439.

This observational study of 10 college classes of from 12 to 65 students found that, regardless of class size, about the same number of students (9-10) participated in discussion. Additional observational data as well as students' reasons for participating or not participating are given.

Keller, F. S. and Sherman, J. G. The PSI Handbook: Essays on Personalized Instruction. Lawrence, KS: TRI, 1982.

The Personalized System of Instruction is one of the most carefully researched and positively evaluated alternatives to lecture-discussion. The founders of the approach describe its basis in theory, its applications, and advantages and disadvantages which have emerged during two decades of use.

Kemp, J. E. The Instructional Design Process. New York: Harper and Row, 1985.

Concise guide for planning instruction. Appendix includes sample instructional units in a variety of fields which were developed according to the author's plan. Compatible with teaching at the college level.

Kemp, J. E. and Dayton, D. K. Planning and Producing Audiovisual Media (5th ed.). New York: Harper and Row, 1985.

The "how" and "why" of media for instruction. Especially good on "how." Techniques discussed range from chalkboards to multimedia presentations.

Knapper, C. K. (Ed.). "Expanding Learning Through New Communications Technologies." New Directions for Teaching and Learning (No. 9), 1982.

Eight chapters deal with such topics as distance education, videodiscs, videotex, data analysis by computer, simulation and gaming, and lifelong learning.

Knowles, M. Self-Directed Learning: A Guide for Teachers and Learners. New York: Association Press, 1975.

Provides resources for those promoting collaborative, self-directed learning rather than competitive, teacher-directed learning. Exercises and evaluation forms for individual and class use are included. Heavy on the practical, light on the theoretical.

Kozma, R. B., Belle, L. W., and Williams, G. W. Instructional Techniques in Higher Education. Englewood Cliffs, NJ: Educational Technology, 1978.

Nontechnical discussion of teaching, with some reference to research. Techniques are classified as one-way media (lecture, book, television, motion pictures, still projection, audio), two-way media (discussion, role playing, simulation), and self-instructional media (PSI, audio-tutorial, programmed instruction, computers, laboratory, independent study).

Kulik, C. L. C., Kulik, J. A., and Cohen, P. A. "Instructional Technology and College Teaching." Teaching of Psychology, 7, 1980, 199-205.

The Kuliks and their colleagues have conducted meta-analyses of research on several instructional technologies. In this paper they provide an overview and integration of the separate analyses.

Lacey, P. A. (Ed.). "Revitalizing Teaching Through Faculty Development." New Directions for Teaching and Learning (No. 15), 1983.

These essays describe teaching projects conducted by junior faculty at a variety of institutions under fellowships from The Lilly Endowment. Innovative approaches to physics, sociology, literature, political science, music theory, and psychology are included. Some projects emphasize cognitive skills (analytical and creative thinking) or technology (computer-assisted instruction). Authors comment on how the fellowships influenced their professional development.

LaFauci, H. M. and Richter, P. E. Team Teaching at the College Level. New York: Pergamon, 1970.

General discussion based on experience at Boston University's College of Basic Studies.

Levinson-Rose, J. and Menges, R. J. "Improving College Teaching: A Critical Review of Research." Review of Educational Research, 51, 1981, 403-434.

Seventy-one studies are reviewed under five intervention categories: grants for faculty projects, workshops, and seminars; feedback from student ratings; practiced-based feedback; and concept-based training. Findings can guide teaching improvement programs, especially programs which employ student ratings feedback and concept-based training.

Lowman, J. Mastering the Techniques of Teaching. San Francisco: Jossey-Bass, 1984.

This experienced teacher of psychology integrates research findings into a model of teaching with two dimensions, i.e. intellectual excitement and interpersonal rapport. The model provides a framework for treatments of lecturing and discussion techniques. Also discussed are instructional planning, assignments, and evaluation.

Mager, R. F. Preparing Instructional Objectives (2nd ed.). Belmont, CA: Fearon, 1975.

Widely used guide for those who wish to learn to write clear and specific objectives.

Mann, R. W. et al. The College Classroom: Conflict, Change, and Learning. New York: Wiley, 1970.

Intensive, semester-long study of several classes. Presents a list of teacher roles and a typology of students. Classroom transcripts illustrate significant classroom events.

McKeachie, W. J. Teaching Tips: A Guidebook for the Beginning College Teacher (8th ed.). Lexington, MA: Heath, 1986.

Includes both practical advice and references to research on a wide variety of topics which concern college teachers regardless of their level of experience. This edition expands or adds material on cognitive and instructional psychology, motivation, PSI, student ratings of faculty, roles of teachers, students teaching students, and games and simulations.

McKeachie, W. J. and Kulik, J. A. "Effective College Teaching." Review of Research in Education, 3, 1975, 165-209.

Describes alternative college teaching procedures and summarizes research on their effectiveness. Includes discussion of individualized instruction (personalized system of instruction), educational technology (television, programmed instruction, computers, simulation), student interaction and autonomy (class size, students as teachers, independent study, etc.), student characteristics affecting learning (anxiety, aptitude, etc.), structure, content, and information processing (objectives, sequence, feedback).

McNail, S. "Peer Teaching: A Description and Evaluation." Teaching Sociology, 2, 1975, 133-146.

Brief review of research on peer teaching in college shows that it usually brings a grade increase for tutors and sometimes for tutees. Attitudes are likely to become more positive for both groups. One peer tutoring program is described in detail.

Menges, R. J. and McGaghie, W. "Learning in Group Settings: Toward a Classification of Outcomes." Educational Technology, 14(11), 1974, 56-60.

What learnings are peculiar to group settings? A six-category system is proposed for classifying such interpersonal learning.

Milton, O. and Associates. On College Teaching: A Guide to Contemporary Practices. San Francisco: Jossey-Bass, 1978.

Clear, informative, practical essays on planning and evaluating instruction and on commonly used instructional methods. Effective anecdotes and good humor make this volume easier to read but no less instructive than others covering similar topics. Chapter themes include specifying objectives,

lecturing, leading discussions, testing, contracts, case studies, competencies, simulation/gaming, and more.

Neale, D. C. "Specifications for Small Group Activities in Instructional Design." Instructional Science, 13, 1984, 15-35.

A dozen small-group instructional activities (e.g., tutoring, committee, simulation, and topic discussion) are analyzed according to their distinctive requirements: instructional objectives, role structure, task structure, and reward structure.

Newble, D. I. and Cannon, R. A. "How to Make a Presentation at a Scientific Meeting." Medical Teacher, 6, 1984, 6-10.

These very practical suggestions may seem obvious to experienced presenters, but they will be welcomed by novices. If they were followed by all presenters, scientific meetings would be much improved.

Norton, T. M. and Ollman, B. (Eds.). Studies in Socialist Pedagogy. New York: Monthly Review Press, 1978.

An anthology of pieces by Marxists and political radicals on the teaching of Marxism and on the teaching of content from other disciplines using a Marxist perspective. Includes "how I do it" essays and extensive lists of resources.

Penner, J. G. Why Many College Teachers Cannot Lecture: How to Avoid Communication Breakdown in the Classroom. Springfield, IL: Thomas, 1984.

Along with suggestions for improving lecturing techniques, this speech professor discusses how to gain and maintain students' attention, clarify why one's course is worthy of study, and emphasize the responsibilities of students in the classroom.

Potter, D. and Andersen, M. P. Discussion in Small Groups: A Guide to Effective Practice (3rd ed.). Monterey, CA: Brooks/Cole, 1976.

Text-workbook for use in courses dealing with discussion skills. Highly practical with training exercises.

Rogers, C. R. Freedom to Learn for the 80's. Columbus, OH: Merrill, 1983.

Application of humanistic psychology to education. Includes case studies of student-centered teaching in college.

Rossini, F. A. "EARTHNET: The University of the Future." Technological Forecasting and Social Change, 26, 1984, 189-194.

The present university is "about to be trashed because of intellectual, organizational, and technological obsolescence." Rossini speculates about an alternative institution which could more adequately achieve the following goals: (a) effective and efficient transmission of existing basic knowledge; (b) advanced instruction in frontier knowledge in rapidly changing fields; (c) development of new knowledge through research; (d) effective and efficient transmission of research results to the full spectrum of

users; and (e) ongoing fundamental, constructive criticism of our complex technological society.

Roueche, J. E. and Snow, J. J. Overcoming Learning Problems: A Guide to Developmental Education in College. San Francisco: Jossey-Bass, 1977.

Describes a dozen particularly successful remedial/developmental collegiate programs.

Runkel, P., Harrison, R., and Runkel, M. (Eds.). The Changing College Classroom. San Francisco: Jossey-Bass, 1969.

Sixteen essays by experimenting college teachers, most of them emphasizing the need to restructure the student-professor relationship.

Sheffield, E. F. (Ed.). Teaching in the Universities: No One Way. Montreal: McGill-Queen's University Press, 1974.

Twenty-three essays by teachers identified as excellent in a survey of 7,000 alumni of Canadian universities. Each describes personal beliefs about teaching and some favorite teaching procedures.

Skinner, B. F. "Designing Higher Education." Daedalus, 103(4), 1974, 196-202.

Skinner's view of how people learn, with explicit applications to higher education.

Spinrad, R. J. "The Electronic University." EDUCOM Bulletin, 18(3-4), 1983, 4-8, 15.

Details of life in the future electronic university are conveyed through three vignettes concerning the daily activities of a student, a professor, and an administrator.

Thiagarajan, S. "Games for Unlecturing." Educational Technology, 18(10), 1978, 44-45.

As a substitute for an instructor-delivered lecture, this game requires that didactic content be communicated by means of student-identified questions, teamwork, press conferences, and so on. Students' summary reports can then be graded by the teacher.

Timpson, W. M. and Tobin, D. N. Teaching as Performing: A Guide for Energizing Your Public Presentation. Englewood Cliffs, NJ: Prentice-Hall, 1982.

Explores parallels between teaching and performing arts, particularly theatre, citing views of both teachers and actors. Includes tips and exercises for warming up, controlling energy, vocal techniques, and improvisation. Depictions of teaching in literature are quoted and discussed.

Tucker, M. S. (Ed.). "Instruction and the Computer." Current Issues in Higher Education (No. 2), 1983-84, 25-38.

How five postsecondary institutions imaginatively use computers for instruction: University of Maryland (physics), Colorado State University

(economics), University of Illinois (medicine), Milwaukee Area Technical College (high-technology equipment).

Waggoner, M. "The New Technologies Versus the Lecture Tradition in Higher Education: Is Change Possible?" Educational Technology, 24(3), 1984, 7-12.

Available and affordable new technologies remove one reason for the persistence of the lecture, but the way teaching is defined and rewarded as well as the influence of faculty in institutional governance make rapid change away from lecturing unlikely.

Weston, C. and Cranton, P. A. "Selecting Instructional Strategies." Journal of Higher Education, 57, 1986, 259-288.

Research-based guide for matching instructional strategies to characteristics of the instructional setting. Strategies in four categories (instructor-centered, interactive, individualized, and experiential) are discussed in terms of materials, objective, audience, and so on.

Evaluating Learning and Instruction

American Association of University Professors. "Statement on Teaching Evaluation." AAUP Bulletin, 68, 1974, 168-170.

". . . a guide to proper teaching evaluation methods and their appropriate uses in personnel decisions."

Armstrong, M. and Boud, D. "Assessing Participation in Class Discussion: An Exploration of the Issues." Studies in Higher Education, 8, 1983, 33-44.

Assessing participation in class discussion as part of students' grades raises several problems. This article suggests criteria for evaluation and techniques for keeping records of participation.

Baird, L. L. "Do Grades and Tests Predict Adult Accomplishment." Research in Higher Education, 23, 1985, 3-85.

Relationships are usually positive but low, except where content of the academic measures and the demands of the field are similar.

Batista, E. E. "The Place of Colleague Evaluation in the Appraisal of College Teaching: A Review of the Literature." Research in Higher Education, 4, 1976, 257-271.

Concludes with a list of 10 faculty behaviors which colleagues are in a good position to evaluate and 22 criteria of approaches that could be used for such evaluation.

Benton, S. E. Rating College Teaching: Criterion Validity Studies of Student Evaluation of Instruction Instruments. AAHE-ERIC Higher Education Research Report (No. 1), 1982.

How closely does student learning (measured by exam scores) correlate with student ratings of courses and teachers? Although conceptual and

methodological problems complicate the question, it appears that the relationship is at least moderately positive and is strongest for such dimensions as teacher skill and course structure. Some research is reviewed which used criterion variables other than achievement.

Bess, J. L. "Classroom and Management Decisions Using Student Data: Designing an Information System." Journal of Higher Education, 50, 1979, 256-279.

Ways of collecting data from students through which decisions can be made about institutional and instructional practices. An appendix briefly describes several dozen "testing instruments" for this purpose.

Braskamp, L. A., Brandenburg, D. C., and Ory, J. C. Evaluating Teaching Effectiveness: A Practical Guide. Beverly Hills, CA: Sage, 1984.

This useful guide consistently distinguishes between evaluation for personnel decisions and evaluation for teaching improvement. Suggestions for collecting and using information from the following sources: students, colleagues, self, alumni, and records.

Brindley, W. A. "Objective Grading of Essay Examinations." Educational Technology, 18(10), 1978, 27-29.

An instructor using this system identifies and evaluates each idea in the student's essay. Credibility of idea, quality of idea, and volume of ideas each receive equal weight in a grade equation.

Centra, J. A. Determining Faculty Effectiveness: Assessing Teaching, Research and Service for Personnel Decisions and Improvement. San Francisco: Jossey-Bass, 1979.

The nonspecialist is introduced to research findings as well as to specimen questionnaires for gathering: student ratings, student learning data, self-ratings, and colleague reports about teaching. One chapter deals with evaluation of research, advising, and public service; another deals with legal considerations in personnel evaluations.

Clift, J. C. and Imrie, B. W. Assessing Students, Appraising Teaching. New York: Wiley, 1981.

Describes and critiques several assessment techniques (open book exam, project work, oral exam, practical work, etc.) and deals with pros and cons of several types of exam questions. Many examples are given, including forms for recording appraisals of assignments which are then fed back to students.

Cohen, P. A. "Student Ratings of Instruction and Student Achievement: A Meta-Analysis of Multisection Validity Studies." Review of Educational Research, 51, 1981, 281-309.

Data from 68 separate multisection courses show a substantial relationship between achievement and ratings on such dimensions as skill and structure. Findings are interpreted as "strong support" for the validity of student ratings.

Costin, F., Greenough, W. T., and Menges, R. J. "Student Ratings of College Teaching: Reliability, Validity, and Usefulness." Review of Educational Research, 41, 1971, 511-535.

One of the first critical reviews of research on stability and internal consistency of ratings and on factors that possibly bias ratings. Results of a survey of student opinions about ratings are also presented.

Dawson, J. A. and Caulley, D. N. "The Group Interview as an Evaluation Technique in Higher Education." Educational Evaluation and Policy Analysis, 3, 1981, 61-66.

Someone other than the instructor leads a course evaluation discussion with all or some students. Procedures, advantages, and disadvantages are discussed.

Doyle, K. O., Jr. Evaluating Teaching. Lexington, MA: Heath, 1983.

This broad, critical discussion of teaching evaluation in postsecondary education deals with conceptual issues as well as empirical matters (e.g., reliability of questionnaires). Covers collecting and analyzing data from students, alumni, and colleagues.

Frederiksen, N. "The Real Test Bias: Influences of Testing on Teaching and Learning." American Psychologist, 39, 1984, 193-202.

"Efficient tests tend to drive out less efficient tests, leaving many important abilities untested--and untaught." This psychologist discusses alternatives to multiple-choice questions for testing important abilities such as the ability "to solve ill-defined problems."

Gow, D. T. "Intrinsic Analysis of Instructional Materials." Educational Technology, 10(5), 1980, 7-15.

Offers a checklist for evaluating quality and appropriateness of instructional materials, including worksheets, supplementary texts, self-study manuals, and multimedia presentations. Checklist categories include relevance of content, use of motivating devices, quality of sequencing, opportunity to practice relevant skills, and so on.

Greenwood, G. E. and Ramagli, H. J., Jr. "Alternatives to Student Ratings of College Teaching." Journal of Higher Education, 51, 1980, 673-684.

Considers a number of alternatives, including student achievement, peer evaluation, self-evaluation, administrative ratings, and classroom observations. Although none of these is judged an adequate substitute for student ratings, they might be used productively in combination.

Harper, G. M. "'The Waste Sad Time': Some Remarks on Class Visitation." College English, 27, 1965, 119-123.

Argues against observing classes of younger colleagues in order to evaluate their teaching.

Hildebrand, M., Wilson, R. C., and Dienst, E. R. Evaluating University Teaching. Berkeley, CA: Center for Research and Development in Higher Education, University of California, 1971.

Discusses characteristics of effective and ineffective professors as reported by students and colleagues. Suggestions for a program of student evaluation of teaching. (Some results also in Journal of Higher Education, 44, 1973, 41-50.)

Jones, R. E. "Letters of Reflection." New Directions for Teaching and Learning (No. 4), 1980, 1-14.

Instead of using letter grades or narrative evaluations to convey appraisals of student work, Jones writes letters at midterm, off-the-record. Several examples of his letters and of student responses to them are included.

Marsh, H. W. "Students' Evaluations of University Teaching: Dimensionality, Reliability, Validity, Potential Biases, and Utility." Journal of Educational Psychology, 76, 1984, 707-754.

After reviewing his own and others' research, Marsh concludes that "class-average student ratings are (a) multidimensional; (b) reliable and stable; (c) primarily a function of the instructor who teaches a course rather than the course that is taught; (d) relatively valid against a variety of indicators of effective teaching; (e) relatively unaffected by a variety of variables hypothesized as potential biases; and (f) seen to be useful by faculty as feedback about their teaching, by students for use in course selection, and by administrators for use in personnel decisions."

Mathis, B. C. "Evaluating the Effectiveness of Teaching." New Directions for Program Evaluation (No. 6), 1980, 21-38.

Teaching effectiveness in higher education can be evaluated productively in light of models developed for other educational levels (e.g., by Bloom and by Harnischfeger and Wiley). Distinctions between training and education must also be kept in mind in the evaluation enterprise.

McGaghie, W. C. and Menges, R. J. "Assessing Self-Directed Learning." Teaching of Psychology, 2, 1975, 56-59.

A goal-setting procedure that preserves individual learning objectives but also permits comparison of achievement across groups is applied in an educational psychology course.

Menges, R. J. "Evaluating Teaching Effectiveness: What is the Proper Role for Students?" Liberal Education, 65, 1979, 356-370.

Students are sources of unique information about the teaching they receive, but questions asked of them must be carefully planned, and deliberate efforts must be made to regulate how resulting information is used.

Mentkowski, M. and Doherty, A. "Abilities That Last a Lifetime: Outcomes of the Alverno Experience." AAHE Bulletin, 36(6), 1984, 5-6, 11-14.

For seven years, the Alverno College curriculum has been structured to produce student learning outcomes in eight core areas: communication, analysis, problem solving, valuing in decision making, social interaction, taking responsibility for the environment, involvement in the contemporary world, aesthetic response. The elaborate evaluation reported here documents changes in students attributable to the curriculum.

Miller, H. G., Williams, R. G., and Haladyna, T. M. Beyond Facts: Objective Ways to Measure Thinking. Englewood Cliffs, NJ: Educational Technology Publications, 1978.

Text with exercises on writing multiple choice test items which require more than memory. The four cognitive levels covered are: summarizing (understanding substance of a message), predicting (anticipating unknown events), evaluating (decision-making based on criteria or standards), and applying (manipulating situations to produce a desired effect).

Miller, R. I. The Assessment of College Performance: A Handbook of Techniques and Measures for Institutional Self Evaluation. San Francisco: Jossey-Bass, 1979.

Extensively illustrated discussion of assessment of programs, faculty performance, student learning, and related topics.

Millman, J. (Ed.). Handbook of Teacher Evaluation. Beverly Hills, CA: Sage, 1981.

Of the 17 chapters, most pertinent to higher education are Scriven's comprehensive and critical discussion, French-Lazovik on documentary evidence for peer review, Aleamoni on student ratings, Carroll on self evaluation, and Brock on teacher development.

Milton, O., Pollio, H. R., and Eison, J. A. Making Sense of College Grades. San Francisco: Jossey-Bass, 1986.

Discusses ways to change testing and grading so that grades can effectively promote student learning.

Payne, D. A. The Assessment of Learning: Cognitive and Affective. Lexington, MA: Heath, 1974.

A basic educational measurement text, notable for its attention to noncognitive as well as to cognitive learning.

Priestley, M. Performance Assessment in Education and Training: Alternative Techniques. Englewood Cliffs, NJ: Educational Technology Publications, 1982.

As alternatives to multiple-choice tests, this practical volume discusses other paper and pencil approaches, work samples, simulations, oral assessments, observation records, and assessment centers.

Reiser, R. A. An objective approach to scoring essays. Journal of Instructional Development, 3, 1980, 19-22.

Guidelines for specifying what features an answer should contain and criteria for judging the quality of each feature.

Renner, R. R. "Comparing Professors: How Student Ratings Contribute to the Decline in Quality of Higher Education." Phi Delta Kappan, 63, 1981, 128-130.

Arguments commonly raised in opposition to end-of-course questionnaires are conveniently consolidated in this article.

Seldin, P. Changing Practices in Faculty Evaluation. San Francisco: Jossey-Bass, 1984.

A survey of more than 600 liberal arts colleges is compared with similar surveys five and ten years earlier. Includes commentary on the survey by seven researchers, discussion of legal issues in evaluation, and much practical advice.

Shore, B. M., Foster, S. F., Knapper, C. K., Nadeau, G. G., Neill, N., and Sim, V. "Guide to the Teaching Dossier: Its Preparation and Use." Canadian Association of University Teachers Bulletin, 27(3), 1980, 15-23. (Also available from Center for Teaching and Learning Services, McGill University, 845 Sherbrooke Street West, Montreal Quebec H3C2T5).

The Teaching Dossier is a format for communicating information about teaching activities. It identifies and illustrates more than 45 categories of information, including information about academic and career attainments of students; self-evaluations and self-reports; and data from students, colleagues, and administrators. Faculty members may choose items from this "menu" as they document their work for purposes of administrative evaluation, self-improvement, and/or student course selection.

Wagenaar, T. C. "Using Student Journals in Sociology Courses." Teaching Sociology, 11, 1984, 419-437.

Student journals can be an alternative to tests for evaluating student learning at higher cognitive levels, particular application, analysis, and synthesis. Evaluation of journals is based on five criteria: accuracy, diversity, thoroughness, originality, and range of cognitive levels.

Whiteman, N. and Weiss, E. Faculty Evaluation: The Use of Explicit Criteria for Promotion, Retention, and Tenure. AAHE-ERIC Higher Education Research Report (No. 2), 1982.

Explicit criteria for personnel decisions can be developed for certain areas of evaluation. Appropriate standards and proper administrative procedures are enumerated. Specimen peer review forms and guidelines for interpreting student ratings are appended.

Professional Development of College Teachers

Andrews, J. D. W. (Ed.). "Strengthening the Teaching Assistant Faculty." New Directions for teaching and Learning (No. 22), 1985.

For TAs and those managing programs for TAs. Deals with programs for TA training through workshops, simulations, and video feedback and how to determine the proper administrative location for such programs. Problems of time management for TAs and special problems of foreign students as TAs are also addressed.

Baldwin, R. and Associates. Expanding Faculty Options: Career Development Projects at College and Universities. Washington, D.C.: American Association for Higher Education, 1981.

Reports two dozen projects for expanding faculty career options. Programs deal with new faculty roles, both on and off campus.

Becker, W. H. "A Collegial Approach to Faculty Development." Liberal Education, 67, 1981, 19-35.

Improvement of teaching should be the priority of faculty development. A collegial approach minimizes conflict between individual autonomy and institutional goals. Two dozen specific activities are listed which involve faculty one-on-one, faculty in small groups, student-faculty collegueship, and administrative support.

Bergquist, W. H. and Phillips, S. R. A Handbook for Faculty Development (Vols. I, II, III). Washington, D.C.: Council of Independent Colleges, 1975, 1977, 1981.

Provides research-based essays, exercises, and instruments for persons conducting faculty development programs. Describes several approaches, including instructional development, organizational development, and personal development. Volume III extends materials in earlier volumes, discusses funding for faculty development programs, and includes an index to all three volumes.

Brown, D. G. and Hanger, W. S. "Pragmatics of Faculty Self-Development." Educational Record, 56, 1975, 201-206.

There are many ways that faculty can energize the institutional community. This article lists 142 of them.

Chait, R. P. and Gueths, J. "Proposing a Framework for Faculty Development." Change, 13(4), 1981, 30-33.

This brief overview proposes a faculty development program which focuses on professional roles and activities, is developmental and constructive (rather than remedial), centrally supported by the institution, faculty controlled, institution-wide, and uses appropriate intrinsic and extrinsic rewards.

Cole, C. C., Jr. Improving Instruction: Issues and Alternatives for Higher Education. AAHE-ERIC Higher Education Research Report (No. 4), 1982.

Brief summaries of recent studies on learning theories, instructional effectiveness, faculty attitudes, and particular instructional methods. "Extensive reform" is called for.

Davis, R. H. "A Behavioral Change Model With Implications for Faculty Development." Higher Education, 8, 1979, 123-140.

This model specifies factors associated with faculty adoption of innovations and with successful use of innovations. Both individual and organizational variables are included.

Eble, K. E. The Aims of College Teaching. San Francisco: Jossey-Bass, 1983.

As a humanist, Eble laments specialization in teaching. He urges more attention to values and humane feeling, notes flaws in teaching and teaching improvement programs, and suggests remedies.

Francis, J. B. "How Do We Get There From Here? Program Design for Faculty Development." Journal of Higher Education, 46, 1975, 719-732.

Attitudes about faculty development pass through three stages: consciousness raising, focal awareness (new strategies and procedures), and subsidiary awareness (new climate). The stages are illustrated with regard to instructional development.

Freedman, M., with Brown, W., Ralph, N., Shukraft, R., Bloom, M. and Sanford, N. Academic Culture and Faculty Development. Berkeley, CA: Moutaigne, 1979.

This discussion of faculty development (defined as processes of self-insight and challenge) is derived from data from interviews in the early 1970's. Ethnographies of Berkeley, Stanford, and Mills lead to a five-stage typology of development of professors.

Furniss, W. T. Reshaping Faculty Careers. Washington, D.C.: American Council on Education, 1981.

Demographic information and fictionalized cases lead to suggestions of nonconventional careers for academics at various ages and stages. Considerable attention to financial matters. (Excerpts in Change, 13(7), 1981, 38-45, 57).

Furniss, W. T. The Self-Reliant Academic. Washington, D.C.: American Council on Education, 1984.

As successful professors move from dependency on their institutions toward career-broadening options, a self-help organization (here called "the Associates") can assist with job and financial information, marketing, and interpersonal support.

Gaff, J. G. Toward Faculty Renewal: Advances in Faculty Instructional and Organizational Development. San Francisco: Jossey-Bass, 1975.

Comprehensive description and analysis of faculty renewal programs. Separate discussion of three program emphases: on faculty members themselves, on instruction, on the institution.

Griffin, G. S. (Ed.). Staff Development (82nd Yearbook of the National Society for the Study of Education). Chicago: University of Chicago Press, 1983.

Although dealing with precollege education, this volume can assist in designing, conducting, and evaluating postsecondary faculty development programs keyed to needs of adult learners.

Group for Human Development in Higher Education. Faculty Development in a Time of Retrenchment. New Rochelle, NY: Change Magazine, 1974.

Thoughtful discussion about improving the effectiveness of faculty, including instructional effectiveness. Touches many topics treated in this bibliography and is useful as a basic working paper for groups planning faculty development programs.

Heller, J. F. Increasing Faculty and Administrative Effectiveness. San Francisco: Jossey-Bass, 1982.

Exposition of Argyris' "Model II" learning with applications to postsecondary education. An instance of attempted curriculum innovation is reported and analyzed. A seminar in which participants study Model II is described.

Hewton, E. "The Twilight World of Staff Development." Studies in Higher Education, 5, 1980, 205-215.

Essay review of six books on programs outside the U.S.A. According to these sources, staff development programs are widely available but often faculty response is disappointing.

Highet, G. The Immortal Profession: The Joys of Teaching and Learning. New York: Weybright and Talley, 1976.

A collection of speeches and writings about teaching and learning, mostly in higher education. Something of a successor to his 1950 volume, The Art of Teaching. Education is viewed as a civilizing force, and the characteristics of good teachers and students are discussed. Includes a chapter, "Teaching College Teachers How to Teach."

Lindquist, J. (Ed.). Designing Teaching Improvement Programs. Washington, D.C.: Council of Independent Colleges, 1978.

Several prime movers in faculty development provide essays describing teaching improvement programs in several settings: liberal arts college (Bergquist), university (Mathis), community college (Case), nontraditional (Clark), and interinstitutional (Buhl).

Lindquist, J. Strategies for Change. Washington, D.C.: Council of Independent Colleges, 1978.

Change teams worked during several years with ten colleges and universities. Their case histories, recounted in reflective detail, lead to the "adaptive development" theory of change, a model applicable throughout postsecondary education.

Lovett, C. M. "Vitality Without Mobility: The Faculty Opportunities Audit." Current Issues in Higher Education (No. 4), 1983-84.

This workbook contains lists of questions to be completed by faculty and by institutional leaders. They deal with teaching, research/publication, and service/leadership, both "along traditional lines" and "through the expansion of traditional roles."

Mathis, B. C. "Academic Careers and Adult Development: A Nexus for Research." Current Issues in Higher Education, 1(2), 1979, 21-24.

Discusses interplay of career stage, disciplinary values, and institutional culture, with implications for controlled interventions.

Mathis, B. C. "Faculty Development." In H. E. Mitzel (Ed.), Encyclopedia of Educational Research (5th ed.). New York: Free Press, 1982, 646-655.

Presents reasons for the emergence of faculty development as a movement in the late 1960's; summarizes a number of models for faculty development programs; reviews studies of program characteristics and effects; discusses recent interest in development and careers.

Mehrotra, C. M. N. (Ed.). "Teaching and Aging." New Directions for Teaching and Learning (No. 19), 1984.

The aging professoriate affects teaching quality, institutional budgets, and efforts at recruitment and affirmative action. Describes ways institutions can make use of the special skills and experience of faculty who are approaching and entering retirement.

Menges, R. J. (Ed.). "Intellectual Journeys in Faculty Development." Evanston, IL: Northwestern University, Center for the Teaching Professions, Occasional Paper Number 14, 1981. (ED 216591)

Four professionals in the field of faculty development describe the intellectual and practical foundations of their work. Papers by John Andrews, Ron Smith, Rita Weathersby, and Bob Young. Commentary by Michael Piechowski.

Mortimer, K. P. (Chair). Involvement in Learning: Realizing the Potential of American Higher Education. (Report of the Study Group on the Conditions of Excellence in American Higher Education.) Washington, D.C.: National Institute of Education, 1984.

Among recommendations about teaching and learning in this wide-ranging report are: make greater use of active modes of teaching, place greater responsibility upon students for their own learning, and use technology to

increase rather than reduce student-faculty contact around intellectual issues.

Sanford, N. (Ed.). The American College: A Psychological and Social Interpretation of the Higher Learning. New York: Wiley, 1962.

A classic, if somewhat dated, handbook, with articles on all of the topics of this bibliography.

Svinicki, M. (Ed.). To Improve the Academy: Resources for Student, Faculty, and Institutional Development. Professional and Organizational Development Network in Higher Education, 1986.

Each year, POD publishes a collection of papers submitted by its members, many of them based on presentations at its annual meeting. This volume includes 20 items.

Stordahl, B. "Faculty Development: A Survey of the Literature of the '70's." AAHE Bulletin, 33(7), 1981, 7-10.

Selective survey, quite useful for someone starting to read in this field.

Toombs, W. A. "A Three-Dimensional View of Faculty Development." Journal of Higher Education, 46, 1975, 701-717.

Three dimensions (professional, curricular, institutional) are arrayed against five career categories. The resulting matrix can be used for program planning.

Periodicals and Bibliographies on College Teaching

Periodicals

AAHE Bulletin

Academe

Adult Education

Adult Leadership

American Educational Research Journal

American Journal of Education

American Journal of Physics

American Mathematical Monthly

Anthropology and Education

Assessment in Higher Education

AV Communication Review

Behavioral Science Teacher
British Journal of Educational Psychology
Change (the Magazine of Higher Education)
College Composition and Communication
College English
College Student Journal
College Teaching
Communication Education
Community-Junior College Research Quarterly
Convergence: International Journal of Adult Education
Current Issues in Higher Education
Educational Technology
Engineering Education
Exchange: Organizational Behavior Teaching Journal
Higher Education
Higher Education Abstracts
History Teacher
Innovative Higher Education
Instructional Science
Journal of Adult Education
Journal of Architectural Education
Journal of Biological Education
Journal of Chemical Education
Journal of Classroom Interaction
Journal of College Science Teaching
Journal of College Student Personnel
Journal of Cooperative Extension
Journal of Dental Education

Journal of Economic Education
Journal of Education for Librarianship
Journal of Education for Teaching
Journal of Educational Psychology
Journal of Educational Research
Journal of Experiential Learning and Simulation (through 1981)
Journal of Experimental Education
Journal of General Education
Journal of Geography
Journal of Geography in Higher Education
Journal of Higher Education
Journal of Instructional Development
Journal of Legal Education
Journal of Medical Education
Journal of Moral Education
Journal of Negro Education
Journal of Nursing Education
Journal of Pharmaceutical Education
Journal of Psychiatric Education
Journal of Research in Music Education
Journal of Research in Science Teaching
Journal of Social Work Education
Journal of Staff, Program, and Organizational Development
Journal of Teacher Education
Journalism Educator
Junior College Journal
Learning and the Law
Liberal Education

Mathematics Teacher

Media and Methods

Medical Education

Quarterly Sourcebooks--Jossey-Bass, Publishers:

New Directions for College Learning Assistance (through 1983)

New Directions for Community Colleges

New Directions for Continuing Education

New Directions for Experiential Learning (through 1983)

New Directions for Higher Education

New Directions for Mental Health Services

New Directions for Program Evaluation

New Directions for Student Services

New Directions for Teaching and Learning

Nurse Educator

Personnel and Guidance Journal

Physics Teacher

Religious Education

Research in Higher Education

Research in the Teaching of English

Resources in Education

Review of Educational Research

Review of Higher Education

Review of Research in Education

Science Education

Simulation and Games

Simulation/Gaming/News

Small Group Behavior

Social Education

Sociology of Education
 Studies in Higher Education
 Teaching History
 Teaching of Psychology
 Teaching Philosophy
 Teaching Political Science
 Teaching Sociology
 Theological Education
 Training and Development Journal

Bibliographies

Berry, K. A. and Daniel, R. S. "Annotated Bibliography on the Teaching of Psychology: 1984." Teaching of Psychology, 12, 1985, 231-236.

This article, part of a continuing series, holds items #2234 to #2385.

Dressel, P. L. and Pratt, S. B. The World of Higher Education: An Annotated Guide to the Major Literature. San Francisco: Jossey-Bass, 1971.

Oriented primarily toward institutional research, this book of 238 pages also has sections on students, faculty and staff, and curriculum and instruction. Author and title index.

Eels, W. C. (Ed.). College Teachers and College Teaching: An Annotated Bibliography on College and University Faculty Members and Instructional Methods. Atlanta, GA: Southern Regional Educational Board, 1957.

Although not commercially published, this bibliography is held by many libraries. This volume and several supplements list thousands of books, articles, reports, and dissertations and includes a variety of indexes.

Gaff, S. S., Festa, C., and Gaff, J. Professional Development: A Guide to Resources. New Rochelle, NY: Change Magazine, 1978.

This bibliography of about 800 items includes brief annotations of two-fifths of them.

Goldsmid, C. A. and Goldsmid, P. L. "The Teaching of Sociology, 1981: Review and Annotated Bibliography." Teaching Sociology, 9, 1982, 327-352.

The sixth annual compilation, this bibliography includes more than 70 items.

Leitner, E. "Selected Bibliographies on Research Into Higher Education: An International Inventory." Higher Education, 7, 1978, 311-330.

An alphabetical list (by author) of 300 bibliographies on higher education from around the world. Most were published between 1956 and 1977.

Marshall, J. D. and Durst, R. K. "Annotated Bibliography of Research in the Teaching of English." Research in the Teaching of English, 20, 1986, 198-215.

This annual bibliography annotates items in four categories: writing, language, literature, and teacher education. Each category includes references on higher education.

Meeth, L. R. (Ed.). Selected Issues in Higher Education: An Annotated Bibliography. New York: Teachers College Press, 1965.

This 212-page volume annotates thousands of items on all aspects of higher education. Author index.

Menges, R. J. and Mathis, B. C. Key Resources in Teaching, Learning, Curriculum, and Faculty Development. San Francisco: Jossey-Bass, in preparation.

Several hundred references with annotations and review chapters will cover the areas of postsecondary education named in the title.

Quay, R. H. (Compiler). Index to Anthologies on Postsecondary Education, 1960-1978. Westport, CN: Greenwood Press, 1980.

Quay identified 218 anthologies and this volume lists (under 31 chapter headings) the 3,617 entries contained in those anthologies. Many entries are annotated. Author and subject index.

Rochte, N. C. (Compiler). "Recurrent Education." Educational Documentation and Information, 54(215), 1980.

This UNESCO-sponsored annotated bibliography contains nearly 400 entries of worldwide scope. It defines "recurrent education" as education and training at various levels, formal and nonformal, which are distributed over the lifespan in a recurring way.

Teather, D. C. B. (Ed.). Staff Development in Higher Education: An International Review and Bibliography. New York: Nichols, 1979.

Staff development is profiled in separate chapters for each of 12 countries. Also includes a list of centers and associations and subject and author index.

THE NATIONAL CENTER FOR RESEARCH TO IMPROVE POSTSECONDARY TEACHING AND LEARNING (NCRIP TAL)

NCRIP TAL, the National Center for Research to Improve Postsecondary Teaching and Learning, was established at the University of Michigan in 1986 as the result of a successful proposal to the U.S. Department of Education's Office of Educational Research and Improvement (OERI; formerly the National Institute of Education). The national centers specialize in research and development in education, and disseminate their findings nationally. NCRIP TAL is one of fourteen centers, ten of which were established in 1986. Only two of the centers focus exclusively on postsecondary education--NCRIP TAL and the National Center for Postsecondary Governance and Finance.

NCRIP TAL's research, development, and dissemination activities concentrate on five aspects of college education that affect learning: classroom learning and teaching strategies, curricular structure and integration, faculty attitudes and teaching behaviors, organizational practices, and the use of technology in learning.

While recognizing that cognitive development, personal development, and career development are all important outcomes of college education, NCRIP TAL initially is studying the cognitive development of undergraduate students. This emphasis was chosen because of recent dramatic developments in research on cognition hold great promise for improving teaching and learning. Furthermore, students' cognitive development is intimately linked to career development and to the development of a sense of self-efficacy, personal responsibility, and motivation.

Students' cognitive and affective characteristics, which vary with their diverse backgrounds, can condition and predict how they learn. Since learners of many backgrounds and ages now attend college and since instructors may select an increasing variety of potentially effective teaching strategies, NCRIP TAL is researching optimum combinations of learner characteristics and instructional processes that will encourage cognitive development.

As a national center, NCRIP TAL: (1) provides national leadership to stimulate, encourage, and guide research that can improve postsecondary teaching and learning, (2) conducts selected research studies and demonstration projects, typically in collaboration with colleges and universities, to show how the research results can be used to improve undergraduate education, and (3) provides educators, policy makers, and the media with suggestions to improve public understanding and decision making on postsecondary teaching and learning.

In fulfilling its national leadership role, NCRIP TAL staff members actively encourage and assist others in undertaking projects designed to improve teaching and learning in a broad range of postsecondary settings. The staff continually reviews existing research, develops information networks among active researchers, encourages and provides training for new individual and institutional researchers, calls attention to critically needed studies and potentially fruitful conceptual research frameworks, and disseminates research results.

In its research with colleges, NCRIP TAL: (1) collaborates with specific institutions to clarify their educational objectives, (2) helps develop ways to achieve those objectives, and (3) helps colleges assess how well the objectives were achieved. NCRIP TAL assists colleges in developing their own, ongoing programs in research to improve education, and it uses study results to develop empirical and broadly applicable suggestions for improving college teaching and learning. In its

initial years NCRIPAL serves the 2,800 two- and four-year colleges that have undergraduate teaching as their primary mission. These colleges enroll 8.6 million students--70 percent of the nation's undergraduates. Collaborative activities are taking place in selected institutions, but results and assistance will be available to all.

To achieve its public policy mission, NCRIPAL disseminates its own results and suggestions for improvement as well as those of other researchers. Concise news briefs and more extensive state-of-the-art reports are designed for local, state, and national audiences. As research findings become available, NCRIPAL will respond to requests for specific assistance from educational decision makers and policy makers.

NCRIPAL comprises six research, development, and dissemination programs aimed at improving education within varied institutional settings. While varying in their levels of analysis, the programs all share assumptions that students' cognitive characteristics can be improved and that college education occurs in a rapidly changing information environment. Each of five NCRIPAL programs focus on improving one aspect of the educational environment; the sixth program integrates the work of NCRIPAL, guides dissemination, and encourages research on postsecondary teaching and learning.

The objectives of each of the individual programs and a summary of the findings of the first year's work follow.

PROGRAM A: RESEARCH LEADERSHIP, DESIGN, AND INTEGRATION

As NCRIPAL's integrating mechanism, the program on Research Leadership, Design, and Integration implements projects different from the research and development projects in the other programs. This program is led by the Director and staffed by the other program directors and research consultants. Together they have: (1) conceptualized frameworks to guide comprehensive programs of research on college teaching and learning, (2) identified critical research and development issues, (3) developed consistent definitions of student characteristics and outcomes to be used in NCRIPAL programs, and (4) established a national interdisciplinary network of researchers and practitioners interested studying postsecondary teaching and learning. This program contains the primary dissemination mechanism for NCRIPAL.

The following summaries reflect principles guiding the research and development activities of NCRIPAL.

Summary: Approaches to Research on the Improvement of Postsecondary Teaching and Learning by Patricia J. Green and Joan S. Stark

This paper aims at stimulating reflection about research approaches and promoting recognition of the complexity of the issues involved and the variety of approaches that might be taken.

Recent discussion about education has shifted from issues of access and equality toward a concern with declines in achievement among degree recipients, as measured by graduate and professional school entrance examinations. Many public representatives, including governors and state legislators, believe that academic deficiencies of students who enter college with limited preparation have not been remedied by the time of graduation. Furthermore, even for students well prepared for college, today's college experience is sometimes characterized as fragmented rather

than coherent, narrowing rather than broadening, and vapid rather than engaging for students. As a result, there is widespread discussion about the meaning of "excellence" in postsecondary education and the varied routes to its achievement.

In such a climate, both new research and new policies can restore credibility and accountability in collegiate education. Since the approaches employed by both researchers and policy-makers are determined by the issues addressed and the specific questions asked, it is essential to determine the assumptions about the sources of problems in teaching and learning. For example, are the primary problems (1) in the activity, (2) with the actors, (3) in the organizations, or perhaps, (4) in the definition of what is to be learned? If improvement is needed in each of these four areas, what research models are most likely to be useful? What current mechanisms are available to execute this research? While making no claim to have identified all possible issues or approaches, we explore some of the underlying questions involved.

Potential Targets for Improvement

One approach to the complex problem of improvement is to study the activities of teaching and learning. Learning and teaching can be viewed as distinct activities, each amenable to research and improvement. Another possibility is to view teaching and learning as mutually dependent, exploring how changes in one affect changes in the other. In either case, considerable effort is needed to understand how formal education takes place and to use such knowledge to bring about improvement. Defining and clarifying productive learning processes or strategies and describing more fully what constitutes effective teaching are important research agendas.

Another approach is to focus on the actors rather than on the activity. If postsecondary teaching and learning is not meeting public expectations, perhaps the problem is not in the process but in the characteristics of teachers and learners themselves. Student motivation, involvement, ability, and preparation all have an impact on the way in which students engage themselves in learning. Similarly, faculty preparation, motivation, and sense of task may shape the teaching-learning process.

An alternative formulation of the problem is that the organized delivery system for teaching and learning in postsecondary institutions is faulty. Teaching and learning are, in a crude sense, products of formal organizations which serve as societal gatekeepers to professions, occupations, and future lifestyles. It may be that research on improving teaching and learning should focus on the institutions society has created and their impact on both actors and activities.

Finally, the problem may be in lack of consensus of what is to be taught or learned. The definition of what is to be learned is a boundary issue between higher education and society. In some cases, administrator, faculty, students, and employers have different and not readily compatible views on what is important for students to learn. The problem of apparent lack of consensus is exacerbated by long-standing neglect of ways to measure learning.

Types of Research

When considering possible problem areas, and consequently targets for intervention or improvement, we must also consider the types of research which might be used to investigate these areas. For the sake of discussion, we outline four interrelated types of research: basic research, institutional research, policy analysis, and evaluation. Although these research approaches are sometimes confused in

public discussions, each is distinctive and will likely play a unique role in informing improvement efforts.

Basic research on teaching and learning typically is carried out by independent or collaborating researchers from fields such as psychology and education, although it is sometimes undertaken by various disciplinary groups or individual faculty members. The primary purpose of basic research is to better understand the processes of teaching and learning and the various influences on them. Since the ultimate goal of basic research is to discover causal relationships, the research methods chosen typically are exploratory, correlational, and experimental. The results of this research usually appear in scholarly journals, often without clearly stated implications for change.

Institutional research usually refers to studies directed and carried out by colleges attempting to understand and improve their own actors and activities. Most large colleges and universities maintain offices to conduct institutional studies and many small colleges conduct such studies on an ad hoc basis. For a variety of historical reasons, relatively little institutional research has focused on the teaching and learning processes or their outcomes and relatively few institutional research offices employ personnel whose primary interests are in these areas. Most studies conducted by institutional research units within colleges are descriptive or correlational, and since they are designed for local use, reports are not widely circulated.

Policy analysis may be considered research that examines and weighs alternative practices and strategies that one or more institutions might pursue. The analysis may be carried out at many levels, for example, by institutional administrators, faculty or administrative committees, or by superordinate groups such as state coordinating agencies or legislatures. In its most complete form, the analysis will collate and draw on results from both basic and institutional research, suggesting how institutional practices must or might change in a desired direction. Consequently, while policy analysis ultimately may be based on descriptive, correlational, or experimental information, it is an analytical technique which asserts that, based on the evidence, selected strategies may be most likely to produce certain desired results. Reports of policy research are often circulated widely but the sources on which they draw and the basis on which alternatives are chosen are not always made clear.

Evaluation is a specialized form of research that examines the results of existing strategies or policies to determine if intended or unintended outcomes actually can be attributed to them. As such, evaluation typically implies judgments about the success of various strategies and makes recommendations about their continuation. Evaluative research may be used to learn more about the effects of implementing strategies derived from the other types of research--basic research, institutional research, or policy analysis. The evaluation may be undertaken by independent researchers, by institutional research units, by other units within institutions, or by agencies with policy responsibilities. The methods used are often eclectic and frequently consider the values and interests of various stakeholders. The extent to which research reports are available and the extent to which they may be clear about their methods depends upon both the scope of responsibility and the public accountability of the sponsor.

Arguably, then, a successful program of research for improving teaching and learning must consider the potential contributions of all four types of research. Ideally, the policy analysts would weigh their decisions against knowledge produced by both basic and institutional researchers while the evaluative

researcher would help to supply new and refined questions for both these groups and for policy analysts. This potential relationship, which currently does not operate ideally for many segments of higher education, is diagrammed in Figure 1.

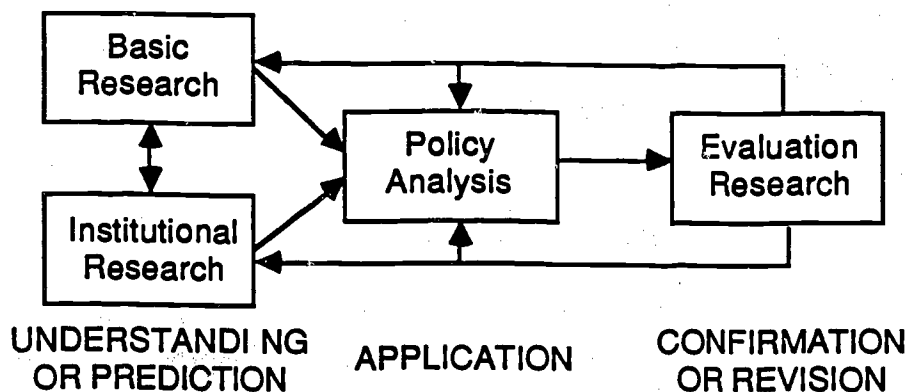


Figure 1. Ideal relationship among existing types of research.

The strengths and weaknesses of each type of research, as well as specific approaches, may influence both the nature and use of research. To facilitate consideration of the current status of research on postsecondary teaching and learning, we created a matrix from the four primary types of research and the potential points of attack on the problem of improving teaching and learning that have been described.

Proceeding from our own sense of the status quo rather than from any empirical summary of ongoing research, we observed the following:

1. Basic research on college student learning is advancing rapidly through progress in cognitive psychology. At present, these findings are not frequently field tested or translated into practice. Better understanding of the learning process is not an important focus for other types of research.
2. The entire field of research on college teaching is underdeveloped. While attempted improvements in practice proceed by trial and error in scattered settings, little basic knowledge about the process of teaching is available to inform us about the potential impact of intervention through changes in the way teachers teach.
3. An abundant literature on student characteristics describes the ways in which students change during college and the correlates of student success, at least as defined externally to the student. This descriptive and correlational research has reached a stage of development where colleges can readily collect and analyze their own data for policy analysis or for program evaluation. Only recently, however, has basic research been launched to explore the meaning of education for the student. Such studies, closely allied to developing psychological paradigms and ethnographic research methods, are expensive and rare.
4. Demographic and attitudinal descriptions of faculty members abound. Compared to the parallel data on students, this research lacks longitudinal studies and correlational studies of variables directly concerned with the person as teacher. Without noting the superficiality of research on faculty, policy researchers call on it for

propositions that modify the context in which the faculty member performs the teaching role.

5. Within the substantial amount of literature on organizations, colleges and universities have received their share of attention by both basic and institutional researchers. Within this research base, the connections between student learning and varied measures of organizational effectiveness have not been effectively explored. New models are needed for research at all levels, particularly since some researchers advocate seeking meaning through the examination of institutional subcultures while policy initiatives increasingly move to a broader systemwide or statewide context.

6. Partly because consensus is lacking about what students should learn, partly because of beliefs in individual choice, and partly because research has been politicized, there are few models to test the impact of the differences between what students are supposed to learn and what they do learn under varied circumstances. In this arena, keen interest among policy and evaluation researchers may stimulate more basic investigations.

As a heuristic device, we separated each of four ways of approaching the task of improving teaching and learning and each of four types of research that might provide enlightenment. It quickly became obvious that each juncture at which teaching and learning might be improved is inextricably related to the others. One of the benefits of examining each as a discrete issue is that we are then able to see the relationships more clearly. For example, it became obvious in our discussion that the purposes for which students attend college (personal, social, cognitive, and vocational development) not only affect their learning but permeate societal debate about what they should learn. Similarly, it was difficult to talk of teaching without envisioning the learner.

Because of these interrelationships, the research models used to investigate these issues are necessarily complex. Student outcomes are not the function of a single additive process: mode of learning + method of teaching + learner attributes + teacher attributes + organizational context = learning achievements. Any attempts to estimate such an equation would be foolhardy. Instead the models used for advancing knowledge must reflect the complexity of the questions, recognizing both the interactions between elements and the existence of multiple points for intervention. Nor can it be assumed that interventions, such as those that might be recommended by policy researchers, are independent; their effects will be evident in several aspects of teaching and learning.

While these relationships between teacher and learner, teaching and learning, goals and outcomes are commonly recognized, the connections between the types of research we have described are not so obvious. If, as some assert, educational research has little impact on practice, the reason may be that links among the various types of research, often undertaken by diverse agencies for varying purposes, are weak or nonexistent. In Figure 1, we diagrammed an ideal model in which each type of research would reciprocally inform the other types. Here we set forth some recommendations about how the reality of this situation could be brought closer to the ideal.

1. Basic research that holds promise of improving college teaching and learning needs greater support, broader field testing, and improved translation for the use of institutional researchers. It is no secret that much of this research originated as psychologists explored various aspects of personality and cognition with the handiest subjects, college students. Colleges themselves have never invested heavily in the research and development enterprise deliberately to improve teaching. Societal interest, as well as institutional self-interest, makes this a propitious time to foster such research.

2. Institutional research, a little publicized aspect of university operation, typically has focused on aspects of organization most closely allied to funding, facilities and enrollment planning, systems operations, and report generating. In relatively few universities are personnel in the institutional research office either appropriately trained or inclined to apply basic research to the improvement of teaching and learning. In some universities, a separate office of faculty instructional development also exists. In these offices, too, neither the origin of the developmental activity nor current expectations are likely to foster research directly concerned with teaching and learning. It is time for these offices to broaden their mission to include the translation and field testing functions as well as the training of faculty members to be classroom researchers.

3. Policy researchers need to weigh more heavily basic studies and related field tests, recognizing that simplistic alternatives based on superficial understanding are unlikely to provide long-range improvements. Even so, if the necessary developmental mechanisms for basic research and institutional field-testing do not exist, policy researchers can hardly be blamed for choosing among available studies that are understandable and seem promising.

4. Lastly, despite objections on the grounds of intrusion, both institutions and governmental agencies need to sponsor carefully structured evaluation research. Traditionally, universities have relied on sporadic efforts of a politicized committee system to collect descriptive data about teaching and learning and develop recommended changes. The evaluation research office within a university should have dual obligations: to examine the results of chosen policy alternatives and to identify areas of need for new basic and institutional research. Such an office would complete the link in a systematic research enterprise that would at least come close to approaching the complexity of the problems by which it is challenged.

Summary: Postsecondary Teaching and Learning Issues in Search of Researchers by Carol D. Vogel and Joan S. Stark

In developing a manageable research agenda for NCRIPAL's efforts over the five-year grant period, it was necessary to bypass many critical research questions. Some are closely related to the investigations that NCRIPAL will pursue; others are conceptually quite distant. Because we hope that other researchers will investigate both types of questions, we have begun this outline of the broad dimensions of many important issues needing further development.

For ease of discussion, we have arbitrarily grouped the questions in a manner parallel to the educational process dimensions or environments around which

NCRIPTAL programs are organized. We have created additional categories for those questions not closely related to our current work.

The five categories of potentially alterable variables that provide an organizing framework for the NCRIPTAL programs are not distinct but rather overlap and are intertwined in complex ways. Although our research foci represent different institutional levels of investigation (the college, the academic program, the classroom) and different units of analysis (the college climate, the faculty, the curriculum, and the student), changing one of these important elements of the postsecondary environment undoubtedly will stimulate changes in others. Similarly, it is unreasonable to suggest that college teaching and learning can be enhanced by changes only in a single area. Improvement in teaching and learning requires a stronger base of knowledge in all of these areas, as well as in others.

Issues of Student Learning

NCRIPTAL Program B, Instructional Processes and Educational Outcomes, is exploring how student cognitive and affective characteristics, such as learning strategies, motivation, personality, learning styles, and stages of intellectual development: (1) affect student learning outcomes, (2) are themselves learning outcomes that may be altered to improve learning, and (3) are related to student demographic variables, such as ethnicity, age, and sex, so as to suggest different teaching and learning strategies for various groups of students. The program's work proceeds from three perspectives: cognitive theory, personality theory, and developmental theory.

Issues and research questions that should be addressed by researchers generally relate to: (1) student participation and involvement, (2) student intellectual development and capacities for critical thought, (3) student attributes and learning styles, and (4) assessing student outcomes.

Curricular Issues

National reports have brought the postsecondary curriculum into sharp focus. Unfortunately, there is not always agreement on the meaning of the term curriculum nor has there been a history of systematic approaches to curricular change. Curriculum issues are issues of both product and process: what students should learn and how it should be arranged for most effective learning. Proponents of various strategies for improvement seem to agree, however, that the plan of study should be meaningfully integrated and that what is expected of students should be clear.

Defining of curriculum as an academic plan, the NCRIPTAL Program on Curricular Integration and Student Goals is studying (1) the ways in which faculty members organize academic content and (2) how the way content is organized interacts with student and program goals to affect student learning outcomes. Because curriculum issues are so diverse--varying with institutional and program goals, disciplinary focus, and faculty beliefs about education--many questions remain unanswered. These questions relate to: (1) curricular models and designs, (2) general education versus specialization, (3) liberal education versus vocational study, and (4) teaching and learning across the curriculum.

Studies of Teaching and of the Faculty

In recent years a number of large-scale studies have documented background, concerns, and attitudes of the college faculty. These surveys and interviews have identified both problems and satisfactions in faculty life but have not directly related these findings to faculty members' teaching roles.

The Program on Faculty as a Key Resource is improving understanding of how faculty characteristics and behaviors: (1) depend on faculty incentives, role integration, and the institution's academic climate; (2) interact with student characteristics to produce varied student learning outcomes; and (3) can be assessed and altered to improve learning in ways that more effectively produce the desired learning outcomes.

Research questions not currently being addressed relate to such issues as: (1) faculty career preparation, (2) faculty selection and assessment, and (3) using and sharing faculty knowledge and expertise.

The Organizational Context for Teaching and Learning

In the corporate world, considerable attention has been focused on the concept of organizational culture and the conditions that foster "effective organizations." Similarly, in K-12 educational settings, the "effective schools" research has identified organizational conditions that appear to contribute to student learning. In higher education, it has long been thought that some colleges have more effective educational programs than others, but it is not easy to separate the specific conditions that support academic effectiveness from other variables, such as the characteristics of the student body that the college attracts.

The Program on the Organizational Context of Teaching and Learning is attempting to identify organizational practices within colleges that produce a supportive academic climate for teaching and learning to suggest how such a climate can be fostered. External conditions are also important and, in cooperation with the National Center on Postsecondary Governance and Finance, this program will undertake studies of supportive external factors such as state policies.

Issues in need of research relate to: (1) organizational leadership, (2) organizational effectiveness, (3) special organizational structures and management practices, (4) institutional linkages and relationships, and (5) external influences.

The Technological Information Environment

Evolving technologies affect the way we live and work. It is likely that the shift to an information-based technology will dramatically change teaching and learning within institutions and universities, and even change the colleges themselves. Indeed, the accessibility of small computers may change the way students think.

The Program on Learning, Teaching, and Technology is attempting to increase understanding of the current and potential uses of technology in college instruction, the learning situations in which technology is most appropriate, and the conditions that facilitate its effective and appropriate use. A national dialogue on "information literacy" will be initiated among college faculty members who will consider the implications that emerging information technologies have for their programs. After developing a taxonomy to describe and evaluate software, the program will sponsor conferences at which faculty members and software producers can work toward production of most effective learning materials.

Issues needing further research relate to: (1) the general impact of electronic technology on higher education management and teaching practices, (2) the impact of electronic technology on learning, and (3) the impact of electronic technology on access to information and the development of literacy.

General Research Issues

In the last forty years research on various aspects of higher education has increased rapidly. Additionally, increasing sophistication of researchers and availability of computer programs that process large databases have made possible broad-scale studies of both entering students and graduates. The findings on college learning and teaching, however, are fragmented and in need of synthesis. As institutions and public agencies move toward coordinated programs of research to document outcomes and as colleges use assessment information to improve teaching, a number of issues arise concerning the form such research should take, the locus of responsibility for conducting it, and the manner in which it can be best used. Therefore, issues in search of researchers relate to: (1) appropriate research frameworks, (2) definitions, measures, and analyses of student characteristics, and (3) longitudinal studies and data bases.

PROGRAM B: INSTRUCTIONAL PROCESSES AND EDUCATIONAL OUTCOMES

The program on Instructional Processes and Educational Outcomes is exploring how students' cognitive and affective characteristics, such as learning strategies, motivation, personality, learning styles, and stages of intellectual development: (1) affect learning outcomes; (2) may be altered to improve learning; and (3) are related to demographic characteristics. The program's work will proceed from three perspectives: cognitive theory, personality theory, and developmental theory. A summary of the first year's literature review follows.

Summary: Teaching and Learning in the College Classroom: A Review of the Research Literature by Wilbert J. McKeachie, Paul R. Pintrich, Yi-Guang Lin, and David A. F. Smith

What can college and university teachers learn from research on college learning and teaching? Not the one best method of teaching. Not the secret formula of great teachers. Not ideas that have never before occurred to good teachers. Rather the research we review indicates that the best method of teaching depends on the student, the goal to be achieved, the teacher, and the subject matter to be taught. The research reminds us of the complexities with which teachers must deal, the limits of generalizations about teaching, and the degree to which the empirical science and theories of learning and teaching must be coupled with artistry for effective application by the teacher.

What are the complexities revealed by research? First are the complexities related to the goals or outcomes of teaching. Our review of the research suggests that methods of teaching and testing for knowledge of facts are likely to be ineffective in achieving goals of critical thinking and problem solving. For example, lecturing and objective testing are reasonably effective in helping students achieve factual

knowledge objectives, but discussion methods and essay tests are more effective in achieving goals of critical thinking or problem solving.

Complex interactions with student characteristics are also important. For example, students with less ability and less prior knowledge benefit more from highly organized or structured learning situations, while students with higher levels of ability and knowledge can benefit more from less structured learning situations.

Happily, our research review provided rays of hope as well as confirmation of the complexity of the teacher's task. Recent research indicates that teaching goals can go well beyond the conventional outcome of the student's learning a mass of factual knowledge. First of all, research suggests that students can learn to organize subject matter concepts in ways that become closer to the conceptual relationships characterizing the field they are studying. Moreover, we now have available several methods of assessing the organization of knowledge. Thus we can go beyond conventional tests of amount of knowledge and add to the armamentarium of assessment devices available to teachers.

Learning strategies can also be taught to students. There are several research reports describing evaluations of successful courses devoted to teaching learning strategies, but more effective learning skills and strategies can also be developed in regular subject matter courses. However, instruction in learning strategies is best accomplished when it is direct and explicit.

Students should learn a variety of strategies that can be used and adapted for different studying and classroom tasks. As the carpenter uses different tools for different jobs, students must realize that they need different learning strategies for different tasks.

In addition to measuring outcomes beyond accumulation of knowledge, we found research demonstrating successful attempts to teach higher-order intellectual skills. The news about higher-level outcomes is both good and bad. The bad news is that problem solving and sophisticated thinking depend much more on the thinker's subject-matter knowledge and experience than was formerly believed to be the case. Expert problem solvers in mathematics, physics, chemistry, economics, or other fields may be poor problem solvers when they are faced with a problem in political science or psychology. The good news is that students do gain in thinking ability over the course of their college careers. Improvement in problem-solving and critical thinking is more likely to occur if:

- a. Students are involved in discussions,
- b. Problem-solving methods are given explicit emphasis, and
- c. Verbalization of methods and strategies occurs to encourage the development of student meta-cognition.

Research on learning and cognition is becoming increasingly intertwined with that on motivation. Earlier behavioristic theories emphasizing direct effects of reward and punishment have proved to be oversimplified. We now know that reinforcement by rewards or simple praise does not necessarily increase student motivation for learning. Rather, the effect of rewards or praise depends on the context of the instructional setting, the informational value of the feedback, and the student's interpretation of the feedback's meaning.

One motive of particular relevance to teaching and learning is anxiety about achievement, particularly anxiety revealed in testing situations. Such "test anxiety" often lowers performance on course examinations. Test anxiety affects, and is

affected by, the student's method of studying and test taking. Many students who are high in test anxiety use ineffective methods of study. Such students can be helped by specific instruction on effective learning strategies. Students whose anxiety is primarily manifested in poor performance on tests may be helped by desensitization techniques or by construction and presentation techniques that reduce their tendency to worry about questions they feel they have answered inadequately.

Thus our review reveals enough signs of progress to encourage the view that research on college and university teaching can contribute to improvements in higher education. At the same time, it is clear that much remains to be done.

PROGRAM C: CURRICULAR INTEGRATION AND STUDENT GOALS

The program on Curricular Integration and Student Goals is studying the extent to which the organization and integration of academic content interact with student and program goals to affect learning. Additionally, the program will identify and publicize methods that community colleges are using to successfully integrate liberal and occupational study. The following summary presents the major findings from the first year's literature review.

Summary: Designing the Learning Plan: A Review of Research and Theory Related to College Curricula by Joan S. Stark and Malcolm A. Lowther with assistance from Sally Smith

The primary tasks of NCRIPAL's research program on curricular integration and student goals are to establish a framework for systematic research on college curricula, to field test the framework, and to design and undertake collaborative studies that will help colleges determine the effects of various curricular strategies on learning for students with different backgrounds and goals.

In the technical report on which this executive summary is based we examined a wide variety of works about college curricula and selected a framework with promise for future development. Before summarizing our findings, however, it is important to understand the context within which the report was prepared.

Context

In 1984 and 1985 three national reports on undergraduate education were published: To Reclaim a Legacy (Bennett, 1984); Involvement in Learning (National Institute of Education Study Group, 1984); and Integrity in the College Classroom (Association of American Colleges, 1984). These reports uniformly express the belief that the college course of study needs revision. Although the specific emphases of the three reports differ, all espouse the goals of liberal education as most important during the undergraduate years and all state or imply that liberal education has been seriously eroded by increasing specialization and vocational emphases of course content. Each report presents a plea for redefining the undergraduate experience--a clarification of what "going to college" should mean. And, while celebrating the diversity of American higher education, all were critical of the power and autonomy of the academic department, a development that is blamed, in large part, for the inability of educators to reach consensus on student outcomes. All called for a renewed emphasis on faculty concern and on teaching excellence. In short, the reports

reflected a widespread concern that political, social, and economic pressures of recent years, including an increasingly diverse student body and predictions of falling enrollments, have led to a loss of educational vision. The curriculum, although variously viewed as skills to be learned, courses to be pursued, and subject matter to be transmitted, is the central concern of the reports. All three imply the need to move toward a more prescribed pattern of college education.

Perhaps because the reports have made clear which educational goals their authors consider to be in the best interest of students and society, somewhat less public attention has been given to the recommendation that institutions establish clear expectations for students. As yet, very little attention has been given to the processes by which the college curriculum will be changed, to the connections between course design and student outcomes, or to the assumed relationship between the subjects currently taught in college and the characteristics generally desired of educated students.

Currently, college personnel are using the reports as a basis for academic program review receptivity to self-examination and to studies that relate educational practices to measurable results. Thus our review of the college curriculum literature was undertaken in an atmosphere of apparent receptivity toward change and improvement. At the same time, the climate is one in which publicly announced action may seem more politically expedient than thoughtful analysis of the problem and examination of alternatives. Unfortunately, the research base that might assist institutions in weighing the potential merits of curricular variations is extremely limited.

A Summary of Major Writings on College Curricula

In the previous section we summarized recent literature about curricula, noting the particular foci, strengths, and deficiencies of existing persuasive arguments, frameworks, and research models. To focus the review, we developed a scheme to establish boundaries of the relevant literature. Our literature review also was guided by a conception of the curriculum as an academic plan. Thus subsequent portions cover (1) general reviews of the curriculum literature in higher education; (2) background works (historical treatments, descriptions of current practice); (3) literature concerned with the educational product, including (a) exhortative writings or frameworks describing views of quality education and (b) empirical studies concerned with educational outcomes; (4) literature concerned with the educational process, particularly curricular planning or design; and (5) discussions and research on curricular change.

We found that, beyond reports of histories, case studies, and trend reports, literature on college curricula seems to fall into two primary categories that might be likened to an architectural blueprint and a computer program. Those who have the blueprint for a quality education know what the product should look like but are not always able to articulate what construction processes would achieve it. Those who prefer a computer program have a plan for getting to the product but, because so many diverse variables may be entered into the program, the product is not clearly specified. Neither group has indicated how the product can be recognized nor have they suggested a fully acceptable way of observing the process.

Several national reports have made such terms as "coherence," "integrity," and "integration" the curricular watchwords of the 1980s. Yet when viewed from the perspective of the curriculum as an academic plan, the reports themselves do not exhibit the qualities of logical, harmonious wholeness implied by these words. Rather,

as is the case in related background literature, the reports primarily emphasize either product or process, leaving higher education with a continuing sense of disarray and fragmentation rather than clear mandate for change.

Consistently, however, throughout the major writings, including the national reports, certain sets of variables surface. One set of variables is the characteristics of the disciplines, always considered important but seldom examined in detail. Another important set of variables is a set of general learned capabilities that are rather uniformly believed to be important. The matrix formed by the juxtaposition of these two sets consists of an uncertain number of cells and there is little empirical evidence about the interaction that each cell represents. To these two primary dimensions, the literature adds at least two more sets of variables, namely (1) various theories of student development that may interact with the disciplines and are believed related to acquiring the learned abilities, and (2) a set of student experiences generally assumed (but seldom demonstrated) to produce the learned abilities. The result is an *n*-dimensional matrix (at least four dimensions, perhaps more), which has presented a complex puzzle for researchers.

The puzzle may remain unsolved, however, not only because of its complexity but because curriculum development in higher education has typically been the autonomous province of disciplinary specialists. Except in psychology and education courses, generalist researchers interested in these relationships have seldom been able to gain entrance to the classroom laboratory. The current receptivity to change, as well as the models under diffusion from such institutions as Alverno College and Northeast Missouri State University, may assist in developing fruitful collaboration of discipline experts and higher education researchers.

In particular, there is a paucity of research and scarcely little published discussion on the relationships between discipline structure, educational goals, learning objectives, and both program and course development. We have found no studies that examined the interaction of discipline structures and intended learning outcomes nor any studies that attempted to determine how these factors interact with other relevant variables to shape course and program plans.

Some incomplete but promising models exist in the writings of Paul Dressel, William Bergquist, and William Toombs. Dressel's writings are suggestive but will be pursued only when a large number of variables can be specified more fully. As presently formulated, Bergquist's categorizations do not help us to understand the process through which the non-traditional curricular plans he examined were constructed or whether the categories are also applicable to more traditional courses and programs. In describing a design process involving content, context, and form, Toombs has presented an enticing scheme of curriculum development which has not yet been the subject of further exploration or experimentation. The Alverno College studies present a model worthy of emulation but one that requires a higher level of institutional commitment than most colleges are willing to risk. Pace's concept of student effort introduces a new and important variable that may, in fact, provide access to the curricular laboratory as faculty perceive studies including level of student effort to be less threatening than designs that seem to place the total responsibility for success on the individual faculty member.

We have been particularly selective in our review, discarding many redundant discussions in favor of highlighting widely respected views that seemed representative of various positions. The redundancy itself is indicative of the undeveloped state of the literature on college curriculum design. Seldom in our search of the literature did

we encounter a new conception, a shift in approach, or an encompassing vision of the relation of learning plans, learning experiences, and learning outcomes.

A Summary of Pre-College Curriculum Literature

We examined the work of curriculum specialists at the pre-college educational levels to identify theories and activities that might be developed or modified for use in postsecondary education.

Curriculum literature, including both theory and empirical studies, is far more abundant at the pre-college level than at the college level. Two factors may account for this fact: (1) there is greater centralization of curriculum planning responsibility, and (2) disciplines are taught at a level sufficiently general to allow wider discussion of concepts and structure. In this review we did not attempt to cover the many specific studies of curricular change in elementary and secondary education; rather we focused on several broad areas of curriculum literature that had the potential to provide useful notions and frameworks for use in studying the design of college curriculum viewed as a comprehensive academic plan. To the best of our knowledge, the K-12 curriculum literature has not been examined from this vantage point.

The broad areas covered in the review include: (1) definitions of curriculum, (2) the nature of the activity called curriculum development or planning, (3) varied theoretical assumptions from which curriculum planning proceeds, (4) approaches to curriculum development, (5) organizing frameworks for structuring and sequencing curricula, (6) the relation of cognitive psychology to curriculum development, and (7) the teacher as a curriculum planner.

Rather than summarize this section, we provide below a series of observations and, in some cases, a set of tentative explanations building on a comparative perspective of curriculum literature at the college and pre-college levels.

1. At both levels of education, the term curriculum is defined in many ways, requiring that researchers and practitioners specify the meaning intended before communication can be effective.

2. Curricular change processes at the pre-college and college level are occasionally parallel, particularly when the change involves the selection of content and the manner in which the content will be sequenced and taught. Major curricular revisions in the 1950s and 1960s at the high school level, notably in the sciences and mathematics, were implemented nationally after extensive testing and development. Similarly, major shifts in the methods of teaching disciplines at the collegiate level often involve broad change fostered and disseminated through disciplinary associations and accrediting agencies. Evidence of such curricular change at the college level can be found in the disciplinary journals and related literature. We are reviewing such sources for several disciplines, but this work is not reflected in this paper.

3. At both educational levels there is an extensive literature on "the nature" of the curriculum. Both levels have theorists who take a normative view (how the curriculum should be developed or designed). Conflicting conceptions or sets of assumptions on which academic planning rest are parallel at the two educational levels, but at lower educational levels, a larger number of theorists have devoted their

attention to the process of developing academic plans. At both educational levels, discourse about curriculum is subject to societal oscillations and trends.

4. The "extra-disciplinary" or broad postsecondary curriculum literature is more general in scope than the pre-college literature. At the college level, public discourse most frequently focuses on the intersection of societal needs and institutional or program mission, on the value of historical traditions, and on case study reports that seldom are analyzed in a systematic way. At the pre-college level, even for the lay reader, considerably more literature is available that focuses on the content and principles to be taught, the sequencing of that content, and the needs of the learner. Additionally, there have been more reported attempts at the K-12 level to articulate these elements--student, teacher, content, setting--and to systematically explore their interrelationships.

5. Pre-college educators are more likely to discuss the locus of curriculum decision making as an issue involving considerations of expertise and the power of societal groups. In collegiate education, the site of day-to-day curriculum decision making is more local; disciplinary experts/instructors represent or translate the views of broader societal groups in their own terms. Although there are literatures generated by milieu-experts (e.g., counselling, student development experts), teaching experts are infrequently involved in college curriculum decision making at program level. Thus discussions about curricular plans at the college level may be found at two widely separated levels--that of the individual instructor or program and that of broad discussions that receive their impetus from national reports and reform movements. There appears to be little middle ground for curricular discussion except in small colleges where a faculty forum becomes an arena for discussion of wholistic curricular change.

6. Theorists and researchers dealing with public school curriculum planning typically are either knowledgeable about or have direct access to the ideas of others interested in related topics, such as new developments in psychology or sociodemographic changes in the learner population. Thus the literature at the public school level may reflect new thinking in these fields more rapidly than the literature at the college level. The consideration of new developments in cognitive psychology, for example, is an example of work that has penetrated curriculum thinking designed for public school improvement but is still not familiar to most college instructors outside of the behavioral sciences. Rather, the infiltration of these educationally focused ideas in higher education appears to await the activity of charismatic translators or private consultants whose names and approaches gradually and somewhat selectively become part of the vocabulary of college teachers. It is possible that faculty members at both levels seldom read the original works but rather are stimulated by translated versions of new ideas in curriculum planning and teaching.

7. The ideas of some scholars have reached the common vocabulary domain of both public school curriculum theorists and discussants of curriculum issues in higher education. Although we have not conducted a systematic study of the extent to which this has taken place, it appears that there are commonalities among those whose ideas have diffused into the colleges. The work of such scholars may have appeal because it has originated with college professors and is grounded in intellectual dimensions, because the vocabulary used is similar to that of the

disciplines, or because it deals directly with the intellectual development of students. Examples might include the curricular works of Dressel and Phenix, the instructional psychology of Bloom, Gagne, and others, the work of Perry on student intellectual development, and the work of Kolb on learning styles. To some extent, the diffusion of this work into higher education depends on attempts of administrators or faculty leaders to broaden exposure of their colleagues.

8. We noted reports of a "bandwagon effect" of innovation adoption in higher education. There probably are tendencies at both levels to adopt curriculum plans that a neighboring or peer institution or program has adopted. We suspect, however, that there are more individuals in the lower schools themselves or in the organizations who study them, who critically assess such changes, attempting to sort out their component factors and resultant effects.

9. Researchers concerned with change process in K-12 school curriculum and those concerned with innovation in higher education present similar caveats about the desirability of involving faculty members in curriculum development and taking into account local needs.

10. Although studies of teacher thought processes are developing rapidly in K-12 education there is limited knowledge about what assumptions professors in higher education bring to their curricular planning or which theories of curriculum they might espouse. We infer, however, that some divisions do exist based on disciplinary and/or institutional affiliation. These differences may parallel other evidence of such divisions as two, three, or four cultures, research paradigms of the disciplines, or professional educational ideologies. Certainly, the language used in such reports as *Integrity in the College Curriculum* would be classified as "generic" curriculum theory; education is treated more as an art than as a science. In contrast, the report *Involvement in Learning*, with its emphasis on clear expectations for students, assessment of learner progress, and cautious assertion that college professors should have some training to teach, leans toward education as a scientific process and toward "structural" curriculum theory as it is known in the lower school arena. Another example of structural theory occurs in the popularity of personalized or individualized instruction following a "systems approach" among faculty members in the natural sciences and psychology while generic theory is reflected in teaching styles preferred more frequently in the humanities. Interestingly, proponents of both the AAC and NIE Study Group reports find a common ground in "substantive" curricular theory since both consider current modes of curriculum planning and execution to be deficient in achieving desired educational outcomes.

11. Ironically, in higher education, where a great deal of attention is focused on the structure of knowledge and the conceptual relationships in various disciplines, three common practices illustrate the extensive research and development task that must precede full acceptance of the ideas cognitive psychologists are developing. First, in using implicit, rather than explicit intended learning outcomes, college teachers do not always clarify for themselves or for their students their own conceptual maps of the disciplines. Second, there appears to be little conscious attention to the teacher's responsibility to design courses in ways that will link the structure of knowledge with the student's prior knowledge structure. Third, many learning

activities in higher education are passive and appear to ignore the student's active role in constructing meaning.

The research on cognitive processing in students has led to new views of knowledge, at least as far as psychologists are concerned, and these views are having an effect on curriculum thinking at the K-12 educational level. Translation of these notions to the arena of college teaching appears to be needed if the curriculum is to be coherent, the expectations clear, and the learners involved.

PROGRAM D: FACULTY AS A KEY RESOURCE

The program on Faculty as a Key Resource is researching ways to improve the understanding of how faculty characteristics and behaviors: (1) depend on incentives, role integration, and the institution's academic climate, (2) interact with student characteristics to produce different outcomes, and (3) can be assessed and altered to improve learning. The program's literature review is summarized here.

Summary: Faculty as a Key Resource: A Review of the Research Literature by Robert T. Blackburn, Janet H. Lawrence, Steven Ross, Virginia Polk Okoloko, Jeffery P. Bieber, Rosalie Meiland, and Terry Street

The overall goal of NCRIPAL's research program on faculty as a key resource is to ascertain how institutional structures and common understandings (culture) influence faculty role performance and, ultimately, student achievement. A key assumption is that these environmental variables combine with personal attributes of professors and result in different levels of effort.

The literature review collected research studies on the work life of faculty in colleges and universities and focused on the faculty member in the teaching role. Analysis of the literature about faculty showed, however, research most often is from the student's perspective and, when the professor is the principal subject of investigation, the data primarily are descriptive and normative (what faculty do) rather than introspective (why faculty do what they do). Since it is the latter we need if we are to reach faculty and persuade them to alter their teaching styles to fit their goals and to stimulate their students, the decision was taken to alter the research review process. The scope of the search was broadened to include social science inquiries about professionals at work in organizations. As a result of the modification, we feel the expanded literature survey provides a conceptual guide for understanding the multidimensional factors related to how faculty experience their work.

Selected findings are structured in this document under two headings: (1) an overview of the higher education literature on faculty in the teaching role; and (2) highlights of descriptions of selected psychological and sociological research that suggest profitable approaches to understanding how faculty experience their work.

Research on Faculty in the Teaching Role

Increasingly evident throughout the literature written by and about faculty as teachers is the growing acknowledgement that the academic profession is not a singular body but rather is made up of many subcultures. Furthermore, behavior across subgroups varies appreciably. For example, moving beyond classification by

political orientation and perceptions of retirement, current research studies have presented data suggesting variations in the behaviors and role performance of faculty members can be characterized as differences of institutional, disciplinary, and age-related group membership. Several explanations for the distinctions between faculty cohorts have been advanced.

There is evidence documenting how faculty in different institutions, in different disciplines, and at different ages exhibit cohort distinctiveness in values and role enactment. Literature indicating how other personal variables--gender and race, for example--may differentiate faculty subgroups is harder to find. The preponderance of available research on faculty has been on white males so that only occasionally are we able to include these two ascribed characteristics. A related yet separate critical limitation of this line of research is an almost exclusive consideration of faculty in one category of institutions--the doctoral-granting research universities.

To what extent, and in what forms, are teaching practices related to faculty effectiveness in the classroom? To what extent is effectiveness in the instructional role associated with clear, definable behaviors? To what extent indeed is it even possible to gather credible evaluative information about teaching quality?

Inquiries such as these have spawned a large body of empirical research, literature surveys, and theses without supporting data. By and large, the range of writings reveal that, in general, the results fail to answer adequately any of these questions.

To illustrate, the quality and empirical sophistication of the research studies investigating the relative effectiveness of instructional styles and techniques conducted are generally weak and frequently put forward unfounded conclusions. On the other hand, we did uncover some information on how faculty teach, even if the reasons why they perform as they do remain unanswered. Unfortunately, guidance from existing research is lacking.

What emerges, then, are other unresolved research questions about what lines of inquiry would be most helpful for offering insights. One possible province for future examination would include more clearly defined individual-difference variables in empirical investigations. To what extent does faculty decision-making alter the effects of instructional practices?

Conspicuously absent from the body of literature about faculty are studies to determine how personal attributes and general environmental features, alone and together, operate to condition the perceptions and judgments linked to assessing effectiveness of college teaching. They, too, merit research attention.

Professionals at Work in Organizations

From research on professional work outside the traditional sphere of higher education, we chose an array of theoretical constructs that illuminate different avenues of approach for studying faculty behavior in colleges and universities. The different approaches addressed in our literature review include: (1) role integration, (2) opportunity structure, (3) social support and cooperation, (4) organizational structure, (5) burnout and stress, (6) commitment, (7) work motivation, (8) power and authority, and (9) conceptualization of faculty members' roles.

In the research review, each of the selected topics includes a synopsis of two or more research contributions that have guided the construct's development. Further, application of each construct in research on a faculty sample (when available) is provided. Following are the selected research approaches.

1. Inherent in research on role integration is the firm belief that a strongly integrated role orientation, particularly for the professional employee, leads to higher job satisfaction, less stress, and greater productivity.

2. The concept of opportunity structure encompasses at least three primary variables: the desire of the individual in the organization to seek opportunities; the socialization process of the individual within the profession and the organization; and the actual structure of the organization itself.

3. Social support and cooperation is a general concept composed of several more specific definitions. Some theorists have proposed three major categories into which social support assessment may be grouped: existence (i.e., designation of the absence or presence of an interpersonal relationship); supportive content (i.e., the type of support given); and network structure (i.e., features of the full set of relationships in which a focal individual is involved).

4. The issue of the influence of characteristics of the organizational structure on job satisfaction and general work productivity has been the focus of considerable research debate. Importantly, in a study of instructors' leadership behavior in the classroom in ten community colleges, a moderating effect was identified for faculty who had a participative leadership style in the classroom.

5. Although the effects of stress on college faculty have received some attention in the literature, relatively little appears to be known about the scientific syndrome labeled burnout. While stress can have both positive and negative consequences, burnout (i.e., unmediated stress) is always a negative experience.

6. Commitment is viewed in terms of loyalty, identification, and involvement with the work system. Recent empirical research found a strong correlation between commitment and variations across several attitudinal and behavioral dimensions of academic work.

7. Researchers from psychology have extensively studied the value of motivation as an explanatory construct for illuminating the issue of faculty motivation. There is a wealth of findings suggesting the usefulness of this construct for studying differential employee job effort.

8. Power (i.e., the ability to affect the outcomes experienced by others) and authority (i.e., group recognition of the line of control) derive from disciplines of political science, anthropology, sociology, and social psychology. Moreover, these theoretically related constructs introduce still other conceptualizations, such as exchange and learned role behavior.

9. Clearly, faculty differ in how they conceptualize the role of a college faculty member. To what extent does faculty differentiation in role definition influence how individual faculty members perceive and experience their work? Moreover, how does one study such a curiously intriguing and important phenomenon? Fortunately, our literature focus, characterizing a multidisciplinary research strategy, already has

identified at least two alternative lines: the first draws from the adult socialization literature; the other makes use of foundational psychometric research.

PROGRAM E: THE ORGANIZATIONAL CONTEXT FOR TEACHING AND LEARNING

The program on the Organizational Context for Teaching and Learning is identifying organizational practices in colleges that produce a supportive climate for teaching and learning. These findings will form the basis for suggestions on how such a climate can be fostered. This critical program also closely collaborates with the National Center for Postsecondary Governance and Finance to study supportive institutions, for example, from state policies. The following summary presents some of the major findings of the program's review of the literature.

Summary: Organizational Context for Teaching and Learning: A Review of the Research Literature by Marvin W. Peterson, Kim S. Cameron, Lisa A. Mets, Philip Jones and Deborah Ettington

Unique to higher education in the United States is the extensive array of institutional types and internal organizational arrangements. We pride ourselves on the diversity of types and characteristics of our institutions, of arrangements for delivering education, of internal organizational structures and processes, and even of external patterns for coordinating our institutions. We argue that these varied organizational structures, processes, and dynamics improve the delivery of education and of teaching and learning, but, there is little direct research evidence on the relationship of organizational characteristics and variables with either an institution's academic climate or its teaching and learning outcomes.

The primary purposes of the National Center for Research to Improve Postsecondary Teaching and Learning (NCRIPAL) research program on the Organizational Context for Teaching and Learning are to identify organizational practices, dynamics, and variables that support and foster successful teaching and learning at the undergraduate level and to identify strategies for ensuring a supportive organizational context. The various tasks of this research program include a synthesis of the related research literature; a national survey of organized academic management practices designed to support teaching and learning; a study of academic climate and culture; an examination of how these organized academic management practices and the academic culture or climate domains are related to teaching and learning; and a study of strategies designed to improve the organizational context for teaching and learning.

The literature synthesis, the first task of this research program, includes an extensive survey and synthesis of the literature from two sources: the non-higher education organizational literature that identifies the nature of organizational culture, climate, and other variables that promote effectiveness, quality, and high performance; and the higher education literature that examines organizational practices, dynamics, and variables associated with improved teaching and learning outcomes. The purpose of the synthesis is threefold:

1. To identify and clarify constructs, concepts, and variables that illuminate the organizational context;

2. To identify organizational characteristics, structures, and practices that may be related to improved teaching and learning; and
3. To refine the research questions and designs that guide this research program.

A Framework for Organizational Context

The major finding of the literature is that the research in higher education that relates organizational constructs, concepts, and variables to teaching and learning outcomes is sparse, complex, and confusing; in essence, it is in a state of conceptual chaos. The literature, however, was helpful in refining the following framework for examining the complex organizational context, in clarifying concepts and variables, and in providing some insights.

The academic or educational function of a college or university can be conceived as consisting of seven interrelated environments (the term environment is used broadly to refer to all characteristics of some arena of organizational activity). Those are its external environment made up of surrounding organizations and groups with which a college or university interacts or by which it is influenced, and six internal environments that describe its major constituent group environments (administrative, faculty, and students) and its curriculum or knowledge, technology (or educational delivery), and organizational environments. The external environment is seen as having a critical effect on higher education today but it is not the primary focus of this paper. The student, faculty, curriculum, and technological environments are important but are the focus of other NCRIPAL research programs. The organizational environment is seen as those formal and informal patterns (structure and process) that link the other environments. Because the administrative and organizational patterns or environments are so intertwined, both are included in this purview.

The organizational and administrative environment can usefully be viewed as consisting of six different domains of organizational behavior: (1) organizational and administrative strategy, (2) organized academic management practices, (3) organizational culture, (4) organizational climate, (5) psychological climate, and (6) teaching/learning outcomes. These domains interact (see Figure 1), and as the literature suggests, may all potentially contribute to improved teaching and learning outcomes. Two of the six domains were not examined in this report. Student learning outcomes are NCRIPAL's primary focus and are addressed in another report. Other related outcomes such as organizational effectiveness or other functional outcomes (e.g., the academic function's contribution to research or service outcomes) are not part of the NCRIPAL focus so they are not examined. The psychological (or "felt") climate is primarily dealt with in NCRIPAL's student and faculty reports.

Student Learning as Organizational Outcome: A Caveat

While this report does not discuss student learning outcomes, our understanding of organizations and our familiarity with the literature on colleges and universities as organizations made us aware of the fact that student learning outcomes, NCRIPAL's primary focus, are only a subset of possible organizational performance measures. Few outcome assessment instruments are reliably or validly developed and fewer have been standardized in different institutional settings or on different student populations, and few of these instruments are used by many institutions. These facts raised doubts about the efficacy of student learning outcomes

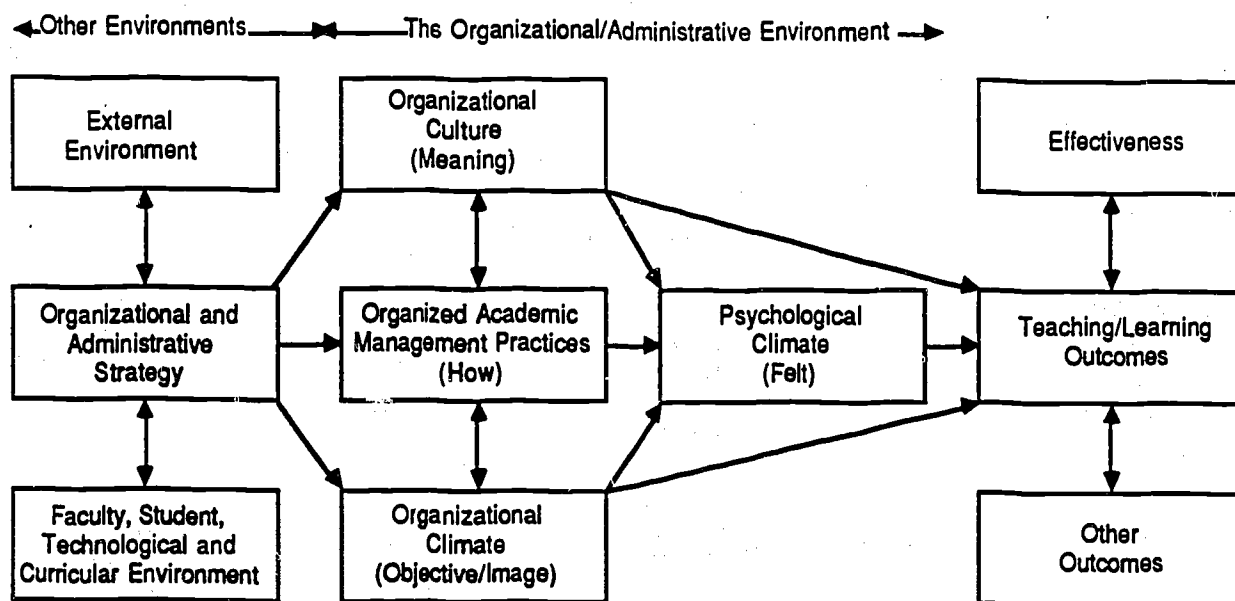


Figure 1. The academic organizational context.

as a feasible dependent variable for a study with organizations as the unit of analysis. Further, even with good instruments, measures of student learning aggregated at an institutional level may mask variations among units within an institution, may not be equally valid for different types of institutions or students, and will be expensive to collect.

These considerations suggest that, for this focus on the organizational context for teaching and learning, other more readily available and less expensive measures of student outcomes than student learning may be more valid and useful. Some suggested measures include: persistence rates, graduation rates, student satisfaction, and post-graduation experience. These measures may be reasonable dependent variables if they are matched to institutional type and the purposes of undergraduate education. This does not obviate the need to examine student learning outcomes (or improvement) but suggests useful substitute measures for this study of organizational context.

Organizational Domains and Student Learning Outcomes

In examining the four remaining organizational domains, we attempted to identify constructs and variables that would contribute to our understanding of the academic organizational context. We also attempted to determine what was known from the extant research.

Academic strategy is seen as the domain that gives "direction" to the college or university; organizational culture is the domain providing "meaning"; organizational climate is the domain that reflecting participant "perception"; and academic management practices is the domain expressing "how" the organization attempts to achieve its purposes.

Organizational and Administrative Strategy: The Academic Guidance Function. Concern for an institution's organizational and administrative strategy for its academic function is prevalent in the literature and is the focus of the first domain. Seven major

dimensions of strategy are: its definition, emergence, content, governance, leadership, academic structure, and resource strategy.

Strategy can usefully be defined in at least three different ways. (First, it may be defined as an institution's purposes and priorities as formally stated or as reflected by major decisions about things such as its function and mission, clientele, goals, program mix, geographic service area, and comparative advantage.) Second, it may be viewed as the "fit" or relationship among the institution's internal environment or functional patterns, its external environment, and its primary constituents. Key dimensions of strategy in this view are its current vs. future orientation, environmental vs. organizational patterns, internal vs. external orientation of members, and rigid vs. flexible control over its members. A third view of strategy focuses on the structural and functional patterns represented either by its formal design or its emergent pattern of activities, policies, and practices.

The differing views of strategy suggest two dimensions that describe its emergence and content. The emergence of strategy is usefully distinguished by its planned or unplanned nature. Variables describing the degree of a planned strategy focus on the planning process in terms of its emphasis, internal-external orientation, strategic-interpretive approach, dynamism, educational focus, comprehensiveness, coordination, participation and representation, penetration, consistency, and analytic sophistication. As a descriptive dimension, the content of strategy includes mission and goals (about things like functional emphasis, clientele, educational orientation, program mix, service area, and comparative advantage) and the more general characteristics of content, such as clarity, learning-outcomes emphasis, legitimacy, and objective/subjective nature.

Two key dimensions affecting the formation of institutional and academic strategy are the governance and the leadership processes of an institution. Governance, viewed as the broad institutional decision-making process for strategic decisions, is reflected by variables describing patterns of participation or representation, type of decision process (consensual, rational, political, ambiguous, or loosely-coupled, etc.), centralization-decentralization, and process consistency or coordination. Leadership, particularly by executive officers and key academic figures, is viewed as critical to establishing a climate for an institution. Key variables describing leadership style would appear to be its supportiveness of teaching-learning activities and outcomes, the breadth of leadership on educational issues, style in decision making (see governance-decision process), leader credibility and legitimacy in academic areas, and consistency.

The final two strategy dimensions, academic structure and patterns of resource allocation, are more a reflection of how an institution chooses to implement strategy. The structure of academic affairs can reflect the status or importance of undergraduate concerns and the degree of intended coordination. Similarly, patterns of resource allocation reflect the availability of resources for undergraduate education, its priority, and its emphasis (teaching, student and academic support services, etc.).

While there is a great deal of literature about the relationship of these strategy dimensions and variables for improving teaching and learning climates and, by implication, student learning outcomes, there is little solid research evidence of the relationship. Planning has been shown to improve institutional mission and focus. Smaller institutions with well-focused missions tend to have stronger educational climates than do larger, less-focused institutions. Decentralized, collegial governance, particularly in academic areas, is associated with more favorable academic climates as is a supportive, open, credible, and consistent leadership style.

However, none of these general patterns has been clearly linked to improved learning outcomes.

Culture: *The Amorphous Glue.* The concept of organizational culture is not new to research on higher education, yet the renewed popularity of this concept in high-performing non-higher education organizations has focused our attention on it in higher education. The external literature reviewed for our literature synthesis helped us clarify the term and distinguishing it from climate. Traditionally, both terms that have been used inconsistently and often interchangeably in higher education.

Viewed as the deeply embedded shared values, beliefs, or ideologies that participants have about their organizations, an organization's culture is both instrumental (affects member interpretation of events, guides their behavior, and resists or supports change) and interpretive (provides meaning to a member's work). A strong culture emphasizes a college's distinctiveness, is enduring, and is not easily changed. Major conceptual characteristics or dimensions describing culture are the degree of member consensus, its content focus, the congruence among its content elements, its strength over members, and its continuity, distinctiveness, and clarity.

Higher education research underscores the existence of institutional cultures (although there is more research on student subcultures), their resistance to change, and their ability to undergrad educational activities. However, how institutional culture affects learning outcomes (as opposed to attitudinal and behavioral outcomes) is still primarily conjecture.

Climate: *The Prevailing Atmosphere.* Climate is a widely used conceptual domain in higher education research; however, as with culture, the non-higher education organizational literature is more sophisticated and suggests some useful distinctions. As contrasted with culture, climate emphasizes current organizational patterns and member perceptions and attitudes--an atmosphere or style that is more focused and less embedded or enduring.

One view of climate is as objective formal organizational patterns and practices. Since this view overlaps our domains of strategy and academic management practices, it is not useful. However, two other distinctions, participants' perceived climate (or "image") and psychological (or "felt") climate, are helpful. Perceived climate, the descriptive shared perceptions of patterns of organizational behavior ("is" or "should be" views), is the primary focus of our literature review. Psychological climate, the shared feelings about the organization (satisfaction, loyalty, morale, commitment, etc.), is a useful construct when viewed as an intervening variable (and as a dependent variable) between our other organizational domains and learning outcomes. However, psychological climate is primarily the domain construct addressed by the NCRIPAL faculty and student programs and, therefore, is not discussed here.

Perceived climate focuses on current views of organizational patterns, emphasizes common views of participant groups useful in distinguishing groups or organizations, and (unlike culture) may vary and be more easily changed. Such patterns do take on an expectation or normative character that can support both extrinsic (member control) and intrinsic (member institution) purposes.

Like culture, perceived climate can be described by such conceptual dimensions as member consensus, congruence among elements, content, strength, and clarity. However, the content of climate is usually more focused than in culture and important culture dimensions, such as continuity and distinctiveness, are less useful. "Supportiveness" of climate, however, appears to be a critical climate dimension.

The higher education research on institutional climate is more extensive than the research on culture. However, climate, as perceived by faculty and administrators, is much more limited than research on student climate. It includes perceptions of goals, institutional functioning, educational emphasis, and other patterns of the academic work environment and organizational behavior. Perceptions of institutional climate are often used to contrast participant groups or institutions or is treated as a dependent variable. It is seldom linked to other organizational outcomes, especially student learning.

Organized Academic Management Practices. This domain includes the formally organized programs, activities, practices, and policies an institution devises explicitly to implement its educational strategy and to support teaching and learning or academic functioning. Several ways of organizing these practices were considered, but six areas were viewed as most useful. Those included practices designed to support: (a) academic program design, development, and evaluation; (b) faculty teaching and instructional efforts; (c) student enrollment and academic support; (d) budgeting and resource allocation practices; (e) academic evaluation and assessment practices; and (f) academic information and analytic systems.

While the specific activities included in each of the six areas are discussed there is little research in the literature linking specific activities to educational or learning outcomes. The authors suggest that patterns of academic management practices (one of the definitions of strategy) may be more useful as organizational-level variables to explain outcomes variables. Some broad dimensions or variables describing organized academic management practices would appear to be: breadth or comprehensiveness, perceived importance or supportiveness, content or educational emphasis, control or incentive emphasis, and coordination or consistency of practices or activities.

The lack of research linking the effects of individual academic management activities or their broad patterns to educational outcomes is disappointing. It is our impression that an academic management revolution is occurring. Many academic management activities are being implemented with the assumption that they improve educational outcomes, but there is, as yet, little evidence available on their usefulness.

Organizational Characteristics: A Critical Dimension

Although not a variable domain, the authors' experience and the research literature did highlight the fact that variables describing broad college and university characteristics were often related to other domain variables. Some key organizational characteristics would appear to be: size, control, level of offering, secular or religious focus, functional emphasis (teaching, research or service), and prestige (wealth, selectivity, and reputation). While there is some evidence that smaller, private, and more prestigious institutions may have better learning outcomes, there is little evidence that learning improvement is a result of organizational characteristics per se.

Tentative Findings. As initially expected, the literature review was more useful in conceptualizing the organizational context than in providing explicit, unassailable research findings linking organizational variables to student learning or insights into improving practice. However, a few tentative conclusions follow.

1. Almost absent from the literature are (a) studies investigating the relationship between organizational characteristics, strategy, academic management practices, and other organizational-level variables and cognitive or student learning outcomes;

(b) studies investigating institutional culture; and (c) studies focusing on the relationship between institutional culture and climate and the outcomes of undergraduate education.

2. Based on the literature about institutional strategy, academic management practices, climate and culture that improve teaching and learning outcomes, we have concluded that the framework presented is a useful one both to guide our research and to inform practice. The organizational and administrative environment can be seen as consisting of six different domains of organized behavior: organizational and administrative strategy; formally organized academic management practices; organizational culture; organizational climate; psychological climate; and teaching and learning outcomes. These domains interact and each potentially contributes to improved teaching and learning outcomes.

3. The most useful and feasible outcomes of interest at an organizational-level of analysis may be different from learning outcomes, which are of primary interest to other NCRIPAL research programs. The following measures may be more useful at the organizational level: persistence (retention rates and continuity of enrollment); graduation rates; aggregate student satisfaction and goal achievement indicators; and post-graduation experience.

4. In the domain of organizational strategy, evidence suggests that institutions are developing strategies to influence their cultures, climates, and learning outcomes, but the impact of strategy on them remains largely unexplored. Useful elements of strategy include: planning, mission and goals, governance, leadership, academic structure, and resource policies.

5. In the domain of organized academic management practices, the literature indicates that administrators and faculty are devising policies, procedures, and activities explicitly to implement educational strategy. While it is assumed that they improve teaching and learning outcomes, evidence of their influence on culture, climate, or teaching and learning outcomes is also limited.

a. Six areas of practice include those related to: academic program support; faculty support; enrollment and student academic support; resource allocation; academic evaluation and assessment; and academic information systems.

b. The following variables describe the academic management practices and may relate to an improved teaching and learning climate and teaching and learning outcomes: breadth of academic management practices; their importance and supportiveness; content focus; control orientation; educational orientation of academic management; and degree of coordination and consistency of practices.

6. The organizational literature outside higher education should be particularly usefully to shape research on institutional culture and climate. Notably, one observes that:

a. Culture and climate are two distinct conceptual domains.

b. The major features of culture are that it emphasizes an organization's unique character or distinctiveness; it is deeply embedded and enduring; and it is changed primarily by cataclysmic events or only by slower, intensive, long-term efforts. In contrast, climate emphasizes "common" views; it focuses on current patterns; and it can vary over shorter periods of time; and it may be influenced or changed.

c. Two perspectives on culture are: (1) culture as a variable an organization has; and (2) culture as a metaphor of what an organization is.

d. Various types of climate are distinguished in the literature and include: (1) objective organizational patterns of behavior; (2) participants' perceived climate or "image"; and (3) participants' psychological or "felt" climate.

7. The following concepts are useful in investigating culture and climate in the higher education setting:

a. Conceptual dimensions for analyzing culture:

- (1) the degree of consensus among members;
- (2) the type or content of the culture;
- (3) congruence among its content elements;
- (4) the strength of the culture in terms of its control over member behavior;
- (5) its continuity over time;
- (6) its distinctiveness; and
- (7) its clarity.

b. Conceptual dimension for analyzing "perceived" climate (the major focus of this framework):

- (1) degree of consensus among members;
- (2) type or content of climate;
- (3) congruence among its elements;
- (4) strength of the climate over member behavior;
- (5) its clarity; and
- (6) its perception as supportive.

8. As the literature strongly reinforces, diversity in American higher education prohibits us from easily making generalizations across institutional type since the major domains of strategy, academic management practices, culture, and climate vary considerably by the characteristics of colleges and universities. Institutional size, type, emphasis, and prestige are a few examples of contextual variables that are related to culture, climate, and teaching and learning outcomes.

PROGRAM F: LEARNING, TEACHING, AND TECHNOLOGY

The program on Learning, Teaching, and Technology seeks to increase the understanding of current and potential uses of technology in college instruction, the situations in which this technology is most appropriately used, and the conditions that

facilitate its effective and appropriate use. A dialogue on "information literacy" has been initiated among college faculty members as they consider their changing role in an information society. With the development of a taxonomy of software and its use, the program is sponsoring conferences at which faculty members and software producers can work to produce effective learning materials. Because of the different nature and time schedule of this program, there is no literature review available per se. A discussion paper on information literacy has been developed, and a review of software is being completed.

ADDITIONAL INFORMATION

NCRIPAL collaborates with other National Centers on issues of common interest. In addition to a formal collaborative agreement between NCRIPAL's program on the Organizational Context for Teaching and Learning and the National Center for Postsecondary Governance and Finance, other programs collaborate to varying degrees with related centers on testing, learning, writing, and technology. NCRIPAL also maintains close ties with disciplinary and professional associations in higher education that seek to improve teaching and learning.

NCRIPAL's National Advisory Panel meets annually in Ann Arbor to advise and evaluate the activities of the programs. Individual members of the Panel, through conversations and correspondence, keep abreast of the programs' progress throughout the year and participate in the annual forum. The annual forum, held in Ann Arbor in the fall, invites researchers and practitioners from all over the country to become active members of a network to improve postsecondary teaching and learning.

In its dissemination activities, NCRIPAL employs a variety of media and product development strategies to reach college faculty and administrators, researchers, and policy makers. The first year's products are technical reports. Videotapes, guidebooks, manuals, and workshops are planned.

For further information or to be placed on the mailing list, contact: NCRIPAL, Suite 2400 School of Education Building, The University of Michigan, Ann Arbor, Michigan 48109-1259.

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The Conference *Shaping the Future of American Higher Education: An Organizational Perspective* was cosponsored by Division J, Postsecondary Education, of the American Educational Research Association (AERA) and by the Association for the Study of Higher Education (ASHE).

Introduction: John J. Gardiner, Oklahoma State University
Ellen Earle Chaffee, National Center for Higher Education Management Systems (NCHEMS)

Focused Dialogue I

(1 hour and 50 minutes)

Chair/Discussant: James March, Stanford University

Burton Clark, UCLA

Salient system characteristics that underlie the current condition of higher education. An Achilles' heel: the two-tier reward system for research and teaching. The current challenge to the integrity of community colleges. The need for greater organizational interaction between disciplines and institutions.

Clark Kerr, University of California, Berkeley

Better governance as the key to success. A historical view of governance and research on governance. The need for more field research. Institutions must look externally, not only internally. Researchers must stay in contact with reality.

Lewis B. Mayhew, Stanford University

General trends and projections for higher education, with particular attention to the context of the educational enterprise. Certain built-in forces largely responsible for the condition of higher education. An inherent system of checks and balances.

Rosemary Park, UCLA

Restructuring the learning system. The need to take analysis away from discrete layers (elementary school, and college) and study the process of education whole. Focus on how and when people learn, rather than on how the current education system is structured.

Ralph Tyler, Center for the Advanced Study in the Behavioral Sciences, Stanford University

Lessons to be learned from the austerity of the 1930s. Reform at the institutional level, not by general fiat. Self-study and institutional mission: getting beyond the labels. On reassessing the relative importance of teaching and research.

James March (Chair/Discussant), Stanford University

Adapting to the future. Steering a course between optimism and pessimism.



Alexander W. Astin is Professor of Higher Education at UCLA and Director of the Higher Education Research Institute and the Cooperative Institutional Research Program. Previously he was Director of Research for both the American Council on Education and the National Merit Scholarship Corporation. The most recent of Dr. Astin's many books and articles is *Achieving Educational Excellence: A Critical Assessment of Priorities and Practices in Higher Education*.

Burton Robert Clark serves as Allan M. Carrter Professor of Higher Education at UCLA. A past president of the Association for the Study of Higher Education (ASHE), Dr. Clark has also taught at Stanford University, Harvard University, University of California at Berkeley, and Yale University. A prolific writer, he recently authored *The Higher Education System* and edited *Perspectives on Higher Education: A Cross-Disciplinary and Comparative Views*.

Algo D. Henderson was most recently Research Educator at the Center for Research and Development in Higher Education at the University of California, Berkeley. Among the most respected figures in American higher education, he has served as President of Antioch College and as a member of President Truman's Commission on Higher Education. As Associate Commissioner of Higher Education in the newly organized State University of New York, he helped initiate public policy that transformed the state system from an elitist to a populist base. He also founded and directed the Center for the Study of Higher Education at the University of Michigan. Dr. Henderson is the author of *The Innovative Spirit and Higher Education in America*, among other titles.

H. Thomas James is President Emeritus of the Spencer Foundation, an organization supporting educational research. Prior to joining the Spencer

Foundation, he served as Professor and Dean of the School of Education at Stanford University and as Professor and Director of Field Services at the University of Chicago School of Education. Dr. James has served on numerous Commissions and Presidential Task Forces.

Clark Kerr, among the most influential individuals in American higher education, first came to wide national attention as the embattled head of the University of California. A distinguished labor negotiator and professor of Economics, Kerr's firing by then Governor Ronald Reagan in 1967 released him for the Chairmanship of the prestigious Carnegie Commission on Higher Education and the Commission's successor, the Carnegie Council on Policy Studies in Higher Education. In 1984 Dr. Kerr chaired the National Commission on Presidential Leadership, sponsored by the Association of Governing Boards of

C O N T E N T S

Focused Dialogue II

(1 hour and 25 minutes)

Chair/Discussant: William Birenbaum, Antioch College

Algo D. Henderson, University of California, Berkeley

Passing the torch of learning. The role of liberal education in a technological world. Educational philosophy, not administration, the chief concern of forward-looking leaders. On the need to depart from the status quo and develop fresh perspectives.

T. R. McConnell, University of California, Berkeley

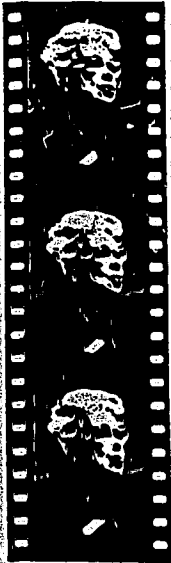
Education and changes in the labor force.

Retraining and continuing education. The competing demands of liberal and professional education. On designing an educational system adequate to the labor force of the future.

Earl McGrath, University of Arizona

The role of public policy in the future of higher education. The role of institutional size in the educational process. On the importance of values in education and public policy. Adapting the dual system of public and private education to the demands of the future.

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P A R T I C I P A N T

Universities and Colleges. Dr. Kerr is currently President Emeritus of the University of California and Professor Emeritus of Economics.

James Gardner March, a scholar of international repute, is Professor of Higher Education, Political Science, and Sociology at Stanford University. Prior to joining the Stanford faculty, March taught at the Carnegie Institute of Technology and the University of California at Irvine. He has been a member of the National Council on Educational Research and the National Science Board. His publications include *Leadership and Ambiguity* and *Ambiguity and Choices in Organizations*.

Lewis B. Mayhew is widely known as one of the most knowledgeable scholars in American higher education. A prolific writer, he serves on the faculty of Stanford University's School of Education. Mayhew's knowledge of the college world is encyclopedic, and he has served as a consultant at

a host of American campuses. Author of a summary volume on the reports of the Carnegie Commission, Mayhew has also written *Legacy of the Seventies* and *Surviving the Eighties*.

T. R. McConnell is Professor Emeritus of Higher Education at the University of California, Berkeley. In 1957 he organized the Center for the Study of Higher Education at Berkeley and also served as the first director of its successor organization, the Center for Research and Development in Higher Education. A member of President Truman's Commission on Higher Education, McConnell has received numerous awards for his distinguished contributions to educational research.

Earl Jones McGrath is a leading advocate of the importance of values in higher education and public policy and an active consultant on general-education programs. In the late 1970s Dr. McGrath was Executive Director of a special study, funded by

the Lilly Endowment, on values in higher education performed in conjunction with the Center for the Study of Higher Education, University of Arizona. He has also served on the faculty of the University of Buffalo, Iowa State University, University of Chicago and Teacher's College, Columbia University. A member of President Truman's Commission on Higher Education, Dr. McGrath has also served as U.S. Commissioner of Education, President of the University of Kansas City, and Director of the Higher Education Center at Temple University. He has authored several books and numerous articles, and has received numerous honorary degrees.

James L. Miller, Jr. is Professor of Higher Education and former Director of the Center for the Study of Higher Education at the University of Michigan. A prolific author, Dr. Miller is a leading authority on budgeting and finance in public colleges and universities. He has given special attention to issues

Focused Dialogue III

(1 hour and 30 minutes)

Chair/Discussant: Elaine El-Khawas, American Council on Education

Alexander W. Astin, UCLA

Cause for our poor performance in undergraduate education: a conflict in values. Reputation and resources, traditional yardsticks of excellence, imply values inappropriate to developing the talent of students. The professional concerns of today's student mirror the misplaced values of our institutions. The need for honesty in relating our behavior to our values.

H. Thomas James, Spencer Foundation

The need to disaggregate data about higher education. Carefully designed case studies as a fruitful direction for research.

James L. Miller, Jr., University of Michigan

1985, plus or minus 15 years. Planning for the year 2000: what can be or should be accomplished as we enter a new millenium. As a yardstick, consider the change that has occurred since 1970.

Kenneth P. Mortimer, Pennsylvania State University

How to accomplish what is proposed in the NIE report *Involvement in Learning*. An organization that focuses on the learning process has the greatest chance of maximizing its potential and that of its students. The need for trust and legitimacy in educational organizations.

Barbara W. Newell, State University System of Florida

On shaping our future in a changing world. What is involved in planning for the years to come: the example of the Florida Master Plan.

Barbara W. Newell is Chancellor of the State University System of Florida. She was previously President of Wellesley College and U.S. Representative to UNESCO. Dr. Newell has also served on the faculty of the University of Wisconsin, the University of Illinois, Purdue University, the University of Michigan, and the University of Pittsburgh.

Rosemary Park is Professor Emeritus of Higher Education at UCLA, where she has also held several key administrative positions. Prior to moving to Los Angeles, Dr. Park served as President of Barnard College and as President of Connecticut College, where she was a long-time faculty member and dean. She has served on numerous councils and commissions and has received many awards recognizing her outstanding contributions to higher education.

Ralph Tyler is among the most respected leaders in American higher education today. He is widely known as the father of educational evaluation and a leading force in curricular reform. After serving at the University of North Carolina and Ohio State University, Dr. Tyler engaged in the Eight Year Study, the first nationwide showcase for modern methods of evaluation. Thereafter he chaired the Department of Education at the University of Chicago and served as its Dean of Social Sciences. In the early 1950s he was the founding Director of the Center for Advanced Study in the Behavioral Sciences at Stanford University. A leading architect of the educational reforms enacted in the 1960s, Dr. Tyler is currently Director Emeritus of the Center and remains extremely active in the higher-education community.

of state-level policy making and to state planning and coordination of higher education. Dr. Miller is a past president of the American Association for Higher Education (AAHE) and a former member of the NCHEMS Board of Directors.

Kenneth P. Mortimer is Executive Assistant to the President for University Affairs and a Professor of Higher Education and Public Administration at The Pennsylvania State University. A former director of the Center for the Study of Higher Education at Penn State, Dr. Mortimer has focused his research interests and published work on questions of governance and management in higher education. In 1984 he chaired the Study Group on the Conditions of Excellence in American Higher Education, sponsored by the National Institute of Education, whose final report, *Involvement in Learning*, has generated considerable interest.

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This Agreement shall be construed to be between merchants. Any question concerning its validity, construction, or performance shall be governed by the laws of the State of New York.

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Customers who have a continuing need for ERIC documents may open a Deposit account by depositing a minimum of \$250.00. Once a deposit account is opened, ERIC documents will be sent upon request, and the account charged for the actual cost and postage. A monthly statement of the account will be furnished.

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