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THIS ANNOTATED BIBLIOGRAPHY CONTAINS REFERENCES TO
GENERAL GRADUATE EDUCATION AND TO EDUCATION FOR THE FOLLOWING
PROFESSIONAL FIELDS--ARCHITECTURE, BUSINESS, CLINICAL
PSYCHOLOGY, DENTISTRY, ENGINEERING, LAW, LIBRARY SCIENCE,
MEDICINE, NURSING, SOCIAL WORK, TEACHING, AND THEOLOGY. (HW)
GRADUATE AND PROFESSIONAL EDUCATION

An Annotated Bibliography

ANN M. HEISS
ANNE DAVIS
FRANK VOCI

UNIVERSITY OF CALIFORNIA, BERKELEY
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GRADUATE AND PROFESSIONAL EDUCATION

An Annotated Bibliography

Ann M. Heiss
Anne Davis
Frank Voci

Center for Research and Development in Higher Education
University of California
Berkeley

1967
PREFACE

Graduate and professional schools currently are feeling the effects of the increased flow of students into higher education. With few exceptions, these institutions face their responsibilities with little relevant data or research on which to base projections or formulate programs.

The Center for Research and Development in Higher Education at the University of California, Berkeley, is planning to study a number of aspects of graduate and professional education. As part of the preparation for this study, Project Director Dr. Ann M. Heiss and Research Assistants Anne Davis and Frank Voci developed the following annotated bibliography with the assistance of Katharine Kunst of the Center staff.

The Center has published this bibliography to aid researchers and others concerned with graduate and professional education.

Leland L. Medsker, Acting Chairman
Center for Research and Development in Higher Education
University of California, Berkeley
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GENERAL GRADUATE EDUCATION
Academic Senate, Berkeley Division Select Committee on Education. 

*Education at Berkeley*. Edited by Charles Muscatine. Report of 
the Select Committee on Education, University of California, 

The result of the Select Committee's year-long study to find 
"...ways in which the traditions of human learning and scientific 
inquiry can be best advanced under the challenging conditions of 
size and scale that confront the university community." The first 
section of the report deals with the diversity in Berkeley student 
characteristics and presents arguments for a pluralistic approach 
to higher education. Central to the report is a consideration of 
the impact of large groups of graduate students and the emphasis 
on research. Proposes a new degree, Doctor of Arts, which would 
substitute a "learned" paper on a research project for the disser-
tration. Makes forty-two recommendations for educational improve-
ment and reform.

American Association of Land-Grant Colleges and State Universities. 

Statistical data and abstracts of reports. Covers: (1) use 
of tests in evaluation of applicants for graduate study, (2) 
seminar practices, (3) enrollment trends, (4) financial assistance, 
(5) relation of graduate studies to contract programs, and (6) 
graduate school communication.

Armsby, Henry H. *Engineering and Scientific Manpower*. U.S. Office of 

Description of programs and services designed to improve 
national scientific personnel resources in engineering, science, 
and teaching in: fifteen nongovernmental agencies, eleven federal 
agencies, and four presidential committees.

Atwood, Sanford S. "Graduate Education and Research," *Graduate Journal* 

Proposals from the provost of Cornell University that: (1) 
graduate education be regarded as an apprenticeship, (2) residence 
requirements for the Ph.D. be less stringent, (3) the Ph.D. be 
distinguished from the professional degree, and (4) the graduate
school exert influence on the undergraduate level to stimulate and foster qualities of research and scholarship throughout undergraduate years.


A discussion focusing on: what program or degree will provide the best college teachers in the needed numbers in the time available. Inquires into the adequacy of the present Ph.D. degree in college teacher preparation, the problem of teaching versus research, required versus optional special programs to improve teaching skills as part of the Ph.D., the possibility of a more rigorous master's degree as an alternate to the Ph.D. as a teaching degree, and the effect of quantitative factors on the quality of graduate education.


A report of a conference of university presidents, graduate deans, government officials, and representatives of educational foundations and associations convened at Brookings Institute. The conference focused on the kinds of information needed on graduate education and the means for obtaining this information. The report discusses: (1) Collection of current data, (2) graduate education costs and capacity for institutional expansion, (3) financial support from federal and private agencies, (4) estimating projected needs for manpower, programs, expansion, and finance, (5) research: what kind and by whom? and (6) graduate study and graduate students.


The report of a panel discussion regarding meaning of scholarship, college teaching, and the quality of Ph.D. programs for preparing scholarly teachers. Discussion complements Strothmann's recommendation in *Graduate School Today and Tomorrow*.


A discussion of the Ph.D. program at Northwestern University. Recommends the elimination of course requirements per se in the regimen of doctoral training. Stresses the encouragement of
intellectual independence and variation in programming on a tailor-made basis. Describes means of liberating students by other graduate schools, such as independent study, advanced standing, and interdisciplinary study. Challenges the system which gives degree only on basis of completion of formal requirements. Recommends Whitehead's three-stage concept in education: (1) Adventure, (2) precision, and (3) generalization.


Reports an attempt to break down the concept of identification into its components for comparison and analysis of social structure and personal development. Discusses the process of identification and the nature and functioning of identity in conduct. Specifically this study deals with the identification of a man with his work. The data are based upon interviews with students doing graduate work in philosophy, physiology, and mechanical engineering. The three groups are compared in three major elements of work identification: (1) occupational title, (2) commitment to particular organization, and (3) significance for one's position in larger society.


Examines personality and personality change in developmental manner by studying careers as they relate to institutions and to persons. Text examines careers in work organizations and occupations. Discusses: (1) Recruiting, (2) replacement, (3) training, (4) schooling, (5) routing through a career, (6) changing situations, and (7) linkage to personal identity.


A study of student attitudes regarding the control on classroom activities and policies by a college department. Subjects were students in the School of Education at the University of Pittsburgh. Findings indicated that, contrary to popular notion, graduate students are not more anxious and authoritarian than the undergraduate student.

A discussion of four major problems in graduate education: (1) Competency of college teaching depending on reforms in graduate education, (2) graduate schools becoming professional schools, (3) need for broadened national distribution of graduate study, and (4) loss of scholarly quality in the master's degree for college teaching. Offers proposals for the resolution of these issues.


Reports little change in graduate education during the past fifty years. Reviews the literature on graduate education which discloses that, although the current status of graduate education is critical, findings are repetitious in that the issues are never resolved. Concludes that need for a resolution of problems becomes more acute in each succeeding generation.


A major study of the historical development and present status of graduate education, institutions, students, and programs. Data compiled from extensive personal interviews, independent catalog studies, bibliographical material and journals, and wide-ranging questionnaire polls. Organized in three parts: (1) The past; (2) the present; and (3) the future; deals with specific problems of professionalization, growth and changes, administration and organization, student origins, background, motivation, caliber, preparation, recruitment, and all aspects of graduate programs.


Hypothesizes: "The development of an occupation into a profession involves specific evolutionary phases which are generic to the process of development of all professions." Medicine is shown as the prototypical profession for extrapolation of phases in the development toward full professional status. Psychotherapy and its stages of development are matched against those of the prototypical model.

Discussion by members of the College Entrance Examination Board of: (1) articulation between high school and college, (2) developments in college admissions and admissions testing, (3) selection and admission practices in graduate and professional schools. Questions "whether existing tests at this level come even close to meeting the real needs."


Offers three hypotheses on nature of science talent: (1) Clearly definable science trait. Not necessarily a component of high general intelligence. (2) No single "science talent" trait. High-level ability in science is a function of high general intelligence. (3) Science talent trait exists, but it is either a component of high general intelligence or masked by it.


Contains evidence that more and more professions, new and old, are resorting to self-critical examinations to bring about improvement and raise standards of service. Reviews writings in several professional fields which represent attempts at self-examination.


A criticism of curricular changes in the graduate program of the Woodrow Wilson School of Princeton designed to prepare men for careers in public affairs and not in academic work. Expresses concern and doubt as to whether a quality graduate school can afford to distinguish between a "scholarly" researcher and a "non-scholarly" researcher.


A survey reporting institutional facilities in Negro institutions of higher education. Provides data on: (1) enrollments, (2) status of accreditation, (3) library and laboratory facilities, (4) fields of study, (5) degrees awarded, and (6) financial support and current problems.

A comprehensive four-part study of doctoral recipients in education. Part I includes questionnaire responses from 818 (1954) doctoral recipients in education regarding their background, training, and productivity in research. Part II includes essentially the same data on the 1964 recipients in education, together with information on their graduate school costs. Part III offers an analysis of the nature and methodology used in the doctoral dissertations by 1964 recipients. Part IV is a study of the background, personality characteristics, graduate training, and research productivity of thirty-one eminent scholars. Offers recommendations for the reorganization and strengthening of graduate training for research.


A broad descriptive survey comparing American and Commonwealth universities. The topics include all aspects of law, medicine, science, and technology. Carmichael is in accord with most of Flexner's philosophy, but places greater emphasis on the intensified search for talent, which is contrary to Flexner's belief that this search must not exclude the large average mass by resorting to rigid selection. Author stresses the need for curriculum overhaul, guarding against overspecialization, and upholding highest ideals of the university.


Describes a master's program designed to recruit and prepare college teachers. Compares the rigorously defined program with the program which is loosely constructed and not precisely defined, and favors the former because the latter does not attract the more able student. As outlined, the proposed three-year program is well defined and presumably will pave the way for completing the Ph.D. in two years. The program is designed to appeal to and stimulate the more serious student earlier in his academic career.


A discussion of major problems facing graduate schools on the
brink of their largest expansion in history. Although the graduate school is the most strategic segment of higher education, it is also the most inefficient division, as evidenced by a high attrition rate, lag between B.A. and Ph.D., the great gap in supply and demand for Ph.D. graduates, and the lack of articulation between the undergraduate and graduate programs. To meet the future demands for graduate education, the present university organization is inadequate. The graduate school needs a dean with a budget and authority to revise the program. The author recommends a three-year master's degree with emphasis on college teaching as the goal, and discusses the advantages of such a program.


A proposal that although knowledge of subject matter is the first requisite for effective college teaching, this is not enough. What must be added is a broad understanding and attitude toward education and learning. With these bases, Carmichael defines other qualities in graduate faculty and graduate programs required to improve the quality of graduate and professional education.


Descriptions of how each of three groups--mechanical engineering, philosophy, and physiology students--studied and handled the problem of assuming an occupational role. Includes a general discussion of a model for analysis. The author attempts to show that conflict does not come in assuming an occupational identity but rather centers around disparities between parental and occupational expectations.


A comparative study of graduate departments in 29 academic disciplines in 106 institutions. Findings are based on a survey of the informed opinion of three major groups: (1) Department chairmen, (2) distinguished senior scholars, and (3) knowledgeable junior scholars who had completed their formal training not more than ten years earlier. Respondents (4,008) were asked to: (1) describe the quality of the graduate faculty in their field at each of the 106 institutions on a seven-point scale, (2) rate the effectiveness of the doctoral program on a five-point scale, and (3) indicate on a four-point scale what changes in the relative...
positions of departments could be anticipated within the next five-to ten-year period. The report compares findings with earlier surveys by Hughes and Keniston. It includes statistical data on departments, profiles of respondents, and generalizations based on four selected disciplines.


Compares the undergraduate records of 294 students at Hunter College who continued to the doctorate, with a random sample of 294 other students of the same period. The results indicated that the records of prospective doctors were significantly better than those of the average students.


Suggests that educational leadership and personal conviction on the part of higher education administration officers in preparing students for graduate study is sadly lacking. Educational leadership must be developed by the dean and faculty and reflected in the quality of graduate students.


Proposes that a profession is a vocation whose practice is founded upon an understanding of the theoretical structure of some department of learning or science and upon the abilities accompanying such understanding. This understanding and these abilities are applied to the vital practices of man. The practices of the profession are modified by knowledge of a generalized nature and by the accumulated wisdom and experience of mankind which serve to correct the errors of specialism. The profession, serving the vital needs of man, considers its first ethical imperative is to be of altruistic service to the client.


A discussion of the conflicts between: (1) general and special education, (2) humanities and the sciences, (3) teaching and research. The author submits that the resolution of these conflicts is the responsibility of the graduate schools.

An analysis of an inventory of attitudes of faculty members in professional schools toward the values of liberal arts education as a whole, and its constituent subject-matter fields in particular.

Findings are as follows: A generally favorable attitude toward liberal arts and science is exhibited, but not substantiated when choices among the liberal arts must be made explicit. Subjects in liberal arts and sciences which have direct relevance to specialties are preferred. The inventory also shows preference for those subjects which develop particular intellectual skills. The higher the administrative position, the more likely the incumbent values a broad general or liberal education as contrasted with training for a relatively narrow specialty. Faculties appear to be interested in liberal arts but are confused as to the ingredients and proportions to combine in a course of study to provide a more liberal education for specialized students.

Dure, Leon S. "More Graduate Students Are the Key to the Nation's Search for Scientists," *American Mercury,* 90:113, April, 1960.

Submits the thesis that the Ph.D. in science will not bring the rewards commensurate with the sacrifices and efforts required. The result is a lack of quality in the graduate students who continue to the doctorate and become members of the academic community. The author recommends a revision of the assistantship and fellowship system.


Reports (in Part III) on curriculum evaluation in three select fields of graduate study, medical school students' attitudes toward psychiatry, examinations in psychology, foreign language requirements, and a follow-up study of the characteristics of Minnesota Ph.D.'s. A comprehensive institutional self-appraisal based on summaries of twenty-three separate studies conducted between 1942 and 1952.


An inquiry into procedures for the organization and direction
of graduate work in different departments at various selected universities. Based on data from interviews with faculty members, the author discusses such problems as specialization versus professionalism, financial support of graduate students, criteria for student selection, and techniques which may affect the quality of graduate education because of their relation to the appraisal of student achievement through testing.


Analysis of data showing the distribution of over 100,000 graduate students by subject fields for 1956-57 compared with figures for 1897. In 1897, one-fourth of the graduate students were in the natural sciences. In 1957, this number increased to one-half. Conversely, enrollments in the humanities and social sciences decreased from almost three-fourths to less than one-half.


Updates an earlier article, which ranked graduate schools according to the number of doctorates awarded from 1948-55. The author determines the five most outstanding institutions in 48 selected fields of graduate study. A significant fact is that from 1955 to 1958 there was an addition of nearly 50 per cent to the number of doctorates awarded in the period 1948-55.


An anthology of writings by thirty-two authors who discuss the dynamic changes and the resultant implications in the scientific fields. A section of the book is devoted to "The Education and the Use of Superior Talent," which includes chapters dealing with (1) problems of the graduate school, (2) financial aid for the graduate student, (3) federal government and university research, and (4) the advanced-degree man in industry.


A report of the results of a questionnaire survey in which Harvard Ph.D. recipients were asked to appraise their degree programs. Analysis was made of data on the formal requirements for
the degree, the foreign language examination, delays in the degree program, quality of programs, preparation for teaching and student-faculty relationships. Recommends: (1) raising the standards of foreign language proficiency required; (2) greater breadth in the humanities programs; (3) more encouragement and guidance of students; (4) more full-time commitment to study; (5) a reappraisal of the examination requirements; (6) more guidance and discrimination on the selection of a thesis topic; and (7) improvement in student-faculty relationships.


Identifies eleven education dimensions which constitute the rationale for almost any type of psychology core curriculum. Uses the core curriculum to illustrate the point that Ph.D. requirements in each department are simply means to larger ends which require explicit statement.


A report pointing out "...the need for more empirical research on the conditions of our scientific capability so that policy can in time proceed on a more informed basis." The recruitment of future scientists is dependent upon the developmental conditions which will make possible future capability of the U.S. in technological invention.


Essays by ten American scholars, each an interpretation of American higher education viewed as a product of social phenomena. The essays are designed to serve international communication by addressing themselves to visitors from other countries. They describe the American educational scene and the place and function of universities and learning in twentieth century civilization. Each scholar describes a particular aspect of the American university experience.


The published addresses given on the occasion of the
inauguration of Dr. Louis Benezet as fifth president of the Claremont Graduate School and University Center on March 19, 1964, together with a summary of the proceedings. Additional commentary by W. T. Jones, Albert Friedman, and Stanley F. Reed. The addresses: "Dialogue with Destiny" by Milton S. Eisenhower; "Thoughts at Thermopylae" by Louis F. Benezet; "Graduate Education and the Creative Process" by Robert A. Service.


A monograph reporting a well-developed study of successful and unsuccessful graduate students. In defining the problem, the authors offer perceptive evaluative comments on a number of studies made on this subject. Statistical procedure chosen was Stephenson's O-technique for the correlation of different individuals in their perceptions of the university and for examining the resulting matrix of correlations to decide which people were enough alike in their perceptions of the university that they might be meaningfully grouped and some general statements made. Included are samples of the (1) interview schedule on graduate work adjustment, (2) list of emotional needs, and (3) card-sort items.


A report of U.S. Office of Education survey which summarizes prerequisites in the biological sciences and which concludes that the pattern of course and credit assignment practices in progress in these fields is highly consistent.


Poses the question: "Is technical expertise stifling scientific creativity?" One of his criticisms centers on the stress on "know-how" rather than "think-how," particularly on the graduate level, which is limited to methodology. Discusses training versus education or methodology versus growth.


A study which places emphasis on the professions, professional associations, and their relationship to government. Its larger aim is to illuminate this development of the American system as a
whole and the relationship among its various parts.


Suggests that three major social developments have altered the program and organization of graduate work: (1) Increase in numbers and change in character of graduate population, (2) shift in production of research from concentration in the universities to governmental, endowed, and industrial or commercial agencies, and (3) competition between public and private agencies for control of the results and procedures of research. The graduate school encountered the dilemma of expanding to render service to society and of maintaining standards developed through a quarter-century of strenuous effort. Conflict in the function and purpose of the graduate school has arisen from divergence between the liberal arts tradition, and the German university ideals of freedom of learning, teaching, research, and publication.


A study which shows that career preferences are modified by contact with graduate study. It indicates that those who change their programs shift toward careers in research in those departments which stress research. The influence of direct personal communication with faculty is rated high as a career determinant. Researchers tend to internalize a research "life style" as well as a career interest.


A discussion of the national resources and quality of engineers and scientists. It reports survey data of federal, industrial, and professional organizations' programs in an effort to determine causes of the shortage of scientists and how to meet the constantly rising needs for scientific talent.


An analysis and critical review of the concepts of graduate education as distinct from professional education in relation to the growth of graduate enrollment.

An informative report of a well-ordered study of factors influencing the decision to enter graduate training. Investigation, conducted in 1957-58 academic year, of a large and diverse sample of 358 graduate and professional students selected from 35 institutions by criteria designed to assure broad national representation. Findings: (1) Men who enter graduate training have (a) high college grades, (b) fathers with high educational attainment, high occupational status, but undistinguished incomes. (2) Men who enter professional school have (a) less distinguished college grades and (b) fathers with more distinguished incomes. Chief among the factors influencing advanced education plans are ability, sex, and social and economic status of the family.


A commentary on "The Core Curriculum Is a Dependent Variable" by Stanford Ericksen. Author Gustad suggests an alternative approach in analyzing the Ph.D. core curriculum. The dependent variable of interest is the characteristic of graduates of various departments with different core curricula. The suggested approach is to find and develop criteria of good performance by graduates rather than obtain agreement on the core curriculum.


A report by the director of research, National Research Council, on the findings of a study of relationships between science doctoral graduates and the location and size of their high schools. Reports that: (1) graduates in biological sciences come from small high schools in agricultural areas; (2) graduates in the behavioral sciences come from larger, urban schools; (3) graduates in physical sciences come from large high schools, though not with the disproportionate frequency of the graduates in the behavioral sciences.


A study of doctoral students at the University of California, Berkeley, designed to determine the character and quality of their graduate education and the extent to which their graduate educational
experiences were seen as conducive to scholarly development. Reports the need for improved faculty-student interaction, for more adequate orientation to graduate study, and for reappraisal of degree requirements.


A major contribution to the study of the professions. This article includes a series of essays and historical accounts of the professions and professional education. Section I covers background and current status and includes a discussion of the problem of defining what a profession is. Section II includes case studies on medicine, engineering, teaching, business, and the graduate school as a professional school. Section III delineates some of the forces which operate to make professional education what it is today. Section IV is both a summary and a challenge for professional education to become what it might be.


A report of findings from a study of 75 graduate school catalogs concluding that 627 courses open to graduate students in all fields are "mixed," or for both undergraduate and graduate. Contends that if such "mixed" course offerings continue in this trend, "graduate education" will become a misnomer.


States that in spite of a multiplicity of professional associations, none is designed to effect communication between graduate and undergraduate schools. Discusses two critical questions: (1) the concern of graduate schools for staffing undergraduate faculties, and (2) the provisions by graduate schools to meet the shortages. Argues that graduate research is overshadowing production of instructors for undergraduate faculties.


Traces: (1) The development of the graduate school, (2) the idea of the university, and (3) the general development of higher education. Discusses the factors in the origin and development of Johns Hopkins University and its administration from 1880. Summary
and conclusions regarding major problems and solutions for graduate education also are included.


Studies the changes in interest areas of students over a one-year period and compares students' changes or achievement, in science and achievement of students in other "non-scientific" areas.

Following are student growth areas tested and instruments used: (1) Beliefs, attitudes, and reactions in general (Inventory of Beliefs). Significant differences were noted at 1 per cent level of confidence between changes or gains of students in various interest categories. (2) Ability to do critical analysis in reading and writing (test of critical analysis in reading and writing). (3) Critical thinking (test of critical thinking). No significant differences were noted at 5 per cent level of confidence.


An excellent article reporting data derived from a study of attitudes concerning identification of students and staff with each other and effects of this identity on educational achievement. The study was conducted in a midwestern state university medical school. Data compiled from extensive observations of all activities and interviews of a random sample of sixty-four students stratified by year. These data were then checked against findings of analyses of other data related to professional education.


Reports an analysis of 52,009 doctorates conferred by 132 institutions in 48 fields of study over the period 1945-1954, and concludes that higher education for the doctorate is concentrated in a relatively small number of institutions and fields of study.


Bemoans the loss of "criteria" for a coherent program development within graduate schools of education and the overreliance of university educationists on occupational standards as a basis for
program development. Schools of education become so preoccupied with educational structure as it exists that the structure becomes reinforced and the possibility of change is paralyzed as a result.


Proposes changes at all levels of education in order to meet demands for more scientists and engineers. Changes include: (1) integration of liberal and scientific studies, (2) recognition of the humanistic qualities of science, (3) increased diversity and strengthening of new engineering programs, and (4) shift of emphasis from undergraduate to graduate level in professional education of engineers.


Points out the great need for teaching competency in the graduate science faculties. Discusses the educational development of the research scientist, the problems involved, and proposes solutions. Author argues that this neglect of teaching will ultimately make science "a modern cult for specialists and technicians" and generally undermine the university function.


Makes four recommendations for the improvement of graduate education: (1) higher admission standards to insure better prepared graduate students, (2) emphasis on broad principles rather than mastery of a body of knowledge in professional education, (3) review and reform of degree requirements in order to relate them to the vital interests of the graduate student, and (4) continuous study throughout the year.


A report by faculty members of Wesleyan University on the results of a study which surveyed the educational background of 18,000 scientists in the U.S. with an assessment of data from approximately 500 colleges and universities.

A description of the current status of higher education, as characterized by change and expansion. The author believes that a number of the larger prestigious universities will evolve into centers for advanced study with limited or no undergraduate programs. The function and idea of higher education will undergo redefinition in a new relationship to community in research or teaching on a contractual basis.


A survey of interinstitutional cooperative arrangements for graduate level offerings. Data was obtained from questionnaires returned by 229 institutions. Fifty-five had existing program arrangements with other institutions. Each program is described.


A report on the developments in progress designed to stimulate better communication and cooperation between the liberal arts colleges and graduate schools in all departments, with special emphasis on medical and law schools.


Proposal by a prominent psychoanalyst that the life of a young scientist challenges our educational system from top to bottom, with unsolved problems awaiting much-needed investigation. He recommends a psychoanalytic study of an adequate sample of young scientists for information leading to solutions of problems requiring special help for the student in his struggle for emotional maturation. During professional preparation for scientific research, emotional problems of young scientists are more taxing than in other careers and are often overlooked. The author points out the significant relationship between masked neurotic components in the personality of an apparently normal scientist and the very nature of his chosen field, which serves to mask the neurotic components by dovetailing with them.


An article discussing the lack of justification for superimposing graduate programs on the undergraduate college. It argues that liberal arts colleges are weakened when the faculty becomes preoccupied with advanced students. It also stresses the
importance of supplying the undergraduate faculty with good library facilities, travel money, flexible teaching schedules, and sabbatical leaves, to offset the notion that undergraduate teaching is less promising or stimulating to scholars.


A description of the newly established college of the academic disciplines and its role and function in the university. The author states that the academic disciplines should be the element of integration within the total structure of the university: a synthesizing agent. This bulletin also announces a gift of $12 million from A. W. Mellon Educational and Charitable Trust for doctoral fellowships in the new college.


A collection of essays by fifteen prominent American professionals. The central issue considered is: Faced with a shortage of professional men and women, with a lowering of standards brought about by efforts to fill the gap, and with a growing conservatism and inflexibility within the professions themselves, where do we go from here? Individual discussions on the following topics are included: (1) law, (2) medicine, (3) teaching, (4) the sciences, (5) psychiatry, (6) city planning, (7) politics, (8) engineering, (9) architecture, and (10) journalism. Role changes and the sociology of the professions are considered.


A presentation of case studies of the developmental stress patterns of graduate students. It describes the stress points and variations in response to requirements, examinations, and self-expectations.


Assumes that society's demand for more numerous and complex technical skills and for specialized knowledge has caused a larger number of students to enroll in graduate schools. McGlothlin deals with some major questions on professional education: (1) The purpose of professions and the qualitative and quantitative aims of
professional education; (2) what the curriculum should contain and how it can be organized best for education that follows in orderly fashion from basic to advanced studies; and (3) other questions having to do with faculty and students.


An excellent comparative study of the educational programs of the professions ranging from medicine to engineering, in terms of aims, curricula, teaching methods, faculty characteristics desired, criteria and procedures used in student selection and recruitment, relationships of professional school and university, program accreditation, and professional ethics. The writer identifies several critical assumptions in professional education which remain untested, suggests kinds of studies needed for revamping professional education programs, and states the need for national conferences of education leaders of the professions for inter-professional communication and plans for development.


A well-written discussion of the introduction into liberal arts colleges of subject matter that is of vocational or professional character. Graduate study preparatory to the Ph.D. has taken on a professional-vocational function. The author views the liberal arts college which has not shifted in purposes and offerings from exclusive liberal arts education to professional studies as an exceptional one. He warns that professionalization of liberal arts curricula and liberalization of professional curricula must not result in a loss of dignity or "excellence," defined as maximum achievement.


States that the purpose and content of liberal education, extended to include professional and semiprofessional instruction, necessitate a reexamination of the relationship of professional and liberal education. The emerging professions of status will be those which will address themselves not only to professional preparation but to personal life and civic responsibility as well. The three purposes dominant in liberal education today are to: (1) instill knowledge, (2) cultivate intellectual skills, and (3) nurture traits of personality and character basic to a reasoned and responsible life. Programs of professional education must integrate technical and general education in the sequence of studies
throughout the period of higher education. The purposes of liberal education should determine the selection of subject matter, classroom practices, and evaluation procedures.


A plea for reconstruction of liberal education based on the suggestion that the decline in liberal education has been the result of the development of graduate schools. This issue is viewed in the historical perspective of educational purposes of higher education in America, particularly the nineteenth and twentieth centuries. Pivotal to this general view is the problem of the emergence of graduate education based on research and the creation of knowledge, which has caused liberal arts colleges to shift their emphasis from teaching to research.


Presents information and data of great value to those concerned with the problems of higher education for Negroes, especially since relatively few studies have been done in this area. The author reminds us that these problems are unique and will require unique solutions. He presents a good case for maintaining the Negro college as a transitional expediency in the solution of some of these problems. The study analyzes patterns of 123 institutions. He also warns of the dangers of spurious Ph.D. programs by ambitious but unprepared administrators.


A thought-provoking critical analysis of the rationale underlying contemporary graduate education. Professor Mooney considers several assumptions which he regards as detrimental to the integrated development of the graduate student. He finds undue reliance upon an orientation toward external authorities at the expense of the student's individuality and integrity. Books, professors, and courses are hurdles rather than opportunities for stimulating inquiry, if the aim of graduate education is to "discover, honor, develop, and thereby produce effective instruments of inquiry." The author offers many constructive suggestions which counterbalance the negative factors considered in his essay.

A comprehensive study of the professional preparation of public administrators. It examines the linkage between the professionals in government and their professional education and their subsequent impact upon government. The author attempts to identify the common denominators, similarities, and differences among professions and what these differences mean for American government. It draws upon existing literature and data, correspondence, and interviews with a limited number of public officials, representatives of professional organizations, and administrators and professors in a few professional schools. It attempts a comprehensive definition of the process of professionalization.


Contains discussion in Chapters 11 and 12 on the potential for higher education and factors influencing education for scientific and professional careers. Points out: (1) the tremendous untapped source of potential talent; (2) the great need to develop those conditions which will permit expansion of national intellectual resources; (3) factors which determine the flow of students into higher education; and (4) the relationships between economic affairs and higher education.


Deals with aspects of the problem of the quality of the nation's manpower resources. Part I is a statement of policy for scientific and professional manpower. Part II presents facts and issues about scientific and professional manpower, with specific data on the military, engineering profession, physicists, teachers, and physicians.


A special publication of the Council. This book is devoted to the role of women in national resources of talent. It includes several chapters devoted to education of women from high school through graduate school. Excellent bibliographical material.

One of a series of reports containing published papers delivered at annual conferences held by Scientific Manpower Committee of the American Association for the Advancement of Science. Discussion of education and supply, demand, and recruitment of scientists in all related scientific fields.


Statistical data on professional education of engineers and scientists in the U.S. in three sections concerning: (1) human resources, (2) professional education programs in the sciences, and (3) appendix of statistical tables.


Proposes studies of the productivity of professional education and graduate schools to assess scientific manpower. Presents a program which includes fifteen projects for supplying needed information about national resources of scientists.


Designed to serve as a guide for the undergraduate planning on graduate study. It covers selection of school and academic and financial requirements and presents a realistic view of the educational life of the graduate student. Statistical data for making comparisons among institutions are given. The first part consists of a discussion of the principal matters of concern to the undergraduate in reaching a decision on graduate study, with particular reference to college teaching and research. The second part is devoted to programs leading to the Ph.D. Information is derived from a wide sampling of sources: graduate school deans, faculty members, graduate students, and the advisory council of the Professional and Graduate Study Commission of the Association of American Colleges.


A book of advice to the prospective college student, outlining the scientific fields. Describes the work of the scientists and
educational prerequisites. Includes sections dealing with graduate education and scientific research.


Presents argument that educators concerned with general education need to reevaluate curriculum in order to provide for the Negro student those experiences missed throughout his educational history. This student brings unique problems and needs. His satisfaction with the mediocre must be replaced with a liberal spirit and a formulation of a value system of his own. His perception of himself and the world must be changed and provision must be made for the concomitant changes in his productivity and his personality.


Assumes that measuring relative openness of American social structure has had two problems: (1) Use of gross occupational categories to measure number of occupational shifts between fathers and sons; and (2) statistical measures focusing on mean mobility rates rather than internal occupational shifts. This specific study focuses on a single occupational category (professional) whose members have an institutionalized avenue of mobility (education). A fine comparative sample of engineers shows the relation of socio-economic origins to relative prestige level of position within the professional category. It includes a statement on trends in American social structure towards rigidity.


Attempts to: (1) identify the pattern by which a small sample of students admitted to candidacy for the Ph.D. at Ohio State University were able to experience qualities of personal significance from their education; (2) identify groupings of students according to the degree to which they were able to obtain increments of value from their educational experience; and (3) identify some commonalities of university environment which tend to offer significance for students.

Part of an extensive investigation of personality and vocation relationships focusing on scientists—begun on 188 biologists (18 women) from eight universities; one public and one private from each of four geographical divisions: Cornell and Columbia; Chicago and Wisconsin; Berkeley and Stanford; Johns Hopkins and Maryland; and the National Museum. The results were analyzed for comparison: (1) among individual institutions, (2) between public and private institutions, (3) between geographical areas, (4) between the sexes, (5) between different university ranks, and (6) between different fields in biology. Summary and conclusions were made for each division of comparison.


Part of an extensive study of relationships between personality and vocation, focusing on clinical studies of individuals eminent in various scientific fields. Subjects tested were sixty-five physical scientists from six institutions: (1) University of California, (2) Cal Tech, (3) University of Chicago, (4) Columbia, (5) Cornell, (6) MIT. The article also includes nine tables of comparison-summaries of subgroupings within physical scientist heading, composite Rorschach psychogram and summary of personality traits indicated, composite Rorschach psychogram for a group of biologists made earlier, and comparison of physical scientist group and biologists.


Initial study in an attempt to investigate the personality structure of scientists and interrelationships between personality and vocation. This study consists of an analysis of group Rorschachs given to men engaged either as scientists or technicians in paleontology as a vocation (sixteen scientists and nine technicians in this study). Most of article is concerned with the Rorschach tests and results. Concluding discussion states and elaborates findings that at the scientific and the technical level, paleontologists as a group show definite characteristics of personality structure.


An analysis of data previously reported in three papers as parts of extensive study in which faculties of biological, physical, and social sciences were considered separately and compared. The results on all of these groups were combined to provide a comparison group for other workers.

An attempt to isolate common features in biologists' personality structure which set them off from other groups and to investigate relations between personality and vocational choice and performance. Results: Wide individual differences on all tests--Rorschach, thematic apperception test, and a verbal-spatial-mathematical test.


Comparisons of test results on a verbal-spatial-mathematical test and the Rorschach and the thematic apperception test given to sixty-one eminent research scientists. Reports interrelations between tests used in a research project extending over a three-and-one-half-year period concerning the clinical study of eminent research scientists of various fields.


A massive study covering over 20,000 graduate students who attended Columbia between 1940 and 1956. It presents important basic facts about the graduate student such as his origins, his career, his success, his failures. These are presented along with a chapter on the functions of a graduate school.


Reports that while growth in graduate education is occurring everywhere, powerful factors restrain it. Ignorance of simple facts about graduate education on the part of graduate school faculties is one of these factors. This is due to the professors' preoccupation with their own disciplines. Other problems discussed include: foreign language requirements, poor undergraduate preparation, length of time spent on earning the Ph.D. The chances for significant changes in graduate education are many, but these changes will be slow.


A report of the Committee on the Graduate Study of Education at Harvard. In the preface Dean Sizer states that the report
"...speaks to Harvard and presumes no more; yet it does speak, if with restraint, to the general question of how the study of education might be construed elsewhere." The report disavows education as a distinct science. Emphasizes the need for four main types of programs: (1) master's, (2) doctor's, (3) post-doctoral, and (4) non-degree. It recommends: (1) reduction or abandonment of commitment to the existing master's degree in favor of a "clinical" master's; (2) that students inclined toward an academic discipline be channeled toward the Ph.D.; and those whose interests are in application be channeled toward the Ed.D. degree, with no distinction in quality or substantive differentiation; (3) integration of common elements through a schoolwide colloquium; (4) annual postdoctoral fellowships; (5) an increase in the number and nature of non-degree institutes for special purposes or urgent social problems relevant to education. It stresses the need for improved teaching at this level.


A report on the medical internship as one example of the process of socialization into the professions, and the changes which occurred in the status attitudes of a group of interns over a year of internship. These changes are interpreted in their significance for three major sociological concerns: (1) understanding reference group processes in professional socialization, (2) effect of status attitudes upon professional performance, and (3) the putative long-term trend from status-centered to team-oriented organization.


A comprehensive study of: (1) the value climate arrangements for research, (2) recruitment policies and joint arrangements with other substantive areas, (3) structure of research units, (4) the leadership and/or managerial role of the research director, (5) problems of service involvement and relationship to research conception, and (6) graduate programs for careers in research. It offers important recommendations for improving the quality of graduate programs leading to research careers and for more effective organization of research training experiences and programs.

This article reports a followup study of the graduates of Catholic women's colleges who continued their education to the Ph.D. between 1936 and 1950. The purpose of the study is to assess the higher educational productivity of Catholic colleges.


Reports that engineering is one of the few professions the education for which has remained consistently undergraduate. General and professional courses have been taught in parallel and have little contact between them. Interest in professional courses overshadows and saps the vitality of non-professional courses. Interest in humanistic and social subjects is washed away with the professional internship. As long as general and professional education are taught apart, there is no assurance that students will think analytically and thoroughly in dealing with human and social problems. Content and method are inextricably interrelated.


A study of the "modern profession" as a complex social institution. It discusses the various influences operating on and within and at various levels of the profession. It discusses some problems involving institutional integration and adaptation, indicating the need for further study. Calls for studies on the meanings of professional skills and their place, rather than technical function, in determining a profession's social organization.


A discussion of conditions required for: (1) development of creativity by instruction and study which permit full play of the creative subconscious, (2) opportunities to learn to trust judgment, (3) development of independence, and (4) "trust in the imagination."


Analyzes characteristics of graduate school applications, admissions, rejections, and registrations. Shows trend in selectivity, diversity in applicants' background, major area of academic interest, and persistence in the degree program.

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A proposal by the former dean of the Graduate Division of the University of California, Berkeley, that all graduate education, except for law and medicine, be administered by a single graduate school under a single graduate dean and committee of faculty. Undergraduate and graduate faculties should not fall under formal distinction. The author discusses the organizational framework and roles of departments, faculties, and the graduate dean. The latter should have broad responsibilities and administer them as a graduate dean rather than "a glorified clerk or an exalted policeman."


An extensive survey of professional education patterns among the various scientific fields with emphasis on chemistry. Chapters VII and XI discuss professional morale, public perception of chemists, professional status and organizations, research, and the relationship of the university and the professional scientist.


A study of the indices of research ability in graduate students as perceived by their professors. Drive, perseverance, intellectual ability, strong interests, curiosity, and industry were traits most commonly sought. Social science professors stressed imagination and thoroughness as desirable research traits, while natural scientists emphasized industry, curiosity, initiative, manipulative skill, and ability to work independently.


An article reporting the results of an interview study of thirty biological and thirty social scientists who had completed a doctoral program in 1957. Interview questions were standardized in informational categories of vital statistics, their doctoral programs, educational background, and questions concerning the development of interest in their fields and their relationships with people.

A work based on a concern that the future quality of graduate education and its schools will suffer under the overwhelming demand for college education from the coming generations of students unless there is a readjustment in graduate education to produce college teachers of sufficient quality and quantity. Key problems facing graduate education are discussed and solutions advanced. A major report.


Analysis of most significant research studies pertaining to prediction of success in several professional colleges. Most of these studies pertain to correlation between intellectual factors and success in professional studies. It cites the influence of non-intellectual factors. The prediction techniques are: personal history data, previous educational records, scholastic aptitude tests, scholastic achievement tests, special aptitude tests, personality and interest factors, and combinations of predictive factors.


An assessment of the studies made to determine the characteristics of natural scientists, engineers, and mathematicians. An evaluative summary of research results and research methods used as related to present theory of vocational development. Excellent bibliographical material which includes 229 items.


Presents the premise in Part I that an organized profession really represents a social contract. In a talk on the role of university extension in liberalizing continuing education of professionals, Paul Sheats points to specific examples, especially at the University of California. He notes that the professionally oriented postgraduate conference can bring together scholars from many disciplines to discuss matters of public and academic importance. Part II covers two important aspects of continued education for the professional, which are: (1) increasing rate of our acquisition of knowledge, and (2) education of professionals as persons (general liberal education). Emphasizes the need for a
reexamination of what is educational, what is vocational, and what is professional in up-to-date terms.


Presentation by associate director of research at National Merit Scholarship Corporation of findings from comparative study of colleges with "equally talented student bodies" and their efforts to motivate students to continue on to the doctorate. Patterns of productivity differ for the natural sciences as compared to the social sciences. The productivity of the college is assessed according to the type of institution, faculty, religious affiliation, and geographical location. Information on faculty behavior, received from student informants, was used to compare faculty behavior in unproductive and productive colleges. Significant differences point out the valuable role of faculty in stimulating or inhibiting student achievement.


Considers some common concerns in all professions: improvement of curriculum, instructional materials and procedures, methods of student appraisal, reexamination of student recruitment and selection processes, and counseling and guidance procedures.


Report of the committee on problems centering on the advancement of science by basic research and graduate education. The approach to the problem was to determine the fundamental character of the environment necessary for producing good young scientists and scientific progress, and how environmental factors are related to policies of universities and the federal government. Recommendations were made for expedient increase in federal support for research, particularly over long terms and broad objectives, with responsibilities left to the universities for research operations.

Discussion of the need for improving teaching and learning of science to develop national resources of scientists and engineers. Recommendations: (1) encouragement of interdisciplinary research, (2) higher production of Ph.D.'s and improvement of graduate departments and education, and (3) review of policies for federal support of research and research methods. In order to attract and retain better faculty and achieve more effective education of students.


A comprehensive set of essays by thirteen graduate deans on the current status of graduate education. The Ph.D. degree is required for college teaching, but the graduate school has failed in its sponsorship of a doctorate oriented toward research. Poor undergraduate education is an inevitable consequence. Major problems of the graduate school are discussed at length: (1) Rising enrollment, (2) financial assistance for the graduate student, (3) increasing demands on resources, and (4) revolutionary changes in state of knowledge. Excellent discussion of the problems and trends in the major disciplines.


A survey undertaken during the period of readjustment in engineering graduate education, using the method of a comprehensive questionnaire prepared by the committee on graduate work of the Society for Promotion of Engineering. It is an excellent discussion of interpretation of the survey as to problems of administration, teaching staff, teacher selection, subsidized graduate work, and cooperation among institutions. Problems of functional aim of graduate work, language requirements, teaching loads, and evaluations are reviewed.


Points out possible dangers in research and fellowships sponsored by government agencies in terms of: (1) imbalanced allocation of university funds and imbalance of academic enterprise; (2) loss of academic freedom in faculty research; (3) conditions unfavorable for developing creativity in graduate students; and (4) difficulties in retention of outstanding scholars and teachers. Recommendation is for "block grants" to be made to universities to use at their own discretion, and to find means of strengthening university resources in fellowship programs rather than "thinning them out."
Reports that the graduate school has become the main site of preparation for our college teachers, for research specialists in every field of science, and for an increasing number of professionals in other fields. The importance of graduate education can be measured in several ways: its contribution to economic development, its contribution to the defense of the nation, its development of the creative scholar-teachers, its contributions of ordered change in the interest of human welfare in a free society, its contribution to individual opportunity. Western graduate education, like Western population, college enrollments, and per capita income, is ahead of the national average in growth. Western graduate education has special characteristics: it is advanced, research-oriented, specialized, costly. Major problems of graduate education in western institutions are: diverse demands, competition for talent, rising costs, balance among disciplines, quality in quantity. The next ten years will see changes in graduate education.


Submits the thesis that most occupations never will reach the status of established professions. The increasing tendency to label any development exhibited by an occupation as professionalization only prevents a clear view of the actual forms that these occupations are assuming.


The author predicts that the areas of higher education which will undergo greatest expansion and change will be the graduate division and professional schools. State universities will probably become centers for graduate education and research in the state or region. The state university needs reevaluation in terms of function and structure.


Aims to "present an ordered view of the complex roles and processes in which the academian participates," especially in major universities. What problems face the academic, what are his functions and status, how is his career affected by the social processes of the university?

A study inquiring into ways and means of reducing time lapse between the B.A. and Ph.D. It emphasizes the need to reevaluate graduate education and "tighten up" its machinery. The author states that actual median time for the humanities involves: (1) Sociology - nine years, (2) English - thirteen years, (3) natural sciences - six to eight years, (4) chemistry - four to six years. Seventy-nine per cent of respondents in humanist-social studies favored time reduction, but only fifty-nine per cent did so in the natural sciences.


States that the undergraduate, professional, and graduate faculties must agree on: (1) the nature and purposes of these components of higher education; (2) the relationship of student aspirations to faculty purpose and curriculum; (3) cultural and preprofessional factors on the undergraduate level; and (4) relating professional education and professional practice.


Informative discussion and statistical information concerning: (1) national supply and demand of specialized talent for present and future; (2) attrition rate in higher education; (3) potential in doctoral students and specialists; (4) relations between undergraduate and graduate fields of specialization; and (5) effective uses of actual and potential supply of specialists.


A study forming a part of the efforts of the Association for the Study of Negro Life and History to portray the social and economic conditions prevailing among Negroes in the United States since the Civil War. Special emphasis is placed on the physician and lawyer.
EDUCATION FOR THE PROFESSIONS
ARCHITECTURE


An anthology of articles by officers of selected university and college schools of architecture on various aspects of professional education for architects: curriculum, research, and interuniversity relations.


Includes conference points of emphasis concerning policies of admission, the need for flexibility in student selection, and the need for variety of teaching techniques and teaching personnel. One interesting subject discussed was the relationship of the school of architecture and its faculty to the architecture of the university. The faculty is consulted but its recommendations are not necessarily followed.


A comprehensive and informative work on architectural education. Statistical information is presented in a very readable style. An excellent, concise report of summary, conclusions, and recommendations is given in the appendix.


A major study in professional education, covering all aspects of architectural education. Serves as proof that educational policies and practices haven't changed significantly since 1932 and that problems involved are not unique to architecture. Quantitative rather than qualitative differences appear when findings are compared with present practices and problems.


Considers the need for continual development after graduation and suggests ways of accomplishing this: (1) seminars for the interchange of ideas, (2) reading, (3) convictions and philosophy on which to base designing, (4) traveling to look at the work of others, (5) interchanging professional information with other
architects, (6) going back to school, and (7) developing a plan for in-service training.


An interesting historical perspective. The author notes that artists generally look askance at university departments of art. The latter undertake the theory, history, and principles of criticism, but leave studio work to painters and sculptors.


Three articles which stress the need for a broader liberal arts base in architectural education and the need for an interdisciplinary and team approach in the curriculum. Of particular interest is the report of research findings by Claude Winkelhake on "The Meaning of Professional Growth for Architectural Education."


An interesting paper reporting research undertaken to study creative architects in order to discover those characteristics which differentiate highly creative individuals from less creative and original persons.


An informative report of the three-day conference on professional education in architecture. Presentations of research papers and discussions covering: (1) education at college level (teaching skills, creativity), (2) education during the intermediate years (need for research, breadth and depth of graduate work), (3) education after registration (professional growth, professional communication, exchange of ideas, and curricular evaluation).


A review of the legal actions taken in some countries to protect professional titles against the competition of amateurs and outsiders.
The professions argue that this protection benefits the public. Contend that the sacrifice they make in terms of time, money, and effort justifies the demands for protection. Most of the countries appear to have done this in the 30's. Estonia also protects the title of artist.


This report describes the first stage of an extensive program sponsored by the American Institute of Architects for the investigation of test materials which could be developed into a battery predictive of success in architecture. This report involves an analysis of predictive information already in the records of architecture schools and a questionnaire aimed at identifying suitable schools for study.


A report of discussions, papers, and research findings presented at the annual conference of the association on the problems of architectural education. Recurring themes were: the lack of agreement on curriculum structure between educator and practitioner, the need for better prepared students, the need for educational breadth, and better communication with other departments and disciplines within the universities and colleges.


An exploratory study of the prediction of academic success in twelve schools of architecture. The results suggest that a battery of tests of ability in the verbal, mathematical, scientific, visual phenomena, spatial relations, interest, and idea productivity would be very useful. Of some significance for the study was the high attrition rate at these undergraduate schools of architecture. Tests were administered to 600 students and data collected over a period of five years.


A collection of facts about the architect, his professional training, and professional organizations. Most useful as ready
background material on architectural subjects. A concise, economical, and useful item.


Submits the charge that architects are suffering from too much self-esteem and superman notions. This makes coordination of efforts with the construction industry difficult.


Reports the concerns of this conference group with the need to attract more competent teachers of architecture, continuing the professional education of those teachers now in service, and the need to shift the emphasis from specialization to general education for future students of architecture.


A guide designed to assist prospective students in architecture. Chapters I-III discuss architects, architecture, and other relevant professional education.


Discussion of the differences between business and profession. Problems of practice in a "sale at any cost" society. Reminder of the ethics of professionalism, i.e., transcendence of monetary rewards.


Traces the development of collegiate education in architecture through all the important phases and analyzes the conditions and influences which underlie each successive period and the significant features characterizing it. The scarcity of publications in architectural education lends additional value to this book.

"What Sort of Profession?" Economist, 203:376, April 28, 1962. This is a summary of a massive survey entitled The Architect
and His Office, Royal Institute of British Architects, 1962.
Prepared by M. Austin-Smith, et al.

Expounds the thesis that the architect has a dual personality: artist and engineer. Issues call to "bring back" the old technical skills into architecture, integrate practice with school courses, and employ techniques to help architects prepare plans.
"Are Business Schools on the Right Track?" Business Week, April 13, 1957, p. 50.

An article reporting the findings of two studies supported by the Ford Foundation and Carnegie Corporation, which surveyed the prerequisites for a career in business.


Presents the various viewpoints on the philosophy, curriculum, goals, and objectives of business education. An excellent presentation of the interrelationship between specialization and general education in business.


Contains well-written and optimistic conclusions: Four years after the ferment created by the reports of Frank Pierson and of Gordon and Howell that curricular changes in business education are becoming more geared to rapid, dynamic changes in society, emphasis is now shifting from narrow specialization to general education designed to cultivate the whole man. Vocationalism is going into an eclipse, and professional schools are more cognizant of the total consequences of the professional businessman in our organizational society.


Discusses educational policy of the business school with special reference to the Harvard program. Chapters 1 and 2 are very informative.


Embody the results of a three-year study of collegiate business education, with prime concern for business education as it is offered by university schools of business administration. Both the undergraduate and the graduate programs are examined along with discussion on students, faculty, teaching, and research.

An excellent paper which presents some preliminary ideas which were incorporated in an extensive study commissioned by the Ford Foundation and published in 1959. Discusses the problem of diversity in business education and careers, students, and resources. Professional education requires general understanding of structure and functioning of organizations and how they affect the making and implementation of decisions, and skill in interpersonal relations. Stresses need for liberalizing education with specialization reserved for graduate level.


Management, and certain functional specialties within business, have tendencies to professionalization. There seems to be no clear direction in business itself as to correct path to the future of management. Hence, certain recent reports recommend diversity in teaching, as well as upgrading of graduate programs.


Reports the results of a survey of executives of public utilities, railroads, and industrial organizations at the presidential and board chairman level. The data were concerned with personality traits, educational background and related factors, and type of institution.


Argument by the vice-president of a major oil company for the necessity of continued extension of a sound liberal education. The ideal product of higher education is moral stamina with the ability to think and discriminate among values.


An excellent study done as part of the Carnegie Series in American education. The Gordon-Howell report was prepared simultaneously, though separately, and their findings are similar. Pierson proposes dividing the curriculum equally among the humanities, science, mathematics, and social sciences, and devoting
the remaining half to business education. He also proposes abolishing language requirements or else requiring them to be developed to a level where language is studied as literature. In business education on graduate level, Pierson proposes a two-year program with the first year devoted to "foundation business subjects" and tools of analyses.


Proposes that: I. Professional education for business fails to develop skills required in the professions, such as: (1) communication skill -- colleges do not correct this deficiency brought to college by students from the high schools; (2) mental skills -- problem-solving, scientific induction; and (3) interpersonal relations -- organizational and leadership skills. II. Greater emphasis is needed on liberal education. III. Education must draw upon all disciplines for breadth.

Analyzes and compares the curricula of law, engineering, and business administration. Concludes business education is the best of the three in terms of providing liberal, professional education.


A report by an economist of South Africa of a study made of business education in Great Britain, Europe, and North America. Very interesting from the standpoint of the kinds of perception and insights gained by one who views business education from another culture. A critical examination of the philosophy of business education and teaching techniques employed in American colleges and universities is offered by Professor Richards. Unique in style as well as content.


Very informative report of the development of a new Master of Business Administration program. The factors which motivated the need for curricular revision were: (1) Existing program lacked direction, purpose and philosophy clarifying social role, and (2) one out of every six degrees conferred in the U.S. in 1957-58 was in business education. The conclusions resulting from a five-year study pointed to a need for a curriculum offering breadth and analytical complexity to cope with rapid social change. Social change makes traditional courses obsolete before academic preparation is completed. There is need for a common foundation of knowledge and broad understanding of business in its societal role.

This article discusses the prerequisite professional qualities of personnel as outlined by the modern business world.


Argues that the "how" of business administration is learned through experience. The emphasis should be on education for breadth, development of analytical ability, skill in communication, and business judgment. Past emphasis has been on a proliferation of vocational courses that ignore these traits and abilities.


Excellent discussion of crucial questions regarding professional education and its relevancy to life--social, personal, and professional. Analyzes the current state of business education and the problems of professional education. Recommends focus on the need for educational breadth, diversity, flexibility, and quality.


A history of the Graduate School of Business at Columbia University. The author stresses the need for more effective communication between business and educators in view of the radical social and economic changes in progress and in the future. The author points out danger spots implicit in business education practices.


A milestone in reporting sociological aspects of businessmen and business education. Chapters VII and VIII discuss with biting criticism the lack of breadth in present business curricula and the psychological and social consequences of this type of education as reflected in American business and the professional businessman.
CLINICAL PSYCHOLOGY


A book intended to assist the undergraduate in planning to meet the requirements for graduate study, to give a realistic view of the educational life of the graduate student, and to provide some basis for making a wise selection of a graduate school. By indicating something of the professional opportunities open to the successful graduate student, it offers encouragement to better undergraduate students to continue their training.


An ethical code approved by the Board of Directors of the American Psychological Association. Eighteen principles designed to cover most situations where ethical problems might arise in professional experiences.


Discussion of the nature of psychology as a profession, its goals and objectives, and the principles governing its relations to other professions.


Discussion of the acute shortage of doctoral candidates in clinical psychology, of the quality of students who accept internships, and of the intern assignment. Recommends: (1) expansion of present doctoral program, (2) additional training programs with reforms of current master's programs, and (3) experimental development of professional schools.


States that continuous conflict about course content and curricula are issues of science. New information wipes out bad science; bad art does not erase easily.
The graduate student comes to advanced training with vague concepts about professional role, responsibility, and image, and with justification. The profession must develop practices, programs, and personnel to aid students.


A study with two distinct aspects. One aspect deals with substantive questions about psychology as a scientific discipline. The other part of the investigation is devoted to matters of psychological personnel and training.


Some simple objective data from questionnaire sources, describing graduate program in clinical or counseling psychology in 1957-58. Trends indicated that: (1) enrollment in graduate schools lagged behind undergraduate level, and (2) since 1955, the number of Ph.D.'s in psychology declined about five per cent each year.


A discussion of factors involved in the need for both doctoral and subdoctoral educational programs in psychology. Studies indicate: (1) A large part of psychological work is done by technicians and personnel with less than the doctorate. (2) Many institutions do not offer doctoral programs. (3) The number admitted to subdoctoral programs has increased twelve per cent since 1953. (4) The number admitted to doctoral programs has been declining.

This article recommends: (1) appropriate distinctions as to role and title between doctoral and subdoctoral degrees, (2) fullscale study of recruitment and selection of graduate students in psychology, (3) discouraging teaching specialized technique courses at undergraduate level, (4) encouraging colleges and universities to emphasize a broad undergraduate education in selection of graduate students in psychology, and (5) extending training programs at subdoctoral level to two years.

An excellent, comprehensive view of professional education in psychology on the graduate level, covering all aspects. Concludes:

(1) Foreign language is not necessary for a graduate training requirement. It must be studied in depth. International communication is needed.

(2) Research is characterized by inbreeding in training psychologists. Education must be for competence in meeting unforeseen problems. Doctoral dissertation should be directed by those experienced in research. Methodology and statistics courses are unsatisfactory. Agrees intuitive skill of a researcher is more valuable than statistics. Most fruitful research training is apprentice work with faculty member.

Recommends that:

(1) "clinical psychologist" be used for persons with doctorate in clinical psychology, (2) degrees and titles for subdoctoral (two-year non-doctoral) training programs be organized for specific kinds of work, rather than as steps toward the Ph.D. (note: American Psychologist December, 1958, reports M.A. in psychology with twenty-eight majors), (3) greater flexibility and innovation, and (4) closer cooperation with other disciplines, especially education. Other disciplines need specialists in psychological aspects of the discipline. New psychological specialties are not developing independently of the discipline of psychology. A close tie to the basic department of psychology is necessary.


A book aimed at graduate students in psychology. Professional and scientific training in psychology has, for many years, required work beyond the bachelor's degree. The percentage of APA membership holding Ph.D.'s has declined. The decrease is due in part to the increasing number of people employed as psychologists in other than academic positions. The amount of training is a subject of considerable discussion. Official opinion is that the Ph.D. should be necessary for professional psychologists.

Treats problems of overlap and repetition of topics in courses on undergraduate level. Requirement for admission to graduate work ranged from non-specified to thirty-one semester hours credit, with median of eighteen semester hours. Main defect in the beginning graduate is lack of breadth of educational experience, with weakness in math and natural and social sciences. Argues for professional programs at a post-bachelor level to be developed for applied fields leading to professional degree other than Ph.D. The American Psychological Association opposes this. A list of twenty-eight different employment positions is given on page 251.

Critical analysis of training program's inadequacy, recalling that studies indicate more than 50 per cent of those in the field are dissatisfied. Morale is generally low. "Training programs at many universities are still largely inadequate with poorly trained clinicians running them, who, themselves, have had a bare minimum of clinical skills and training and experience."


A study designed to identify the variables involved in training clinical psychologists after the scientist-practitioner model in: (1) areas of choice of dissertation topics and (2) patterns of relations between doctoral research and postgraduate job functions. Another important objective was to determine the value of the internship which is deemed a crucial experience in the findings of the study. It was learned that the later in his graduate years a student took his internship, the more likely he was to choose a dissertation topic in areas other than clinical or personality. This study raises a number of questions regarding the quality of professional preparation and how the responsibilities of clinical training programs are being met.


A very readable article in which the author presents issues in "once-upon-a-time" story form called "Psycholandia: A Contemporary Fable in Clinical Psychology." Describes intra-professional conflicts and division of labor. Proposes guidelines based on pragmatic aim to create a training program to develop a clinician who would function professionally on the best available knowledge.


Discussion of graduate training programs with special reference to those at the University of Nebraska, which are designed to train the psychologist for educational breadth and for research in order that he may better adapt to the roles demanded by the various needs of the community.

Results of a one-third random sample of APA Directory, 1959, surveyed by mail questionnaire concerning psychotherapy training and activities. Characteristics of the 72 per cent who responded are described. Among the more salient findings were that the respondents had extensive supervised experience in individual methods of treatment and contact with adult patients.


Listing of institutions with graduate programs in psychology with information supplied by respective departments. The article offers no evaluation of the programs except those doctoral programs in clinical area in counseling psychology which are indicated as approved by the American Psychological Association. Advice to applicants for financial assistance and admission is offered.


Report of Conference on Graduate Education in Clinical Psychology held at Boulder, Colorado, in 1949 by the American Psychological Association. A definitive account covering all aspects of training. Lists fourteen characteristics of educational programs deemed desirable and defines by areas of study rather than by levels of training: (1) general psychology, (2) dynamics of human behavior, (3) related disciplines, (4) diagnostic methods, (5) therapy, and (6) research methods.


Data derived from administration of Group Rorschachs to seven faculties in psychology (California, Chicago, Columbia, Iowa, Harvard, Michigan, Ohio) and five in anthropology (California, Chicago, Columbia, Harvard, Michigan). Part of a series of studies in various scientific fields concerned with relationships between personality and vocation. Data not extensively verbalized. Presented in summary tables.
Rogers, Carl R. Graduate Education in Psychology: A Passionate Statement. LaJolla, Cal.: Western Behavioral Sciences Institute, 1964.

A critical statement concerning the educational policies which are operative in some departments of psychology in their graduate training programs. The author states that there is great difference between what the discipline professes and what it does in training psychologists. Analyzes the implicit assumption underlying the treatment of graduate students and suggests an alternative list of principles upon which a more enlightened graduate program might be based.


Discussion of problems in psychology: (1) perceived cleavage between science and the profession, (2) extensive demands for psychological services, (3) aspirations of psychologists.

This article reports the findings of a survey designed to show the contemporary picture of graduate study in psychology, degrees granted by largest departments, departmental comparisons over the last decade, etc. Excellent statistical data.


A synthesis of major points covering the topics: (1) difficulties with present training, which is regarded as paradoxical, ambiguous; (2) problems in research training—questions of appropriate kinds of research, students with little aptitude or interest being forced into research; (3) problems in training psychotherapists; and (4) new perspectives in postdoctoral training. Dr. Martin Mayman proposes intensifying both aspects of clinical training at advanced levels of education and training.


A report of the education and training committee on education for research in psychology, which concludes: (1) The productive man in research is often narrow and preoccupied with his own ideas, unsystematic in his methods or in studying the literature, and his productivity is the result of his willingness to follow his hunches. This is in contrast to the stereotype of the scientist as one who begins with a thorough knowledge of the field, is systematic in his methods, and open-minded in observations and is responsive to
opposing evidence or cogent argument. (2) Characteristics which make for inventiveness and originality bear little relation to those developed by formal course work. (3) Value of standardized training procedures is questionable. (4) The only adequate index is the eventual productivity of the department. (5) Apprenticeship is the most important part of education for research.


Description of a special program conducted at a state hospital in efforts to reintegrate abnormal psychology and clinical psychology into an internship for advanced training of the psychologist in which he is exposed to a wide variety of activities.


Describes the development of the professional psychologist in the community, reviews the intraprofessional and interprofessional problems and solutions, and provides a perspective for assessing more readily the psychologist's potential as a community resource.


A panorama of psychology which describes the actions of psychologists in context. Chapter III is concerned with training. In 1954, sixty to seventy per cent of first-year graduate students were undergraduate majors in psychology. Twenty-five per cent were undergraduate majors in the humanities. The psychology undergraduate "major" is not clearly defined.

The median time between the bachelor's and the master's degree is approximately three years, and the median between the bachelor's and the doctor's degree is approximately seven years. For the Ph.D., three years of full-time study beyond baccalaureate is a minimum requirement, with the four-year program more frequent, and five years not unusual. A conference in 1958 on the Ph.D. as a research degree concluded that the best training for research was a type of apprenticeship.

Gives four objectives which should serve as guides in developing an adequate program of instruction: understanding public health, understanding dental public health, understanding the way of life in American communities, and understanding interpersonal relations.


Outlines several acute problems in dental education: shortage of well-qualified teachers, low number of qualified applicants. In the future the educational approach in dental education will be more patient centered.


Discusses electronic computers as they are related to dental education and research. Author reports on the use of computers in dental institutions as of early 1963 and presents examples of their application.


A study concerned with testing reliability of the variables often employed in selection of dental students. Each school needs to undertake a serious study of its selection procedures.


Suggests ways to fulfill some of the demands that society makes of a health profession.


A well-documented report on the supply and demand of California dentists, with recommendations made to the Regents of
the University of California for specific improvements for development of graduate and professional programs for meeting future needs. The report discusses problems of licensure, public dental health, and other problems confronting dental education nationally.


A study based on data from questionnaires to faculty members in schools of dentistry. The majority of respondents favored continuation of present predental requirements of the Council on Dental Education with some exceptions. Most agreed that a broad liberal arts education is important in the development of the student.


A report of findings of a survey from the author concludes that curricular changes since 1935 are very noticeable in meeting the challenges of changing times and reflecting social conditions. In the survey the author compares dental school catalogs with recommendations made periodically by the Curriculum Survey Committee.


Reviews the development of dental education requirements and shows clearly that, as progress has been made, liberalization of the requirements has taken place. Author also considers areas of the profession in which liberalization and curricular reforms would be of marked value.


Research results showing some weaknesses in the areas indicated in the title. The author presents solutions which might well be applicable to every dental school. He points to the need for stronger academic preparation for dental students, qualified faculty, and communication among professional organizations, alumni, and college advisers.

A paper discussing problems in dental education and new educational approaches to their solution: (1) making research in education a part of an undergraduate dental school, (2) continuing education for practicing dentists, and (3) prepaid dental services program.


A discussion of the aspects of dental education that need improvement if the educational program is to produce qualified future dentists. Attracting quality students and faculty and improving administration, faculty, and student relationships are critical.


A study conducted at the Center for the Study of Higher Education at the University of California. The author reports the findings in this article and reviews some of the major psychological characteristics of dental students which are of significance for professional education and careers.


A study concerned with testing the reliability of variables that often are employed in selecting dental students. It also strongly suggests that each institution should undertake a program of self-analysis regarding selection procedures, because national norms or data from some institutions have no carryover value of reliability to other institutions. Excellent statistical reporting of the data.


A comprehensive survey conducted by the American Council on Education and the related professional organizations of dentistry for the purpose of compiling data on problems and attitudes in dental education as they concern: (1) questions requiring group action or public measures for all aspects of public dental health, (2) relations between dentist and patient (fees, licensure, auxiliary personnel, health institutions, etc.), (3) professional
education as it relates to the questions outlined above, research to determine if enough time and energy is expended in relation to other health fields, public dental care and the future of dental research. Interesting and readable.


A paper primarily concerned with a discussion of the Survey of Dentistry made by the American Council on Education, in which the author was in charge of studies concerned with research in dentistry. Considers the work of the survey to date in its analysis of dental research.


An article describing personal and vocational characteristics of students as derived from a study employing tests given to predict faculty ratings of professional integrity and assess ethical behavior. Tendencies and characteristics are clearly differentiated among the University of California dental students who served as the subjects for the study.


A study indicating that dental school admissions activities could benefit and improve by employing psychological tests. Dentistry profession is being "flooded" with misinformation of a psychological nature. American Psychological Association studies report that one-half of the accredited dental schools use psychologists in testing, counseling, and therapy. Medicine has explored and documented quantities of data on personnel, curricula, training, teaching of psychology; dental schools have not.


A study showing the results on prediction value of the dental aptitude test for success in dental school as positive. Scores were obtained on seventy-one students, showing that coefficients of correlation between grades received in manual and theoretical aspects were well above .01 level of confidence.

A very informative issue of this quarterly journal devoted to the reporting of findings of studies concerned with the dental student. Some studies are: (1) survey of entering dental students, (2) background characteristics, (3) social origins of future dentists, (4) personality patterns of entering dental students, and (5) dentistry and manpower resources.


Results of a questionnaire and some interviews of about 3,600 students entering dental school. They were utilized to determine the importance of five aspects of dentistry (prestige, money, service, autonomy, and opportunity to do manual skills). The conclusion is that optimum interest in dentistry has a balanced pattern of these motives (although they fit most any profession), with the desire of autonomy or independence of authority the uppermost.


An article concerned with the formulations of objectives in the dental curriculum and with evaluation.


Considers some of the factors responsible for producing changes in the dental education curriculum and the resultant curricular modifications which probably will occur in the next decade. The author predicts that changes will be slow in coming in: (1) patterns of practice, (2) student caliber, (3) licensure, and (4) research interests.


Data compiled from open-ended questionnaires and psychological inventories, permanent records from registrars' offices, and unpublished data from the Commission on Survey of Dentistry. The study emphasizes the point that local influences may strongly affect background, experience, career plans, and personalities of dental students.

A study showing that the dental student undergoes changes during his professional education period that reflect poorly on the educational system. The author points out the need for institutions to undertake a self-study and reexamine their programs to determine factors responsible for these adverse changes. Excellent reporting of data and summary discussion.


Describes a new set of goals for dental education based upon a number of studies of educational research and a comparison of professional literature during the past decade. Goals include: shifts of emphasis from the mechanical aspect of dental education (the tooth) to the patient, introduction of the social concept of dental education, and achievement of good teaching as a result of staff development rather than happy accident, with resulting faculty and graduate research. The dental student is to be: (1) clinically and technically competent, (2) biologically oriented, (3) socially sensitive and responsible, and (4) humanistically integrated for continuous growth.


In essence, a duplicate of a paper prepared by the author for the World Health Organization Expert Committee on Dental Health in Geneva, July-August, 1962. It discusses several new ideas on certain changes that should be considered for the dental curriculum.


A brief discussion showing the influences on curriculum exerted by private practice of dentistry. The author submits that if dentistry is to improve as a health profession, improvements must come from better dental education and better dental practice--they are mutually influential.


Sees danger in the professional school in that it is so good that it is coming to be regarded educationally as an end, rather than a beginning. He stresses the need for awareness of two
forces for change: (1) human beings' normal urge to grow and learn to cope with change and (2) the necessity to learn how to make decisions rather than merely acquire information.


States that although periodically dental schools have introduced first-year students to clinical areas, results of the procedures have not been well documented. Presents an analysis of a program undertaken at the University of Oregon Dental School sixteen years ago.

A report of a humanistic-social research project conducted by eighteen engineering educators, administrators, and representatives from industry, the humanities, and social sciences. The chief concerns are the problems of philosophy, content, arrangement, administration, and scheduling of general education in the engineering curriculum.


An annotated bibliography of 267 articles, 39 books, and 64 graduate studies covering technical institute education. Even though somewhat out of date, this bibliography will be of use to those doing research on technical education.


Report of a committee (forty-six members) on engineering education in the United States. Chiefly concerned with curricular developments and the evaluation of them, the selection and development of an engineering faculty, the place of the humanities in engineering programs, and graduate study in engineering.


A national study conducted by the Engineering Manpower Commission with a detailed analysis of the salaries and income of engineering teachers.


A description of a plan for engineering education which calls for three years of liberal education and two years of professional training in an engineering school. Those institutions
participating in the plan are listed in this directory with a
description of the program and its development.


Concerns one incident in the ecology of universities, namely,
the impact of the scientific revolution on universities in Britain.
Presents a description of the conditions of British universities before scientific thought made any appreciable impact upon them, and the changes wrought in them due to the impact of scientific thought in the nineteenth century. The book closes with a discussion of some of the unresolved problems of adaptation facing British universities today, problems which are due in part to adaptations already made by universities to scientific thought in the nineteenth century and in part to the fresh impact of technological thought on universities in the twentieth century.


A graphic presentation and interpretation of enrollment trends in engineering education in the United States. Concerned with: (1) rate of growth in engineering enrollment and graduations, (2) kinds of engineers trained, (3) attrition of engineering students, (4) outlook for future engineering enrollment, and (5) proliferation and popularity of various engineering curricula. Conclusion: Shortage of engineering talent is critical with respect to engineers with high degree of mathematical and scientific orientation and those with unusual analytic and design creativity.


Answers the question, "Who is an engineer?" Emphasizes the need for creative competence and for a major reappraisal of the engineering curriculum and facilities. Suggests the need for more interdisciplinary interaction, for the rebuilding of graduate courses around research (by faculty who do research themselves), and for the integration of general or liberal education with engineering. Discusses new areas and trends in engineering education.


The author presents his concept of "doing engineering" by describing four broad categories of work function: (1) engineering
which requires a talent for abstract thinking; (2) engineering which requires the arrangement, invention, or innovation of knowledge; (3) engineering which requires an ability to assemble, operate, and maintain complicated machines and works; and (4) engineering which requires a technological background and the ability to interpret engineering to related disciplines. The implications for engineering curriculum, for the allocation of scarce faculty resources, and for research activities are considered.


Report of series of institutional self-evaluation projects financed by Carnegie Corporation. The committee is concerned mainly with which idea works well and which does not. Focuses on the problem of how to develop and maintain an effective program of humanistic and social sciences in the limited time available in undergraduate engineering education.


Indicates in the preface that canal-building and transportation bursts of the American economy in the 1800's were influential in the emergence of engineering. Early chapters provide excellent historical material which could be used for comparison. Describes the apprenticeship system, also prevalent in law and medicine, used to train new engineers. Traces the development of gradations of rank and authority which began to appear as construction-supervision tasks multiplied—field versus executive engineers. By 1840, civil engineers were a definite occupational group.


A short paper that briefly discusses: (1) the identification and selection of students, (2) content and coverage of special programs, (3) experiences and adequate spacing of experiences, (4) evaluation of the student, and (5) evaluation of the program. Specific evaluation objectives are posed as questions to show the criteria for properly evaluating a program.


A study of engineering education and training in the EUSEC and Organization for European Economic Cooperation (OEEC) countries. Sponsored by the Ford Foundation and presented in three volumes. Volume I is an introduction and description of the systems used in these countries; Volume II is a comparative study of engineering education; Volume III is a glossary of terms used in engineering education and training.


Cites demands being made for the strengthening of curricular offerings in engineering education. This book attempts to answer two questions: what are the legitimate demands and how may they be met?


A book bringing together the results of significant research on the most widely used personnel tests and inventories, as applicable to all types of vocational education and training.


Presents the philosophy of one of the outstanding men in the engineering world in America. Cross presents a definition of engineering and discusses the difference between education, training, and schooling. He also discusses the need for a broad general education for the engineer.


A monograph designed for use by counselors and teachers in supplying guidance information to students interested in technological careers.

Presents Conference subjects of general education before admission, selection for admission to engineering schools at university level, education at engineering schools at university level, practical training before, during, and after engineering studies, criteria for professional status, and post-first-degree education.


Reports objectives of the conference: (1) to provide an up-to-date picture of the scientific and engineering manpower situation and its implications for education resources, (2) to highlight the unique problems of higher education in science and engineering and explore remedial measures, and (3) to contribute to general understanding of problems of higher education in technology.


Presents a brief summary of the results of a survey conducted by Engineers Joint Council in 1955-56. Such topics as supply-demand, salary structure, and the mutual needs and dependency of college engineering programs and industry are discussed.


A compilation of views of deans of engineering colleges with respect to the attrition rate of engineering students. In summary: (1) Large numbers of well-qualified students are dropping out of the engineering program. (2) High attrition rate causes student disillusionment and is one of the principal causes of declining freshman enrollment. (3) There are effective ways of reducing student attrition rates.

An anthology of more than 100 articles written by the leading educators, engineers, and scientists in the United States. It deals with nearly every phase of engineering and science teaching and professional growth of the engineering or science educator.


A thesis presented to University of Oklahoma for the degree of Doctor of Education. This thesis attempts to present a composite identification of the major problems and investigates the known information on the status of research in industrial arts education programs leading to advanced degrees.


An attempt to outline the main factors and forces which the faculty of the School of Engineering of Columbia University believes have influenced and now influence the evolution of American engineering education, to review and analyze these influences, and to report in general terms the plans and programs which this school has devised to meet these needs.


Argues that the problem of supply-demand is by no means solely one of increasing the number of scientists and engineers. Qualitative considerations are likely to be more important than quantitative ones in shaping our scientific and technological effort in the future. This summary offers some of the important facts about the past, present, and future of scientific and technical education.


A report dealing with the evaluation of engineering education and with the characteristics which differentiate engineering curriculum from that in science. In determining desirable levels of mathematics, basic science, and engineering science for the
curriculum, the committee was concerned with reasonable, obtainable objectives rather than with minimum standards for accreditation. The present report is offered as indicative of the direction in which engineering education should evolve.


Advice on how to earn more money and greater success in engineering and science. Advises engineers and scientists to: (1) develop personal skills, (2) learn the art of management, human relations, and communication skills, and (3) broaden their professional horizons.


A doctoral study to discover ways in which engineering colleges and universities could improve their services to their students and to those organizations which employ large numbers of graduates. The sample size was twenty colleges and universities, two trade schools, two technical high schools, and twenty industries. The following areas of higher education in engineering were covered: aims and purposes, curriculum, selection of students, counseling and guidance, teaching, placement, and employers.


A survey of graduate work in engineering with the objective the presentation of the development and present status of graduate work in engineering in this country. In order to maintain adequate standards for higher engineering degrees, a study of current practices in graduate work in engineering was considered to be highly desirable by many leading engineering educators.


Considers ways and means of designing, establishing, and effectively operating programs for superior students in engineering. It provides some guidelines for attracting outstanding students into engineering and for stimulating these students enough to
motivate them to complete their education and to make significant contributions to the profession.


An account of the westward expansion in America and the rapid development of railroads, mining, steel, and electrical industries, which sped the development of engineering schools. "An important problem that is shared with other professions is that of how to prepare the student to continue his learning throughout his life."


Presents not only the expected classification of engineering but, further explores the newest areas in present day engineering. General topics include: a description of the role and functions of the engineer, a discussion of the scientific and professional aspects of engineering education, the place of research in engineering, professional responsibility, and the obligations engineering has in government, public affairs, and in an evolving world.


A book designed to help the student clarify his concepts of the engineering college and the engineering profession. Chapters deal with: (1) development of engineering, (2) engineering specialization, and (3) the future of engineering education.


This report is the result of a two-year self-examination at MIT. The committee examined the concept of professional education upon which the Institute was founded and reassessed their way of teaching.


A report of an experimental reading program in the humanities involving extensive debate and discussion of books. Enthusiastic reception by engineers at the University of Cincinnati.

A manual for engineering instructors prepared under the sponsorship of the Committee on Teaching, American Society for Engineering Education.


General discussion of the many ramifications of professional engineering. Emphasis on principles and training systems common to all branches of engineering, with recurrent stress on: (1) the fact that course and progress of engineering career must depend on the individual; (2) importance of broad general knowledge for understanding people and the world; (3) practical aspects of training, salaries, and prospects.


Account of sample of professional engineers selected at random from the five major engineering societies asked to rate their best and worst teachers of engineering on the ten traits of the Purdue Rating Scale for Instructors. More than 500 engineers responded.


A study in California of the five largest occupational sources of technical teachers. Represents an effort to predict the educational attainment of craftsmen who become teachers.

A brief history of the development of Russian engineering education and a description of its present state. Particularly authentic because the author was raised and educated in Russia. Timoshenko's books on strength of materials are engineering classics used throughout the United States.


Reports that engineers come from a lower economic strata than do physical science and math majors, and more are from lower strata than undergraduates in most other fields with the exception of education. This paper considers the implications of social origin of engineers as it bears on their recruitment to the profession and as it affects their orientation to nontechnical studies. It raises the question of the bearing of social origins on the extent and degree of creativity. The major burden of this paper is the suggestion that sociology may shed some light on factors and forces other than aptitude and personality characteristics which shape patterns of recruitment to science and engineering careers. The author believes that this knowledge may allow engineering instructors to act more effectively in increasing the likelihood both of success and satisfaction for the men who enter those careers.


Describes a consensus of opinion of engineering experts consisting of four main points: (1) Technical education at present is wholly inadequate for future needs. (2) General education is lacking in realistic contemporary knowledge necessary for life in a technological society. (3) Cultural content of technical education is inadequate. (4) Technical education (in all forms) is too narrow in a world of rapid technological change.


Verbatim account of meetings and proceedings in discussion of the four important needs in engineering education and proposed solutions. Cites need for: (1) education of current engineering force, (2) manpower development, (3) development of efficiency,
(4) broader base of communications regarding techniques and equipment, and (5) training in educational institutions.


A "how-to" book for engineering students, emphasizing personal factors in studying engineering. General, nontechnical overview of the character, historical development, basic vocabulary, and curriculum of engineering.

A comprehensive bibliography of materials covering all aspects of legal education.


A report concerning the total machinery of legal education in the university, including cost and revenue, recruitment, faculty appointments, salaries, and research. Discusses law school participation in public affairs through involvement of faculty in community projects. A few pages devoted to graduate education beyond first professional degree and including continuing legal education. Gives findings and recommendations.


Presents the thesis that there can be no true liberal arts program without adequate attention to the vital and enduring role of law in human affairs. The problem is the need for qualified, enthusiastic instructors. Some law teachers will be willing to work with undergraduates, but there is need to induce Ph.D. holders in other fields, especially the social sciences, to undertake sufficient training in law to equip themselves properly for teaching law in connection with the other social sciences. Proposal to provide fellowships or summer seminars employing research in law. The author states that research will stimulate interest in the law, broaden knowledge of the field, and thus help inculcate future students with a feeling of the significant value of the law.


Asserts there is a necessity for law faculties to educate the faculties of arts and science in law, and also to remain open to the knowledge that other disciplines can give them. Law should be reintegrated with the social sciences, since they are all part of the science of society. If it were possible for the student to have a liberal arts major in law as it relates to all phases of knowledge and institutions, he would be grounded in legal theory.
and elementary legal techniques, as well as enjoy the broad education of his peers who major in history, literature, or other academic fields.


Submits that lawyers and law schools need to combat public ignorance of government in much the same way as doctors and medical schools had to fight ignorance of basic health ideas. The modern law school should be a center of legal science where the knowledge concerning phases of all social life, domestic and international, in their relation to government and the reciprocal effects of government on all phases of social life are accumulated, coordinated, and transmitted.


Concerned not with legal education in general but with how the law school may minister more effectively to the education of those law-trained persons who will subsequently find themselves on the policy-making levels of the executive branch of government or, who as lawyers outside the government, will nevertheless exert large influence over it.


A report based on individual interviews with one hundred practitioners in Chicago. Findings: (1) Individual practitioners are not the elite of law in Chicago or elsewhere; those prestigeful persons in the elite are members of large firms, usually where the composition is Ivy League or graduates of the best law schools. (2) Individual practitioners are significantly over-represented with persons whose training was in night school. (3) The metropolitan bar is highly stratified. This has to do with the emergence of the law firm as the principal form of organization for legal services to the business elite. Notes the growth of corporation law and a shift away from the courtroom to the conference room.


Describes the present system of legal education, as well as the history of legal education in the United States. Special attention is given to the topics of law school curriculum in the
States that predictions for legal education fifty years hence are characterized by the words "perpetuation" and "personalization." Buildings, textbooks, the law itself are all factors that will maintain continuity between legal education today and that of the future. Although the Bar continues to press for more practical education in the schools, there is recognition that this facet of education ought to be provided and can best be provided by the profession. Investigation of the potentialities of mechanization in legal education will not result in fundamental changes. Legal education will not change much externally in the next fifty years, but there is hope that legal educators will be better able to furnish the personal confrontation with the law that the law students need.

Describes how lawyers are confronted with new responsibility in international relations and transactions. Ford Foundation grants to fourteen U.S. law schools emphasize development of international legal studies as an integral element in legal education. Law schools have obligation for advancement of legal science. Problems of including international law in curriculum are: (1) Few modern theories and concepts of jurisprudence have yet matured. (2) Research has scarcely begun on the subject. (3) Competent teachers are scarce. (4) The case method is the exclusive method of study. The latter is being modified into problem system. Despite problems, growth of interest in international legal studies has been phenomenal.

Restates and evaluates the objectives of legal education; discusses curriculum problems and future needs, the relationship of legal education to other academic disciplines, and to the client, and the public.

Advocates that: (1) the case method be supplemented by a more appropriate method in the newer statutory fields of legal education; (2) research techniques be developed; (3) law schools become centers of team research; (4) international relations, as a very important area for research, be emphasized.


Discusses the need for a reevaluative study of the present degrees granted in legal education, in order to clarify ambiguity and misconceptions. Hervey presents arguments pro and con for keeping the traditional degrees and titles and also proposes changes for program flexibility and expansion which would be correspondingly expressed in the degrees and titles.


A report on the development and expansion of graduate and advanced professional programs for practicing lawyers, designed to compensate for deficiencies in overall coverage in a three-year law school curriculum and to meet needs for specialization. Describes the evening program at the University of Southern California School of Law to serve Los Angeles metropolitan area. Pages 199-210 present tables of data showing comparison of numbers registered in major law schools of U.S. during the period 1948-1951, covering first, second, third, fourth, and graduate years.


Emphasizes the need to promote training for policy decisions and judgment in legal education and suggests methods for accomplishing this: (1) by developing programs of research with law school funds, (2) by combating dogmatic, subjective attitudes which cripple policy judgment, and (3) by exploring the valuable body of material in psychological literature on the nature of man, on maturity, and on concepts of freedom.

Reports findings of studies which show the relationships of types of law schools to success in professional law and in personal social relationships. The author submits that according to the analyses of these data, present legal education reflects an articulation with social organization structurally and functionally. Hence, legal education will not be changed without changes in this interrelationship taking place also.


Stresses the need to recognize that the lawyer must be able to bring the citizen to fuller understanding of the many interdependencies of societies in the world community, in order that appropriate institutions may be formed. The law school is the center where contemporary thought is to be processed into programs for action to "maximize community values." Anticipates that the experience of the past and the best methods of contemporary science will create the law of the future in training the lawyers of the future.


A rather vehement advocation of some changes necessary in graduate legal education. The authors reduce all graduate level education into three main heads: (1) immediate professional specialization, (2) teaching of law and study of jurisprudential law, and (3) legal research-specialist. Authors submit that the fault for dissatisfaction in legal education, both graduate and undergraduate, lies in the teaching profession. Graduate programs (S.J.D.) reflect the tacit assumption that a good research scholar is also a good teacher, and vice versa. Discusses value of specialized research in training teachers. Discusses at length proposals, objectives, and functions of the legal educator and recommendations for curricular overhauling.


Warns that the future of legal education remains clouded. Five major approaches, complementary and competing, vie for a dominant position in legal education. The curriculum squeeze grows more acute; no viable long-term solutions are apparent. Traditional pressures for continuance of the status quo remain. It must be concluded that when changes do occur, they will have to
overcome formidable forces of resistance; they will have to come slowly; and they must be well heralded and supported by general opinion.


Principally a statistical report. To some extent it covers qualitative appraisals of law school performances by presenting the most important observations and criticisms of the inspectors who visited and reported on the law schools. For the most part, however, the book sets forth quantitative law school statistics obtained through answers to the questionnaires, with some analysis and comparison.


Description of the graduate program in legal education at New York University School of Law. Discussion of the value of the curriculum, student selection, teaching skill development, integration of other disciplines, and economics of the program. Proposes that this program serve as pioneering model for other schools, to meet needs in continuing legal education throughout the United States.


Describes a new facet of continuing legal education at Harvard Law School, called the "Forum" in this article, with the author's hope to encourage similar projects. A self-supporting, autonomous organization of various committees designed to assist students in learning practical aspects of legal practice not taught in law school: aid in choosing a locality for future practice, making a judicious selection for specialization, employment, related avocations and activities, program of lectures, and conferences; and, in general, making life inside law school continuous with life outside of it.


An application of the analysis of the medical profession to that of law. The result of these commonplace considerations is that the sociologist must regard the activities of the legal profession as one of the very important mechanisms by which a relative
balance of stability is maintained in a dynamic and rather pre-
cariously balanced society. The author notes that the professions 
can be thought of as agencies of social control, restoring the 
deviants to social status.


A summation of the points of agreement in the third conference 
of prelegal advisers, college administrators, and law school lawyers 
held in New York University Law Center. Concerns problem of 
effectiveness of prelegal counseling, aptitude testing, achievement 
testing, motivation, and determination of interest in admitting 
law school candidates.

Redlich, J. The Common Law and Case Method in Americar University Law 
Schools. Bulletin 8, Carnegie Foundation for the Advancement of 

Passes judgment upon the nature and success of the case method 
in legal education, through firsthand observations and use of the 
literature. This method is found to be a practical and efficient 
method by which students learn to do independent thinking. However, 
before a student enters upon this method of study, he ought to have 
a certain foundation upon which to build.

Reed, A. Z. Present-Day Law Schools in the United States and Canada. 
Bulletin 21, Carnegie Foundation for the Advancement of Teaching. 

A bulletin dealing with the function and work of present 
law schools in the United States and the Dominion of Canada, in 
so far as that relation can be interpreted through the curricula, 
conditions of administration, methods of teaching, and the relations 
of these law schools to practitioners of law.

Reed, A. Z. Training for the Public Profession of the Law. Bulletin 
15, Carnegie Foundation for the Advancement of Teaching. Boston, 

Represents not simply a criticism of the law school of the 
time, but undertakes to develop in a scholarly way the history and 
progress of American legal education. The report describes the 
differences in conception that have existed from one period to 
another in our history. It aims to make clear the relation of 
the bar and of the bar examination to legal education; and, 
finally, it develops the historical relationship between a trained 
and educated bar and the administration of justice.

Explores a topic that was seriously discussed first in 1900. The question was renewed in 1930 and then followed by another thirty years of quiet. In this current renewal of the discussion, Schoenfeld reasons that the J.D. should replace the LL.B. Since candidates for professional degrees already have one college degree, they should receive appropriate recognition of their education beyond graduation from college. Those who oppose the J.D. have confused the old and present day bachelor's degrees with research and professional degrees.


Concludes that law school as a three-year introductory course to a decade of legal education must give competent broad theoretical background to form a foundation for the practice, instead of spending a great deal of time on courses simulating the practice to be encountered. The general aims between 1935 and 1962 have not changed much. Main changes in legal education for the future must respond to society's increased awareness of justice and the possibilities provided by the scientific revolution. Seeks heavy investment in institutes associated with law schools where talented authorities could be gathered to consider what legal education should be doing to prepare the lawyer of tomorrow. Legal education must be based on a solid undergraduate education where precision of speaking and writing have been mastered.


Reports on a research sample representing a special group because of their skills in discourse and interviewing. It became necessary to be cautious about losing control of the respondent by becoming the interviewee instead of the interviewer. An important technique for breaking down reluctance is to reveal knowledge about the topic at hand. Found that Wall Street firms emphasize lineage, ability, and personality in looking for new men.


An article in which an Australian tells Australians about legal studies at Harvard with observations made during his three-year residence studying for J.D. Of particular interest is experimentation with extra-traditional emphases in new courses, i.e.,
Harvard's "International Legal Studies," dealing with legal problems of international business. Makes comparative comments on Australian and American systems of legal education. In both:

1. Interdisciplinary cooperation is needed, especially with law, social sciences, and economics, in both teaching and research.
2. New areas of academic-professional cooperation need to be cultivated.
3. Lecture system and classroom discussion on cases and problems need to be integrated.


Outlines five main areas of public responsibility: (1) the lawyer's standards of decency, etiquette, and group self-protection; (2) standards in the pursuit of the client's interest; (3) standards vis à vis the community, generally in advancing his own or his client's interests; (4) standards as a citizen, or affirmative interest in the public domain; and (5) standards for settling conflicts between the duties arising within each of these areas or between them and those of general moral or religious duty.


States that case method should be supplanted by the problem method patterned after the methods of Harvard Business School, i.e., give premises or essential points of cases to classes to debate and discuss what the law should be according to premises stated. In this way, both law as a system and the art of legal reasoning can be taught. The skills of various courses ought to be taught in the related classes by the instructor and with the cooperation of an experienced practitioner.


Examines the case of lawyers on the thesis that little attention has been given to the way in which occupation affects one's non-work social obligations. They point out that the lawyer is expected to do certain things, not part of his technical work, e.g., be politically active just because he is a lawyer. Their hypothesis: that such extra-professional roles may be attached to all professions.

A study considering basic questions of recruitment and allocation of prospective law students to law schools. The data are of unprecedented scope and afford an opportunity for detailed analysis of the factors that influence the choice of a career field.


A reevaluation of programs of continuing legal education. Stresses need to emphasize theoretical rather than practical aspects of legal education to impart an understanding of fundamentals. Discusses failure of legal education to emphasize educational breadth rather than specialization; an education of ideas, philosophy, and theory of law, rather than techniques. Stresses the need for scholarly research and cultural courses in programs of breadth, in order to prepare lawyers for awareness of new evolving concepts and methods of analysis.

Reports advantages of introducing initial professional library training into undergraduate college programs: (1) It will provide the necessary preparation for library positions that do not require a four-year college program plus one year of library school curriculum. (2) It will provide for recruitment without discouragement over length of study required. (3) The total undergraduate education can be geared to prepare the student for professional librarianship. (4) It will provide a uniform base for a fifth year curriculum suitable for obtaining a master's degree.


Report on 1946-47 activities; a consideration of "core (undergraduate) curriculum," responsibility of profession for recruitment, accreditation program improvements. A listing of meetings and conferences. No really new information. Mention of Columbia University and University of Denver Library Schools working to implement a "core curriculum."


Reports that the divorce of theory and practice has been one of the real bones of contention between library schools and consumers of library school products. Libraries say that library school students have not the right knowledge or skills. An important theme here is the gap between the library schools and the librarians in the field. There is the need for recruitment of leadership, for research, for library schools to sell programs to professors to attract better students, to update teaching, and to encourage research and publication among faculty members.


A report designed to acquaint librarians with "changes in emphasis, additions, and subtractions in course content, as well
As overall experimentation in library school instruction. The trend is moving toward increased realization of the importance of sociological background to the librarian. Library schools are stressing the role of the community and its individual citizens to prepare students for the changing needs of librarianship, to teach the student to be able to acquaint himself with the type of community he serves and to adapt the principles of librarianship to the particular community in which the library functions. To these ends the focus of instruction has shifted from a class orientation toward the individual. More emphasis is placed on imagination, discussion, practical situations, the subject specialties of the individual class members, and the use of projects and displays.


Asserts that the curriculum for librarianship should reflect the ends of librarianship, the characteristics of the professions, the characteristics that distinguish librarianship among the professions, and the place of professional schools in the universities. Examinations of competence should be required for admission and for completion of work for the degree. The preparation would include the following: (1) building of competence in a traditional subject field, (2) (concurrent with 1) studying the theory of communication with respect to the purposes and methods of librarianship and the nature and administration of social institutions, (3) learning the formation and use of book collections, (4) participating in seminars and writing theses, and (5) experiencing directed practice in libraries.


Explains that since the years 1946-50 would probably be considered years of revision in the system of American library education, the conference organizers decided upon a review of objectives, methods, and problems of education for librarianship during this period. Reports covered: "The relationship of the professional school to the university, relationship of library education to other professional education, the historical development of library education in this country, preparatory education for librarians, professional education for various fields of librarianship, advanced study and research."


Professional education for librarians has emphasized the technical aspects of librarianship, such as book selection and
arrangement and assistance of patrons who need to use the books. The librarian's education should provide for future positions, not just the first job. A chief librarian of a medium-sized city library or head of a college library needs the technical education as listed above, but also needs: (1) training for contribution to community leadership, (2) broad general education, including several subject specialities, (3) training and practice in administrative techniques and organization, with specialization geared to type of library and collection, and (4) personnel training.


A doctoral dissertation in progress at the University of Illinois Graduate Library School, Urbana. Mr. Churchwell is concentrating on the period in which library schools proliferated and became affiliated with institutions of higher learning.


One of a series of career books for late high school or early college students. It contains good material or cautionary tales of how to succeed (or not to succeed) in school, what to expect, where to apply, and what the image of the profession is.


Assumes that since a university faculty concerns itself with research, faculties of professional schools in universities must engage in the advancement of knowledge in their respective professions, educate their students to do research, and accomplish self-criticism by consideration of standards and performance. These are necessary concerns for professions having as their end service to society. Loyalty to standards must govern a profession's efforts to raise its level. Salary and quantity of education are artificial indications of professional level. Professional schools in their concern for contemporary problems reciprocally aid the research orientation of the university by keeping it in tune with reality.


Brief pamphlet containing concise, descriptive analysis, criticisms, dilemmas, and proposals for education for librarianship.
A criticism of Lancour's article, "The New Library Training Pattern Looks Good." Lancour implies that library schools agree on the course to be followed, but he fails to treat the arguments against the plan. Article ignores several factors: (1) There is increased demand for wide liberal arts background for librarianship and other professions, and professional librarianship has newly acquired "graduate status." (2) In reducing the quality and quantity of liberal arts and general education, the result will be the progression of poorly educated librarians, lower standards of performance in libraries, and less prestige for librarianship. (3) Further graduate study for the holders of new master's degrees will be delayed by need for additional liberal arts training. (4) Recruitment will not really be advanced, since the candidates attracted will be those who seek to avoid a full liberal education or else be required to take "core" classes during a summer without degree credit in order to enter the master's program with full liberal arts background. (5) There will be a decrease in the number of librarians pursuing graduate study beyond one year. (6) Pressure of shortages doesn't justify this curriculum revision, nor does the curriculum attend to the question of the nature of the education needed to prepare various kinds of librarians.


One of a series of four manuals published in 1949 dealing with fundamental questions of library work, librarianship training, role of library in adult education, and public library activity to meet needs of scattered, rural populations and special groups in the community. It was written principally for librarians by librarians writing freely as individuals expressing opinions on the principles of international public librarianship. Appendix includes samples of applications for admission to American library schools. Bibliography is universal in scope, with all entries after 1925. Although the non-English entries are not recent or very comprehensive because of the scarcity of items, the bibliography includes most recent important publications on each major aspect of librarianship education.


An article in which Charles Robinson, County Librarian, Baltimore, charges that library schools select low quality students who are poorly prepared and psychological misfits. Ray O. Hummel, Assistant Librarian of Virginia State Library in Richmond, suggests
that the first year ought to be spent studying fundamental subjects.


Counts a March, 1947, article, "Undergraduate Courses in Library Science," which presented four advantages of the "core curriculum" undergraduate program for library schools: (1) Gitler did not favor widespread adoption of professional training on the undergraduate level. (2) He favored taking steps to make the fifth year adequate preparation for the master's degree, without disturbing the academic character of the undergraduate program.


States that attachment to learning service orientation, an increased use of professional schools for training membership in professional organizations, independence of the field from any other group, and individuality of occupation are the marks of professional librarians. Librarians still are faced with barriers from total professional status because their "knowledge-base" is not definite; the division between profession and non-profession is cloudy; much of the professional work done is not seen by the public; the librarian does not have control over the patron's qualifications and must work mindful of the patron's limitations; the gulf between values and practice is wide; and the librarian is vulnerable in all relationships as a result of a lack of a clear sense of professional identity.


An article on recruitment of librarians as it is related to the development of a philosophy of librarianship. It was written as an offshoot of these points in Progress and Problems in Librarianship by Wheeler. The main premise is that the future of librarianship depends on library schools and librarians in the field. The profession as a whole must frame the statement of philosophy that will inspire students, engage in recruitment, formulate curriculum changes, prepare effective library school faculty, and develop programs for institutes, inservice training, and internship.

Papers read in connection with the 50th anniversary of the University of Illinois Library School. It is a history of professional education for librarianship as represented by the University of Illinois Library School principally. About half of the book is devoted to the history of the Illinois Library School and the remainder to various phases of librarianship education. Topics in the second section include recruiting, library schools as they have developed to the present (1943), suggestions for future progress, and considerations of international librarianship.


States that a new pattern is emerging—increased agreement that: (1) the first professional degree should be the master's, not the bachelor's, with the bachelor of library science representing the completion of a basic core of undergraduate courses in Library science; and (2) more opportunity for study for the doctoral degree be provided. Doctoral degree should be necessary for library school faculties and administrators of college and research libraries.


Presentation of a general program for education of librarians in the United States. The article analyzes the major problems in librarianship education with suggested solutions: (1) balance in basic professional year between theory and practice, (2) specialists for special libraries, small libraries, children's libraries, and (3) accreditation and certification.


Another statement of the undergraduate "core curriculum." It questions the relationship of the new curriculum plan to the three existing types of library schools and whether the plan actually will provide for library training more adequately and economically than previously. The Steig article, "Library Schools Reshaping Courses," develops the ideas of this one-page article.


A report of a study financed by Carnegie Corporation for the University of Illinois Library. It analyzes American standards and ideals of education for librarianship and gives theoretical conclusions as applied to Illinois Library School. It shows the
results of questionnaire survey of faculty and students and critically appraises library school methods: library training situation in the United States, historical trends, and present practices (1943). The subjects covered in the survey are: library school curriculum, instructional methods and procedures, suggestions for improvements in techniques, a second-year program of library schools, administrative aspects relating to executive and legislative functions, and faculty problems of student personnel.


An evaluation of policies and activities of American library education by Munthe, the director of the University Library, Oslo, Norway. Report was commissioned by Dr. F. P. Keppel, president of the Carnegie Corporation in 1936.


An article analyzing the historical development of library work, library schools, and the curriculum for librarianship. Brief treatment of teaching and administration of librarianship is also included. It gives references to librarianship curriculum.


A report of field investigations carried out from February to May, 1947, to assist with curricular problems pending before the dean and faculty at the School of Library Service, Columbia University. It considers broadly an inquiry and reexamination of preparation for professional work in American libraries. The data were compiled by means of interviews with 200 employers and library supervisors. Interviews conducted individually and in group conferences. The appendix includes interview questions and name, position, and institutional affiliation of each respondent.


States that at the time of his study (1942), four-year college education did not provide the required broad educational background. Library schools provide the basic library curriculum, but no standard amount of time is spent on each field. The specialization along the lines suggested is available, with limitations, as additional courses in library school. The program should be based on a broader academic curriculum. Librarianship interns of fifth-year professional education should not be limited to technical methods.

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Based on the English system of education for librarianship. However, this paper has considerable relevance to American library school curriculum. Many of the suggestions, now more than twenty-five years old, have been incorporated into library school curriculum to some degree. The principal points for professional education are treated in the sections, "Teaching of Library Administration," "Teaching of Bibliography," and "Training for Special Librarianship." Savage emphasizes the need for laboratory practice simulating actual situation in cataloguing and classification, use of bibliographies for book selection and reference, and problems of administration.


Assumes that the low prestige level of the librarian is frequently given as an excuse for the low state of librarianship. Librarianship has grave responsibilities in reference to burgeoning technical information. The theme of this article is that the librarian is a cultural "guide."


Explains that the trend in 1947 was toward a "core curriculum" in librarianship to be offered on the undergraduate level. Completion of this curriculum would merit position at top of subprofessional level or beginning professional or entrance into graduate library school for a fifth year of study leading to master's degree. If this is indicative of the direction of library school education, then greater standardization of library school curriculum is in order. To this end, we must: (1) define meaning and determine content of core curriculum; (2) decide what accreditation or controls of training should be used; (3) decide what the relation of training agencies is to recruitment; and (4) decide what functions accredited schools serve in training school or teacher librarians.


Provides statistical information concerning library education, enrollments, degrees, faculty, and financial support in the United States. Data were compiled from questionnaires on programs designed to prepare student for professional library positions. The forms
were distributed January 15, 1965; second mailing, February 15, 1965; third mailing, March 1, 1965. Survey universe was made up of universities, liberal arts colleges, and teachers' colleges. Bases of inclusion: enrollment of at least 200 students and a program of four or more years.


Detailed analysis of developments of ideas and concepts of librarianship training in the United States during the "Dewey to Williamson period," 1887-1923. It shows a historical perspective of events and patterns of library education: (1) college education base for professional, (2) second-year specialization in professional education, (3) practical experience in final year of training, (4) library schools offering professional training only, (5) professional standardization and certification, and (6) affiliation of library schools with universities rather than public libraries.


One man's study of the status of training for librarianship, with special reference to library schools, faculty, students, together with their relations to higher education and the profession of librarian. This was commissioned by the Carnegie Corporation. It includes a 98-entry bibliography containing works from 1923 through 1946, with concentration on works of the 40's. Also includes announcements, syllabi, and reports from various library schools, together with many American Library Association mimeos of appreciable pertinence.


A well-documented study by a former professor of library sciences focusing on the early years of librarianship training, particularly the "half century or so when the American library school originated and when the ideas it stood for flowered and first triumphed." (p. 13) Thus, it, like the Vann study, is not concerned with the post-Williamson period. Although White's study convincingly shows that the origin of the American library school lies in the commonly accepted apprenticeship system of the 19th century, the study does not attempt to account for the forces of professionalism which sought to free library education from apprenticeship methods and to place it in the context of the academic professions.

Among many other points, notes that many graduates of accredited schools assume positions which require little skill, thus resulting in loss of professional competence and ability. "Efforts to establish librarianship as an emerging profession may well suffer severe setback unless we are able to establish a clear-cut line between duties of fully professionally trained and certified personnel and the partially trained products of undergraduate departments." It raises issues of accreditation.

A review of four hundred research reports on education for medicine, dentistry, nursing, law, social work, and engineering. Special attention is given to students, curriculum development, techniques, and material of instruction and faculty.


A discussion of the historical background and the contemporary social process of medical education as well as preparation for the study of medicine and formal medical education.


Studies by the American Association of Medical Colleges on student selection, undergraduate education, the resident, the intern, graduate education, and postgraduate education. A discussion of the basic problems involved in each area, with constructive proposals and recommendations for changes in curriculum and reevaluation of the objectives of medical education.


A bill of particulars against the disorders in medical practice: (1) the splintering into specialties, (2) the decline in number and professional status of family physicians, (3) increases in health insurance so all patients will soon be private patients, (4) absence of supervisions, controls, or standards in solo practice, and (5) rising costs. Emphasizes that only twelve per cent of medical care is given in the hospital and advocates the establishment of group practice in medical schools composed of twenty to twenty-five physicians on half-time, who would serve as demonstrators for teaching of good medical practice.

Presents an argument for the need for awareness of student culture. The author believes that student culture is the cornerstone of many faculty difficulties with students, and, therefore, faculty must make some accommodation.


Data gathered by participant observation describing the characteristics of the culture of the medical school at the University of Kansas. The students' adaptation to this culture and variation in student responses toward medical education and medicine are described.


A review of studies and articles interpreted in terms of the sociology of medical education. Attention is given to the position of the medical school environment in influencing the development of medical students.


A survey of studies which relate to attitudes involved in the socialization process for the physician's role.


Stresses the fact that one cannot separate the costs of teaching and research from those of patient care. The author relates the size of the hospital to teaching costs. Bugbee feels that each of the participants (the hospital and the university) must assume as much of the cost as possible. The teaching hospital rates must be comparable to the non-teaching hospital's. Questions whether the difference should be made up by the university.


Recommends that medical authorities and universities take greater interest in using the community hospital as an ideal training setting for the general practitioner as well as for the
specializing resident. A study of fifty-three such hospitals shows excellent and continuously improving programs of graduate education.


Discussion of the problem of preparing a family doctor to give comprehensive health care. This author thinks that the value judgments imparted to tomorrow's doctors are determined more by professional interest of influential faculty members than by a serious analysis of the health needs of the community.


Suggests that the Association of American Medical Colleges needs to increase efforts in procuring leadership in health science educational programs. The author notes that the environment of the university during the last twenty years has become more significant to the professional schools.

Commission on Graduate Medical Education. Graduate Medical Education. Chicago, Illinois: University of Chicago Press, 1940. 304 pp.

A report dividing graduate medical education into three parts: the internship, which is part of the basic preparation for practice; the residency, which is graduate education proper since it prepares a physician for the practice of a specialty; and postgraduate courses to keep practitioners abreast of their present fields of practice.


Suggests that individual faculty members need to develop a conscious recognition of their teaching objectives. The faculty as a group should agree on broad objectives covering attitudes, concepts, skills, and knowledge that students should gain in the medical school program. Responsibility for each of these could be assigned to an individual or to some department. Comroe mentions several ways in which grant-supported staff could aid the school in achieving the goals of education.

Deals with need for revising curricula in medical schools and offers four curriculum plans to meet these needs.


The Council's yearly report to the profession on the existing conditions of medical education.


A study based on data from a sample of thirteen medical schools. It answers many of the questions concerning: (1) the background and characteristics of students undertaking research along with their prescribed studies in medical school, (2) the varieties of research opportunities offered, (3) the accomplishments and values of such experiences as perceived by students and faculty.


A major study in medical education. Very comprehensive and informative. The focal point of the survey is concerned with the effects of present educational and training programs on the student, if his training is the primary objective in all activities and policies of the medical school. Excellent appendix and summary chapters.


States that medical schools and their teaching hospitals are not primarily established to serve the community. If this were the case, the schools could not participate or experiment with new forms of service. The profession of medicine, according to the author, is the only one that must be practiced in order to be taught. Therefore the university needs to be free to organize and practice in the fashion which it considers correct. Control from outside facilities does not coincide with the ideas of the university.


A classic study comparing medical education in certain European countries and America against the background afforded by
the general educational and social systems of the respective countries. It depicts and discusses general tendencies and principles.


Ascribes to medical schools (as units) and medical school graduates (as groups with different sets of aspirations) discriminably different sets of characteristics. This discriminability hinges on more than differences in intellectual ability. Measures of non-intellectual as well as intellectual characteristics yield variances as large as those found in college population.


Results of an institute on the evaluation of applicants, criteria for selection, assessment of intellectual and non-intellectual characteristics, and the nature of the admission process.


The study of the complex process of becoming a physician. Emphasis on the great diversity in socioeconomic backgrounds, values, aptitude, and achievement levels of medical students.

Indicates that students in medical schools tend to be more alike at graduation than are graduates in other fields.

Discusses the psychological effects of medical training on students' attitudes toward self, patients, faculty members, and medicine as a vocational choice.


A handbook designed to provide an official source of information on premedical students and admission to medical school.

An article based on the theme of the reciprocal relationship of medical schools and universities and the mutual benefits derived from each. The stimulating association of medical faculty and researchers with those in the sciences on which medicine depends is important. The cultural advantages offered by the university to the medical personnel is of great value. The author questions the wisdom of planning a medical school in physical or intellectual isolation from a university environment.


A report of a four-phase study in which: (1) The relationship of premed grades in the sciences with grades received during the freshmen year of medical school was examined (correlation .75); (2) A subjective evaluation was made of each candidate by the Pre-Medical Appraisal Committee; (3) The premedical and medical school records of 240 students were analyzed in three achievement groups: (a) above average grades, (b) average grades, (c) below average grades; (4) A sample of 101 entering freshmen aspiring to be physicians or dentists were followed for five years to study their goal achievements. (Only ten achieved admission to medical school and eleven to dentistry.)

Implications and conclusions are drawn which indicate the need for better measurements of ability and interest.


A study of the profession of medicine as practiced in "an Eastern American city." Considers a medical career as a set of more or less successful adjustments to the network of institutions, formal organizations, and informal relationships through which it is practiced. Four stages are discussed: (1) generation of an ambition, (2) gaining admission to the various medical institutions, (3) acquiring a clientele, retaining, and improving it, (4) developing informal relationships with colleges (to facilitate (2) and (3)) known as the "inner core." The importance of the "inner core" is as a means of organizing the specialized fields as well as controlling selection and appointment of new recruits into the profession. Verbatim information based on interviews with a wide variety of doctors.

A detailed account of the conceptual base, planned operation, program, and efforts at evaluation of the medical education program at Western Reserve.


Evaluates General Medical Clinic program and provides data relevant to medical education in general. Concludes: The overall effect of the General Medical Clinic program was a positive effect on the student's attitudes by reducing the development of increasingly negative attitudes toward comprehensive care. This result was achieved without impairing the General Medical Clinic student's acquisition of traditional medical knowledge and skill. The more intelligent, independent, and mature student was more responsive to the aims of the GMC. A detailed summary of the findings is included. Well designed, but the breakdown and presentation of topics makes it difficult to follow at times. Actually integrated three studies into one.


Declares: "We can all agree that the best quality of patient care is essential for teaching, whether to medical students, house staff, or nurses, and for medical research of a high order." In a like manner the author states that the best quality of medical care is provided where teaching and research are being conducted. Consequently, the need is for: (1) teaching personnel and programs, (2) research space and equipment, (3) library, and (4) clinical facilities and resources.


Argues that schools of pharmacy and nursing deal with undergraduate students; medicine deals with graduate students. An attempt to standardize their educational policies is questionable and difficult.

Hinsey, J. C. "Full-time Clinical Faculty: An Interpretation of the Problem as it Concerns Medical School Administration," Journal of the American Medical Association, 162:16-19, September 1, 1956.

Interprets the problem involved with recruiting, maintaining, and compensating staffs of medical schools and teaching institutions.
Contributions made by part-time and volunteer faculty members are impressive and important, but their effectiveness is greatest in departments where there is full-time leadership. A proper balance between part-time and full-time staff is best.


The chief responsibilities of those who hold academic appointments in medicine are to: (1) add to the scientific knowledge, (2) integrate new discoveries into the existing body of knowledge, (3) pass this along to students, and (4) suggest the early application of new knowledge to the sick.


A monograph identifying trends and developments in medical education in the areas of: curriculum development, innovation, and institutional self-study; contributions of the Association of American Medical Colleges; student characteristics; the teaching-learning process; followup studies, career studies, postgraduate and continuing education.

Annotated references are included.


An investigation of the experiences of twenty medical students as they progressed through medical school. This study was done within the framework of the experimental program in medical education at Western Reserve. Assumptions of this program: (1) the student is the primary focus of educative process; (2) self-education is important; (3) a graduate school should have an atmosphere in which students could take initiative and responsibility for their own education. The latter part of the study is limited to individual case studies.


Includes in this volume continuations of studies made earlier and published in *Problems of College Success or Failure* (1949). The intent is to follow one class, Freshmen 1948-49, through four years of medical school to get a better perspective of the factors and
features of student success or failure in preparation for a medical career.


A study which aims to: (1) gather information on present teaching of the social and environmental aspects of medicine; (2) analyze the data obtained; (3) evaluate the methods and techniques of instruction in use; and (4) offer recommendations based on conclusions drawn from the study.


An article emphasizing the balance between physician pressure (and control) versus responsibility. Physician pressure is for more beds, as well as for better practice and care.


Well-documented article outlining progress in medical education for the Negro. Data indicate grounds for optimism in some areas, but not in all aspects. White physicians increased 25% during 1952-62, while Negro physicians increased 12.57%. However, since 1955, Negroes in white medical schools dropped from 216 to 164. The role of education must make provision for the unique educational problem the Negro brings, in addition to the problems of prejudice and discrimination.

Lee, Peter V. "Experimentation in Medical Education: the Student, the Patient, and the University," *Annals of New York Academy of Sciences*, 128, Art. 2:532-543.

A review of current experiments focusing on the need to reconsider the student as the reason for medical education and the patient as the reason for medicine, without whom the student cannot learn.


An analysis of nine educational programs that reflect the impact of the scientific and social complexities following World War II. The report analyzes: (1) the climate of change, (2) integration of university and medical education, (3) teaching
comprehensive medicine, (4) reorganization of medical curriculum,
and (5) founding a new medical school.

Lippard, Vernon W. "The Medical School: Janus of the University,"

Discusses the medical school as a double-faced institution
required to respond to the community and the university. The
university needs to take more responsibility for the medical school
if this relationship is to be successful. The author feels that
the humanities, social sciences, and behavioral sciences are as
necessary to a doctor's education as are the natural sciences.
Medicine is a graduate discipline and the program needs to be so
conducted. Students should be treated as mature and responsible
people. Medical faculty deserve the same salary benefits and
status as regular university professors. Physical closeness of
the medical school to the university will aid in removing obstacles
between the medical school and the community.


A sociological approach to medical education in which the
student's attitudes, experiences, changes are studied as he pro-
gresses through the program. Some historical background of
medical training is presented as well as a section devoted to a
comparison of medical and law students. The study concerns
students in only two schools, but probably is representative of
most medical schools in many respects. Interesting to the student
concerned with collecting similar information is an appendix,
which gives the kinds of questions asked in the study.

Mians, J. H. "The Clinical Training of Medical Students," Report of
proceedings of Inter-Professions Conference on Education for
Professional Responsibility, Education for Professional Respon-
114-123.

Seminar used in teaching social and emotional factors in
patient's problems.

Describes how in beginning of clinical training student sees
patient as collection of diseased organs due to preclinical curricu-
rum. Introduction of clerkship and case method considered a
milestone because this gave the student responsibility in patient
care, which leads to growth of professional conscience, development
of insights, and understanding of what illness means to patient.
Description of clerkship.
Reports that since World War II there has been increasing encouragement of student research. Western Reserve's Comprehensive Medical Education program is discussed. With the growth of independent boards, e.g., Advisory Board of Medical Specialties, there has been ensuing rigidification of the sanctioned alternatives through which aspirants can become doctors. The universities are equally at fault, for they emphasize competition in courses and accumulation of credit hours, which are equated with competence.


The first reference work on teaching and learning designed especially for medical educators. Emphasizing what the student gets from education, it describes in terms of basic theory the strengths and weaknesses of familiar and lesser known techniques. The purpose is to provoke reexamination of many educational practices that have become habits in medical schools.


Asserts that medical practice "... In common with the predominant patterns of occupational roles generally in our society, (it) is, (therefore) in addition to its incorporation of achievement values, universalistic, functionally specific, and effectively neutral. Unlike the role of businessmen, however, it is collectivity oriented, not self-oriented." In concluding the discussion on balancing factors around the various pattern variables, Parsons notes that medical practice reveals "the balancing processes within the social system."


An attempt to evaluate the performance of practicing physicians, to establish criteria for evaluating their adequacy, and to relate these criteria to other variables such as medical school performance.


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Cites the Columbia University study by R. Trussell of a select group of hospitals with perfect matching of interns. Cost in teaching hospital was $35 a day per bed, whereas the average for all hospitals was $24 a day. This is not explained by the size of the hospital or by the available facilities and services. Pollack questions whether the patients should pay more for this superior hospital care in the teaching hospital. On the other hand, he sees teaching and research as community problems and not those of the patient. He stresses the need for study and reappraisal of prepayment plans from the consumer's point of view.


Proceedings of a New York Academy of Sciences conference on improving the scope and quality of medical education and medical facilities necessary to medical education and research.


Presents three alternatives for the physician in the hospital: (1) Competitive private practice associated with a willingness to accede to self-imposed controls and discipline through tight medical staff organization dedicated to the principles of the Joint Commission on Accreditation of Hospitals and the medical audit and with due recognition of the moral and legal responsibilities of the trustees. (2) Completely full-time, salaried medical staff with closely integrated services and clear-cut channels of supervision and responsibility. (3) A combination of the above two types of organization with one or more mature and experienced full-time physicians assuming over-all responsibility for supervision.


A discussion of the costs of medical education. The authors use figures from a large teaching hospital to indicate the extent of these costs. They also discuss how medical education costs are to be met and they stress the importance of explaining these costs to the public.

Emphasizes the selectivity of patients for special training versus using a variety of patients for the comprehensive training of internists and other medical specialists. "A teaching hospital cannot get along with busy practicing physicians directing its destiny today." Distinguishes locally versus nationally oriented hospitals. The former is patient-oriented without research, and the latter has strong research and training programs, with less concern for patient care.


Cites need for education which will lead to understanding not only of disease process, but of total aggregate of biological experiences including psychological and social aspects, and need to relate this total experience to community of patients. Premedical education is more involved with physics, chemistry, biology than with psychology sociology, history, and literature. The author claims that the student doesn't have opportunity to learn the nature of man in its broadest meaning. Change is taking place; first year medical students are more aware of significance of personal and social factors in human experience.


A discussion of the kinds of research needed in medical education and the trends in current research emphases.


A preliminary report which attempts to identify the relative contributions of major determinants of educational outcomes.


One of the four major studies conducted in medical education encompassing the period marked by the Flexner Report of 1910 to 1953. This report is very comprehensive and informative in covering all aspects of medical education.

Traces the development of medical education in America from roots established in Europe. Contains comparative analyses of methods of control, process of internship replacing apprenticeship, admission of women, and accreditation procedures. Describes the influences of German and English models on the American institutions of medical education.


A major study of medical education, which includes writings of prominent medical educators. Subjects include objectives, faculties, finance, and trends in medical practice and education.


Stresses the need for trained administrators in medical schools and teaching hospitals.


States that the idea and reality of a medical university is emerging from undergraduate medical colleges. Certain changes occur with this phenomenon--students come from less homogeneous areas; colleges have more specialized faculty; research is incorporated more as an educational tool. In short, the graduate approach is emphasized. The author believes that this evolution is more likely to take place when the medical school is a part of a university. Sees only good in a university approach to medical education.


A report directed to the undergraduate training of the physician. It is a survey of the relations between preprofessional and professional education from the point of view of a single liberal arts college -- Oberlin.


Points to an "...urgent need for the government to have a clearly defined program of support" and favors establishing a body of eminent educators to define the program and coordinate grants. He urges vigorous leadership by the administrations of medical schools, who have ultimate responsibility for them. Also recommended is an increase in efforts to gain support from non-federal sources.


Finds the administrations of have-not medical schools largely to blame for their plight—"primarily purveyors of medical service rather than providers of medical education," with minimal budgets pieced out to provide not a "...minimally adequate program for medicine alone," but something less for both medical and other professional students.


Submits that the gap between the medical schools divided into the "haves" and "have-nots" of resources is widening and will continue, largely because of the allocation of federal financial support. This gap raises the question of assistance to the schools lacking resources. Facts presented illustrate that annual operating expenditures lag far behind increases in financial support.


Offers the thesis that medical education is at the core of the health and medical program of a country; that the faculty of medical schools constitutes the greatest medical resource in a country; that within the faculty the teacher-investigator represents the germ plasm that links the medicine of the present to that of the future; that society must foster and guard the medical faculties.


A comprehensive resurvey of medical schools in the United States and Canada undertaken to indicate to concerned persons which schools were advancing in accord with prevailing standards.
of teaching and which were lagging. The data were obtained through questionnaires and visits to eighty-nine schools of medicine.


Explains that during the last five hundred years, emphasis in understanding disease and health has shifted from anatomy to physiology and pathology to biochemistry and medical ecology. Now is the time for the social sciences to contribute; emphasis is needed on human values, not on economics. Specialization is necessary to produce highly qualified individuals who can stay abreast of rapid increase in scientific knowledge. Various types of specialists are needed: some concentrating on synthesis, interpretation, and coordination. Professional schools need to adopt different goals to enhance diversity within a profession.


A book exploring the social forces at work in present society and the implications for the university, the medical profession, and the general public. The authors assert that the growing influence of the university contributes to the educator-practitioner conflict. This is due to the university's tradition of truth-seeking and change-making influence. Evaluation of goals, a re-definition of old goals, and the establishment of new goals are all needed if medical schools are to accommodate effectively to changes taking place in society.
NURSING


A statement of position on the nature and scope of nursing practice and the type and quality of education needed by nursing practitioners. Depicts two levels of nursing—professional and technical.


Five sociological essays describing and analyzing certain aspects of the nursing profession. Such topics as the structure and ideology of American nursing, problems and issues in collegiate nursing education, and nursing and patient care are discussed.

Dunstan, Laura C. "Characteristics of Students in Three Types of Nursing Education Programs," Nursing Research, 13:159-66, Spring, 1964.

A study with the central aim of determining the congruence or "fit" between requirements and objectives of each of the three types of programs and the characteristics and career expectations of the enrolled students.


This study examines the effects of nursing education on the anxiety level, authoritarianism, political-economic conservatism, humanitarianism, and cynicism of students. Nursing students at Yale were compared with hospital nursing students, practicing nurses, and medical students.


A study proposing to find out whether a large number of students can be taught in the clinical setting through the use of television and whether these students can be taught as effectively as through a more conventional method.

A book addressed to the senior level college students of nursing and for nurses in higher education and administration as related to nursing.

Heidgerken, Loretta E. "Nursing Student Evaluates Her Teachers," Nursing Research, 1:40.

Describes student evaluation of teachers in terms of personal qualities and teaching qualities. Two variables are not described as frequently by nursing students as by other college students: (1) the stimulating of intellectual curiosity, and (2) openmindedness and tolerance.


Compares diploma nursing students in terms of the type of psychiatric nursing experience they have had. Personality changes do occur as a function of the psychiatric nursing affiliation but may be affected significantly by institutional atmosphere.

MacAndrew, Elliott. "Varying Images of the Professional Nurse: A Case Study," Nursing Research, 8:33.

Raises the question whether the nursing educator-policy-maker is able to transform her ideas into realities through the graduating students. Specifically, the study asks: (1) the extent to which the program innovator's image of the ideal nurse has been common to her faculty, (2) whether and to what extent do graduating seniors' self-image approximate the faculty ideal.

Meyer, Genevieve R. "Attitude of Student Nurses Toward Patient Contact and Their Images of the Preferences for Four Nursing Specialties," Nursing Research, 7:126.

Uses a picture item test to compare attitudes of collegiate students, hospital students, and Future Nurses' Club high school students toward caring for patients and in ranking clinical nursing specialties.


An exploration of attitude change as a function of psychiatric nursing experience. Indicates that the sample of second-year hospital school students did change.

It is the purpose of this study to review available data on the use of the American College Test (ACT) in nursing schools and to compare its validity with that of other measures. A secondary purpose was to summarize the predictive efficiency of ACT data with respect to grades in courses typically included in nursing school curricula.


A document which provides a means for: (1) self-evaluation by educational units in nursing in senior colleges and universities, (2) evaluation of baccalaureate and master's degree programs in nursing for which accreditation by the National League for Nursing is sought, (3) appraisal of plans for the development of new units in nursing in senior colleges and universities.


Compares pre-entrance personality test scores of 219 girls who completed a three-year nursing program with those of forty-five girls who failed to complete the program by use of appropriate univariate and multivariate statistical procedures.


Focuses on major components of the socialization of student nurses by discussing the kinds of techniques used to elicit behavior and attitude expressions from the student that lead her to general conformity to the ideals held by her instructors.
SOCIAL WORK


Emphasizes how to develop social workers who will take personal responsibility for their own development as professionals.


Comprehensive report of the curriculum study on social work education. Social work needs to develop a heightened sense of identity as a profession.

Study implies that two sets of social work faculty are needed. Teaching in the foundation component of social work requires faculty with doctoral work in one of the sciences basic to social work. Methods component requires faculty with advanced work in one of the methods of social work and who, in the course of doctoral work, have contributed to theory of social work practice or a chosen method.

Also needed are: Better definitions of the profession's relationship to the college or university. The graduate continuum requires clearer definition of the respective functions of undergraduate and graduate education in social work curriculum. Research-demonstration centers to facilitate closer integration of theory and methods would be desirable. Educational research is necessary for experimentation, evaluation, especially for selection of professional candidates to ascertain the relationship between the intellectually gifted and effective social work.


Describes stages common to all students trained in West Virginia Veterans' Administration. First-year social worker students have one semester in the classroom, one semester field placement, and six weeks' class work following placement.

Stages are: (1) eagerness for practice, (2) reaction to beginning practice through retreat, projection, disappointment, (3) overcoming self-consciousness, (4) focus on client and agency with unawareness of self, (5) dissatisfaction with passivity and need to inject self into situation, (6) attempts at activity, (7) consciousness of the activity of self and more skillful use of agency services.

Categorizes three types of workers--intuitive, empathetic, intellectual--and notes changes in each as development begins. Clues to change in students differ in each type.


Outlines three types of parallel learning in social work: (1) primary learning--skills and knowledge central to the field, (2) associated learning--information, theory, etc. from other fields such as sociology, medicine, and (3) attendant learning--ethics and values.

Increasing self-awareness is essential to professional education since knowledge of self is crucial to knowledge of and working with others in the helping professions. Describes levels of student self-awareness which occur during the first and second year of social work school.


A thoughtful and helpful analytical report of a study for the National Council on Social Work Education, viewing education as a continuing process from undergraduate foundation through graduate school to professional development on the job. Emphasizes the interrelationship of education and social work practice. Describes problems of field work and specialization. States forcefully that the responsibility for social work education rests with the total social work community. Suggests appropriate roles for educational institutions, practitioner organization, employment agencies, and the supporting public. Identifies basic problems facing social work education and suggests lines of action for seeking solutions. A major issue discussed is the problem of accreditation of social work education.

Another issue discussed at length is the failure of the university to accept the responsibility for preparing social workers to the degree that they accept as a matter of course for the other professions. Chapter VI is devoted to analyses and recommendations on the points of cooperation and conflict between social work and university officials.

Presents thesis that student development parallels that of the profession, e.g., growing awareness and sophistication in choice of method.

Author notes growing cooperation among social sciences.


Review of elements of a profession and how social work fits that description.


Suggestions for improving social work by recruitment of better students, enriching program, etc.

Chapter I examines the historical development of teacher education extending back to Ancient Greece. Chapter II presents recent generally accepted patterns and variations to be found between and among states and among institutions. Chapters III and IV discuss certification and accreditation of programs. Chapter V cites growing interest in teacher education, including federal government and foundations. Chapter VI discusses the teacher of the future.


Suggests better methods of identifying and encouraging students of promise to enter college teaching. The period of preparation for college teaching needs to be shortened. One way to accomplish this is through a two-year master's degree especially fitted to the needs of future college teachers.


Suggests the formation of young college men and women into a preteaching group similar to premedic and prelaw groups.


A digest of the findings of Lindquist's study (College and University Faculties) as they pertain to the junior college. Elaborates in further detail the information on the junior college as presented in the study and extends this to comparative analysis between the junior colleges and all other universities and colleges.

Bunnell, Kevin P. "Recruiting College Faculty Members: A Short-Range View of the Problem," Educational Record, 41:138-42, April, 1960.

The results of a survey of twenty-three deans and college presidents in the U.S. to determine what current and effective recruiting methods are in progress. Discusses twelve presently
used methods which attempt to break away from the traditional methods of contacting placement offices, writing to graduate deans, attending professional meetings, etc. The survey concludes that better organized, more imaginative programs of faculty recruitment are non-existent.


Contains an extensive review of related literature and interviews with women faculty members in several institutions.


States that the enterprise of college teaching is vast, multi-purposed, and undecided about its internal value system and consequently about its own standards of performance. Both undergraduate and graduate students need to encounter effective teachers to serve as models.


Presents the findings of a sampling study of all the full-time faculty members of Minnesota's thirty-two private and public colleges of the University of Minnesota. The survey questionnaire was designed to study the motivational factors for entering and remaining in college teaching.


Argues the need for a master's program of a year and a half for future college teachers. Principal requirements for such a degree and possible positions for holders of the degree are considered.

A study which aims to learn the effects of economic, sociological, and psychological factors on the attitudes of the college student toward college teaching as a career. Eighty-seven juniors and seniors were polled for data in the survey.


A survey of graduates of Antioch College who became employed by the college as faculty, to learn what factors influenced their decision to become teachers. The article discusses survey results and ways of encouraging this decision.


A panel composed of Earl J. McGrath of Columbia; Dean Mark H. Ingraham of Wisconsin; and Bower Aly of University of Oregon. Submits statements of criticism and evaluation of graduate programs of college teaching which lag far behind in fulfilling the aims of college teaching, which panel feels must be recognized as a specific profession.


Describes the University of Pittsburgh program designed to identify, encourage, direct, and assist outstanding students who might be interested in college teaching career.


Presents extensive statistical data from responses in interviews and to questionnaires designed to answer questions: Why do some individuals choose to become college teachers? Why do some of these decide to leave?

Presents analysis of information by teaching field and by present and former teachers. Subjects were Southern college and university instructors of psychology, English, and chemistry. Includes excellent chapters on other related information concerning life histories, job activities, motivations, values, personnel practices, working conditions, and career plans and objectives.

Reports the results of a survey by questionnaire of 240 college and university officials in California to determine what characteristics are needed for effective teachers in higher education. Includes discussion and recommendations for professional education programs and recruitment of talent.


Analyzes and reviews the literature and research in teacher education dealing with the following categories: (1) preparation, (2) certification, (3) supply and demand of college teachers, (4) rank, promotion, and tenure, (5) rating the college teacher, (6) salaries, (7) academic freedom, (8) retirement.


States that the literature indicates that concern is growing for what use has or has not been made of educational science—the findings and methods of professional education—in training programs for other professions such as dentistry and medicine.


Tabulated estimates of staff requirements in higher educational institutions in the United States. Compares number actually used during the period between 1945-1953 with the 1965 projected requirement. Estimates that by 1965 approximately one hundred persons would be required for every sixty required to staff higher educational institutions in 1956.


An extensive summary from three volumes of the American Association of Colleges for Teacher Education's inquiry into the doctorate in education.


A monograph reporting the results of a study of college and university attempts to solve the problem of instructional staff shortages during 1954-58. The information is analyzed by: type
and size of institution, twenty-one specific practices of employment, promotion, retention, and staff utilization. Excellent discussion of practices, comments by respondents, graduate education and training programs, and recruitment.


The author considers the feasibility of graduate training program for college teaching which will maintain higher quality in graduate education but will not prolong the time required for the present Ph.D.


Includes addresses by Theodore Blegen, Henry P. Hill, and Francis Keppel presented at a conference of graduate deans and faculty members of Southern graduate schools. Also reports of studies on preparation for college teaching in the humanities, social sciences, and physical and biological sciences.


A comprehensive study based on responses to questionnaires from 1,350 institutions. The major goal was to identify all newly employed full-time instructional personnel during 1957-58 and 1958-59 and to examine their backgrounds and degrees.


Contains a large sample of college students in four colleges who rate the characteristics of fifteen fields which attract college graduates. The image of college professor stressed intellectual competence along with sensitivity to artistic or aesthetic experience. Suggests that this image of professors held by college students is lacking in masculinity.


Analyzes and discusses four elements in college teachers' preparation: teachers, students, subject matter, and communication.

A study to gather data to determine: (1) staff requirement by fields and total by 1960-65-70, (2) characteristics of new faculty appointees regarding highest degrees held, rank appointment, and doctorate institution, (3) expected national and state supply of master's and doctoral degrees by fields and what percentage of these will go into teaching, (4) outlook for supply and demand in specific fields, and (5) suggestions for providing adequate numbers of staff members without loss of quality.


Attempts to produce some objective evidence regarding controversy over the preparation of teachers by relating the professional and academic credit hours and credit points of 800 Indiana public school teachers to two indices of teaching performance. Neither the professional nor the academic preparation of teachers was found to be related to either of the two indices of teaching performance.

Indices of teaching performance were: (1) Minnesota Teaching Attitude Inventory Scores and (2) principals' ratings of teachers.


The purpose of this study was to determine: (1) the relative importance of qualification of college teachers in the judgment of the academic dean and their most promising young teachers, (2) the extent of agreement between judgments by deans and teachers and between these judgments and those previously reported for presidents by Trabue, (3) what qualifications are representative of successful college teachers in the judgment of deans and teachers.

Presents statistical data which indicate that instructors with doctoral degrees have increased in number in every category of higher education institutions from 42.2 per cent to 49.6 per cent. The author discusses the reasons for this increase and submits that one cannot deduce a trend in the opposite direction from the single fact of the declining percentage of doctorates among new college teachers.


Analyzes the problems and inadequacies of educational programs for academic instructors at the junior college level. He proposes a program assuring a standard of quality in academic preparation and discusses certification in California for the junior college teacher.


Discusses the necessity of providing three educational experiences for the teacher of the college undergraduate in addition to normal course work: (1) creative team research, (2) practice in writing for reporting of research results, (3) conducting discussion, presenting material meaningfully, and effecting change in groups rather than using solely the lecture method.


A conference to interest college students in college teaching as a profession.


Describes in detail the activities, the developments, and the proposals on which future teacher education and practice should be based. An enumeration of the significant emphasis and developments includes the observations that: (1) general education of teachers receives emphasis; (2) further integration of theory and practice through professional courses is evident; (3) a better understanding of child growth and development is needed; (4) better programs of guidance and personnel practices are needed; and (5) group planning and action are coming into full recognition in institutions. This book includes contributions from twenty-nine authors. These contributions are referred to as studies; however, this term is used here extremely loosely.

A questionnaire study of 436 full-time teachers in forty-six junior colleges, forty-six administrators, and thirty-three college board presidents regarding actual and desirable preservice preparation and inservice activities of junior college teachers. Finds many gaps between qualifications desired by administrators and board presidents and qualifications possessed by teachers. Makes recommendations to teacher training institutions and to junior colleges.


Discusses the rationale for a "Master of Philosophy" degree. To the graduate work now required for the doctorate would be added other important requirements. The Master of Philosophy must demonstrate ability in research so that a dissertation of quality submitted to a properly constituted committee of the graduate school would qualify him for the Ph.D.


Submits the thesis that most college instructors will not be highly productive in scholarship and publication or research. Many of this group will be effective in teaching, and an educational program to better prepare them for college teaching is vital at this time. The Ph.D. should be a degree for the research scholar rather than an overall title which is becoming meaningless.
A study of the students at Union Theological Seminary. Students believe that diversity characterizes their student body. Discusses polarities in students, in individuals as well as among groups. Interesting discussion on differing views between faculty and students on composition and outlook of students.

Survey which finds that men who have not had clinical training show a lack of sense, tact, and understanding of the mentally disturbed patient.

An entire issue devoted to divinity students. "...the real key lies not in better methods either of recruiting students or of teaching them, but in the renewal of the church as a whole."

Bemoans early marriage among seminary students. Facilities for them are costly and not easy to obtain. Married students look for practical courses and how to get through school quickly and are not interested in adventuresome exploration. Students have been rounded off, or in the editor's phrase, "gentled" too early at the cost of lively inquiry and exploration of self and ideas. He states that the church does not need more domesticated ministers.

Proposes that important movement in theological education is that of clinical training. In some cases, training is more emphasized than theology; pastoral methods, psychiatry, and psycho-analysis have been stressed to the point that the program comes close to losing sight of original vocation.

Notes that seminary training may produce immaturity either by reason of the type of training or by withdrawal from the world. A training program that sets out deliberately to keep a person in a perpetual state of childlike dependence cannot possibly develop a professional who exhibits initiative and responsibility.

Grant, F. C. "Educating for the Ministry," *Christendom*, 3:360-72, Summer, 1948. (This journal later called *Ecumenical Review.*)

Explains that in certain fundamentalist and university circles the theology school is regarded as a technical institute to teach men the tricks of the trade. Author notes that education must include knowledge, skills, and attitudes. Too few students have a grounding in literature. Calls for students to preach more about Biblical religion than about current social problems.


A discussion on faculty responsibility in bringing students to a more adequate view of the ministry. Educational process is one of deepening life, and this occurs in the exchanges between students, as well as in the classroom.


States that theological education must address itself to the task of preparing the whole man for the work of the ministry.


Assumes that married students are no longer unusual; they are a part and parcel of modern theological education. Raises question of maturity. Married students may become more mature, but there is some evidence that immature students marry earlier.


Asserts that the belief that theological education should consist of the accumulation of courses, credits, and grades be replaced by the aim of stimulating students to read, listen, internalize, reflect, reformulate, create, discuss, even argue,
until the activity of theologizing—by which is meant the intensely personal process of thinking about all of contemporary life in a theological way—becomes as natural as breathing.


States that professional educational preparation disturbs previously established patterns of managing drive energies, securing essential satisfactions, and maintaining vital relationships. Anxiety is the result, causing an intense and unpleasant subjective state of disequilibrium. A career of professional preparation can be appraised in terms of developments, alterations, and relapses in the candidate's capacity to manage anxiety. Internalization of the process of professional formulation must occur so that the attributes are relatively durable when removed from an immediately supportive environment.


Suggests that diverse role of minister influences education to make contact with broader range of disciplines. Considerable amount of social and humanistic instruction is inevitable. Seminaries require a liberal arts degree as prerequisite for admission. A more functional emphasis is needed in seminary curriculum and in the method of instruction. Spread of scientific information, dissemination of facts and theories concerning economics, politics, and social questions, and intense interest in personal problems require faculties with diversified gifts and education. Stresses need for large number of specialists as well as general practitioners. Vast multiplication of specialized courses occurred, due to broadening of the minister’s role. Problem: splintering curriculum offers no integrated professional training in classroom and field work, but a mosaic of fragments.


Includes chapters on trends, faculty-student ratio, faculty preparation. Sees decline over 200 years in quality of men recruited to the Protestant ministry; hence, greater emphasis is needed on selective recruiting. Discusses recent trends in courses of study: (1) tendency to relate studies to contemporary life, (2) trend to introduce non-theological disciplines which seem necessary to interpret theology and as background for practical work, (3)
introduction of new disciplines in pastoral theology, (4) more emphasis on learning by doing, and increased participation by schools in the work of the church, (5) tendency to develop prescribed curriculum consisting of many introductory courses. Theological schools find it difficult to acquire and keep strong faculties. Excellent material on sources, problems of salary, self-improvement, etc. Chapters on students are based on interviews in a number of seminaries.


Comments that H. Richard Niehbur feels that theological education "is becoming too professional," too technical, and is neglecting cultivation of the fact that resources always must spring from God.


Discusses motivation in young people. States that they express greater interest in politics than in theology. Mixed motives are noted among seminary students. Students conceive of the parish ministry in pedestrian terms. States that, "We cannot afford to have the bulk of our best minds turned away from the pastorage into teaching." Notes that theological schools convey the idea that teaching and scholarship are more important than the pastorage.


Unsigned evaluations by seminary students of their life and studies.

In "Motivated by What?," student writer takes middle way between idea that seminarians are now a "beat generation" in search of faith, and the idea that seminarians are young organization men seeking techniques and the easy way through, largely because they are now married and quite settled. Writer blames neither seminarians nor married students, but notes that "ecclesiastical Babitry" is part of "cultural Babitry." Another student notes that seminary students have rejected the inherited concept of social action as a program of the church.


States that the seminary seems headed in the same direction as ordinary secular graduate schools, in competition with other seminaries for academic standing, and sees this at the expense of
individual who study there. Author advises that seminaries should practice what they preach--they preach human recognition but do not practice it with respect to students.


Notes growing difficulty in recruiting young men to the ministry since prestige of law and medicine competes for good material. Church does not communicate opportunities for service as does the Peace Corps in the minds of young people. Author notes that young people want security early, thus constituting a problem for a profession which demands lengthy and rigorous education.


States that of all the schools which use Harvard Health Services, the two which usually have the highest percentage of students using psychiatric services are Harvard Divinity and Episcopal Theology School. Author notes that men of the cloth are deeply involved in existential questions in their work; hence, they need to work with a psychiatrist to understand themselves. Author rejects idea that seminarians are more sensitive to personal and social tensions than are other good students. Also finds that second reason for use of psychiatric services is the anomalous position of the church in the society of our time. Third reason for psychiatric pressures is that students have doubts about their vocation that are more excruciating than those of medical or law students.


Treats issues in philosophy of theological education: proper balance and relationship between the subject-matter disciplines and practical experience in professional preparation. Outlines specialization versus generalization. This author is on the side of generalization.


A review by Van Dusen, president of the Union, of characteristics and problems of students. Concludes: (1) This generation broods about its world. (2) It is denied normal and healthy expression of social radicalisms since the Communists have taken that over. (This is pre-civil rights era.) (3) For this
generation, corporate standards of moral behavior are dissolved; private standards remain. (4) Radical individualism is embraced but there is no recognition of personal responsibility for corporate or social ethos. Students say that their lives are full of paradoxes. Author notes that students are taken up with existentialism and are very self-preoccupied. This leaves the individual wallowing in subjectivism and contradicts historical inquiry and the search for objective truth.


Forty-one autobiographical statements by divinity students, both young and old. Excellent for presocialization materials.