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ABSTRACT

Embracing 750 items on adult education research and investigation (mostly dated 1969 or 1970), this annotated bibliography covers adult learning characteristics, program planning and administration, learning environments, instructional methods, curriculum materials and instructional devices, personnel and staffing; education of specific clientele groups, special program areas, professional and technical continuing education, management and supervisory development, occupational training, labor education, institutional sponsors, and international perspectives in adult education. Sections within the above categories are identified by four digit numbers, with a sequential item number for each entry. Cross references are made to other closely related sections (four digit classification numbers) and to other entries throughout this research register. Also included are an author index, a note on availability of documents, an ERIC Document Reproduction Service order blank, and a listing of other publications by the ERIC Clearinghouse on Adult Education. (LY)

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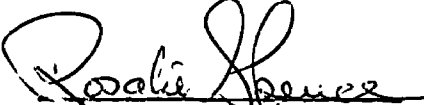
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RESEARCH AND INVESTIGATION IN ADULT EDUCATION

1970 Annual Register

Roger DeCrow and Stanley M. Grabowski
Editors

ERIC Clearinghouse on Adult Education
and
Adult Education Association of the U.S.A.

HA 000 634



CLEARINGHOUSE ON ADULT EDUCATION

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ROGER DeCROW, DIRECTOR / STANLEY M. GRABOWSKI, ASSISTANT DIRECTOR

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A B S T R A C T

An annotated bibliography including 750 items of research or investigation in adult education, mostly dated 1969 or 1970. They cover adult learning characteristics, program planning and administration, learning environments, instructional methods, curriculum materials and instructional devices, personnel and staffing, education of particular groups, program areas, professional and technical continuing education, management and supervisory development, labor education, occupational training, institutional sponsors, and international perspectives in adult education. Included is an author index, a note on availability of the documents, an order blank for the ERIC Document Reproduction Service, and a listing of other publications of the ERIC Clearinghouse on Adult Education.

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INTRODUCTION

This is the sixteenth annual compilation of research and data gathering investigations in adult education. From 1955 through 1967, each Summer issue of Adult Education carried the review. In 1968 it became a separate publication of the Adult Education Association in cooperation with ERIC/AE.

Research and Investigation in Adult Education; 1968 Annual Register. \$2.50 from Adult Education Association, also available in microfiche \$0.50 and hardcopy reproduction \$4.60 from ERIC Document Reproduction Service. Order No. ED 023 993.

Research and Investigation in Adult Education, 1969 Annual Annual Register. Available in microfiche \$0.75 and hardcopy reproduction \$7.60 from ERIC Document Reproduction Service. Order No. ED 030 774.

Seven hundred fifty entries are classified by a rough and ready set of categories used for sorting documents in ERIC/AE. Each section of this classification is identified by a four digit number. Each entry has also a sequential item number. Cross references are to other closely related sections (four digit classification numbers) and to other entries (item numbers) which may be scattered throughout the Register.

A similar compilation of 505 adult education dissertations from the five year period, 1963 through 1967 is available from the Adult Education Association, which will also publish early in 1971 a supplement covering the years 1968 and 1969.

Many documents in this Register have been reported in the following two monthly catalogs of the ERIC system which are the best means of keeping up with the current research and development literature in all parts of education.

Research in Education
Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402 for \$21.00 per year
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Current Index to Journals in Education

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Many of the listed reports may be obtained in microfiche or hard-copy from the ERIC Document Reproduction Service. We have attempted to give a reliable source for the others. Please read carefully the note on availability of documents, for ERIC/AE cannot supply copies. Do ask our advice, however, as a last resort, should you have some harrowing difficulty in obtaining a particular document.

Roger DeCrow, Director
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0000 INFORMATION SOURCES

0015 Bibliographies

1. ERIC PRODUCTS, 1968-1969; A BIBLIOGRAPHY OF INFORMATION ANALYSIS PUBLICATIONS OF THE ERIC CLEARINGHOUSES, JULY 1968 - JUNE 1969. ERIC Clearinghouse on Library and Information Sciences, Minneapolis, Minn. 1969. 34p. EDRS Order Number ED 034 089; price in microfiche \$0.25, in hard copy \$1.80.

Bibliography of those publications of the ERIC clearinghouses reflecting information analysis activities. It includes all substantial bibliographies, review papers, and state-of-the-art publications identified as ERIC publications.

See also: SECTION 0950 ADULT EDUCATION RESEARCH REVIEWS; Item 340 abstracts on continuing education of women; 524 abstracts on management development; 326 review and abstracts on education for older adults.

0150 LEGISLATION

See: SECTION 0350 STUDIES AND PLANNING - NATIONAL LEVEL; 6550 OCCUPATIONAL TRAINING UNSKILLED, DISADVANTAGED; 8500 FEDERAL GOVERNMENT; Item 442 compliance of HEA Title I programs with legislative intent; 129 history of GI Bill in Indiana; 640 state laws related to driver education.

0175 FINANCE

2. THE CONCEPT OF ADULT EDUCATION IN THE AFFLUENT SOCIETY; FINANCIAL ASPECTS. Council of Europe, Strasbourg (France). Council for Cultural Cooperation. Course organized by the Swiss Government at Rueschlikon, 7-12 October, 1968. Feb. 1969. 28p. EDRS Order Number ED 038 602; price in microfiche \$0.25, in hard copy \$1.50.

Created to develop recommendations in alternative means of organizing and financing adult education in European countries, this course was preceded by a preliminary survey of delegates concerning financial arrangements in their respective nations: the Netherlands, Belgium, Luxembourg, the United Kingdom, France, West Germany, Norway, Sweden, Denmark, Austria, Iceland, Ireland, Italy, Switzerland, Malta, Cyprus, and Turkey.

See also: item 599 relation of Federal to other funds in vocational re-training programs; 702 financial survey of Western state extension divisions; 160 financial practices in university residential centers.

0200 PARTICIPATION DATA

See: SECTION 1300 PARTICIPATION PATTERNS OF ADULTS; item 713 compendium of Federally sponsored programs with enrollment in each; 735 statistics of public school adult education; 747 Quebec province; 496 employee training in the Federal service; 700 higher adult education in Pennsylvania; 388 students and staff in adult basic education; 403 adult basic education in New Hampshire; 192 foreign and U.S. enrollment in correspondence study.

0250 STUDIES AND PLANNING - LOCAL LEVEL

3. A PLAN FOR DEVELOPING A PROGRAM OF ADULT EDUCATION TO MEET THE NEEDS OF A LOCAL COMMUNITY. Smith, Harold K. Rutgers, The State University, New Brunswick, N.J. Ed.D. Thesis. 1968. 156p. University Microfilms, Order No. 69-1059; price in microfiche \$3.00, Xerography \$7.40.

Using local and national data, this study examined adult education program offerings in East Orange, New Jersey, potential participants' needs and interests, and program needs reported by business and industrial leaders. A plan was proposed for an appropriate community wide program. Data from public school adult education programs in 142 cities covered time devoted by adult directors to adult school duties, responsibility to superintendents of schools, adult counseling, publicity, community councils, advisory committees, costs, and educational objectives. Local data covered age and sex of respondents, educational background, convenient times of the day or week, and preferences as to program location.

4. COUNTY STAFF OR AREA STAFF? McIntyre, William J. In Journal of Extension; v8 n2 Summer 1970. p33-41.

Compares the multi-county with individual county systems using variables including clientele's reactions to the two systems.

5. AN INVESTIGATION TOWARD THE POSSIBLE EXPANSION OF THE ADULT CONTINUING EDUCATION PROGRAM IN WHITLEY COUNTY, INDIANA. Haworth, Richard Julius. Indiana Univ. M.S. Thesis. Sept. 1968. 85p. EDRS Order Number ED 036 740; price in microfiche \$0.50, in hard copy \$4.35.

The major objectives of this study were to determine the adult education needs of Whitley County, Indiana; to ascertain how well these needs were being met; and to propose one or more approaches to enhance already existing efforts. Of the 352 randomly selected homes included in the sample, 268 returned completed questionnaires. Of the 268 72% selected one or more of the 41 activities listed. When asked to itemize academic credit courses desired, only 20% expressed an interest. The noncredit classes were identified under the headings of arts and crafts, sports, culture, and skills. The activities mentioned most frequently were bowling and knitting. Three out of every 10 respondents indicated that at least one adult in their family was interested in one or the other, or both activities. Other instructional series desired by at least 20%



of the families included Christmas decorations, flower arrangements, refinishing furniture, and upholstering furniture. The favorable response to the noncredit courses listed in the questionnaire served as an indicator of at least possible initial success with a planned on-going adult continuing education program. In addition, there seems to be sufficient enrollment predicted in a wide range of noncredit classes to justify establishing other courses.

6. EDUCATIONAL PARTICIPATION OF GUELPH ADULTS. Blackburn, Donald J. and Warlow, Glen L. Paper presented at the Annual Convention of the Canadian Society of Rural Extension, Saskatoon, Saskatchewan, Aug. 27, 1969. 16p.

Research on adults' participation in sponsored and self-directed educational activities was carried out among a random sample of the voting population of Guelph, Ontario, Canada. A large proportion of Guelph adults with the following characteristics were found to participate in educational activities; under sixty years of age; high school graduates or greater educational attainment; non-farm or urban backgrounds; family income of \$10,000 or more; migrated to Guelph; and currently or formerly a leader of a youth organization.

7. CONTINUING EDUCATION RESEARCH COMMITTEE. Sudbury Board of Education, Ontario, Canada. Text in English and French. 1969. 80p.

A survey is presented of adult education in the Sudbury, Ontario, area. It covers extension courses by Laurentian University and Cambrian College; public school adult education evening classes in academic and other subjects (including English and French); denominational lay groups; service clubs, ethnic groups, and miscellaneous organizations; and manpower development. Community services are also noted, followed by those of labor and industry.

8. A SURVEY OF ADULT EDUCATION PROVIDED BY PUBLIC INSTITUTIONS IN THE CITY OF CALGARY. Shields, Thomas Dionne. Calgary Univ., Alberta. M.Ed. Thesis. 1969. 121p. Available from Interlibrary Loan Service, University of Alberta, Edmonton, Alberta, Canada; price in microfilm \$7.64.

The main purpose of this survey was to describe adult education programs offered by public agencies and institutions in the city of Calgary as they existed in 1968. No attempt was made to compare these agencies and institutions, nor was there an attempt to survey private agencies and institutions offering adult education programs. The basis of the study was an interview schedule used as the guideline for each interview with the adult education administrators of the public agencies. All of the administrators were interviewed and of the 13 public agencies originally included in the survey, 10 were actually involved in adult education programming. Thirty-nine facilities were found to be in use for adult programs. They are located in all geographic areas of Calgary, and 640 adult education courses of various types are offered; 907 instructors are employed in the program, and the average class size is 10-23 students. Fees range from \$4 to \$180 per course, and agencies reported that they met from 50 to 100% of their instructional costs from fees. Informal cooperation among agencies was common, but most administrators were of the opinion that duplication of courses could be eliminated by further cooperation.

See also: item 8182 merger of two university centers; 450 economic profile St. Louis poverty area; 93 social class influence on participation in middle-sized city; 565 industrial training in Cleveland; 151 manpower resources of Tampa Bay area; 614 occupational training of disadvantaged in Milwaukee; 568 on-the-job training in Milwaukee; 577 blue to white collar job mobility in Milwaukee; 154 socio-economic survey East Kootenay area in British Columbia; 606 job training in Detroit.

0300 STUDIES AND PLANNING - STATE AND REGIONAL LEVEL

See: item 706 adult education in Montana university system; 703 technology needed to link New England universities; 747 adult education in Quebec province; 566 advanced occupational training in Oklahoma; 100 educational interests of Iowa household heads; 684 out-door education in mid-west cities; 498 employee training in Oregon state government; 643 history of agricultural evening schools in Iowa; 594 work, training and welfare programs in 10 states; 737, 736 inventory of continuing education in Pennsylvania secondary schools; 700 higher adult education in Pennsylvania; 403 adult basic education in New Hampshire; 427 GED programs in Colorado; 384 education in Arizona correctional institutions.

0350 STUDIES AND PLANNING - NATIONAL LEVEL

9. THE IMPLICATIONS OF SOCIAL AND ECONOMIC CHANGES FOR EDUCATIONAL POLICY IN THE NEXT TWO DECADES -- A PILOT STUDY. National Planning-Association, Washington, D.C. Oct. 1968. 78p. EDRS Order Number ED 027 611, price in microfiche \$0.50, in hard copy \$4.00.

This report summarizes the National Planning Association's pilot study of the implications of economic and social change for educational policy in the next two decades. Research is concentrated on changing manpower needs and on the challenges they are likely to present for designing the educational systems of the 1970's and 1980's.

10. THE IMPLICATIONS OF SOCIAL AND ECONOMIC CHANGES FOR EDUCATIONAL POLICY IN THE NEXT TWO DECADES -- A PILOT STUDY. WORKING PAPERS. National Planning Association, Washington, D.C. Oct. 1968. 622p. EDRS Order Number ED 027 612; price in microfiche \$2.50, in hard copy \$31.20.

The titles of the working papers are (1) "Education in Low-Income Areas During the Next Two Decades." (2) "The Systems Approach to Educational Systems Planning." (3) "Changes in Educational Technology and Their Implications for Education in the Next Two Decades." (4) "Economic Changes Manpower Requirements, and Their Implications for Educational Policy in the Next Two Decades." (5) "Educational Change for Manpower Development," and (6) "The Social Bases for the Education of the Negro American Urban Poor During the Next Two Decades."

11. CORBETT HOUSE: THE ORIGINS OF THE CANADIAN ASSOCIATION FOR ADULT EDUCATION AND ITS DEVELOPMENT DURING THE DIRECTORSHIP OF E.A. CORBETT, 1936-1951. Armstrong, David P. Toronto Univ. M.A. Thesis. 1968. 203p.

This work reviewed events and circumstances leading to formation of the Canadian Association for Adult Education (CAAE) in 1935, traced its development during World War II and the ensuing period of reconstruction, and discussed forces that shaped the CAAE up to 1951, when E.A. Corbett, the first director of the CAAE, retired from full time service. The initial role of W.J. Dunlop of the University of Toronto, and the importance of financial and other early support by the Carnegie Corporation, were documented, followed by steps leading to the choice of Corbett in 1936. Prewar publications, broadcasting activities, and experimental rural education efforts (an abiding interest of his) were described, along with emerging financial problems which eventually culminated in 1945. An account of Corbett's wartime public affairs educational work through such channels as the journal "Food for Thought" and the Canadian Legion Educational Services, was also given; Corbett stressed adult education as a means of promoting citizenship and safeguarding civil liberties. During 1945-51, Corbett gradually let control of the CAAE pass to the Joint Planning Commission, while he concentrated on public relations, fund raising, and writing.

See also: item 744, 745 inventory of Federal educational programs; 742 private vocational schools; 697 higher adult education; 715 assessment of agricultural extension; 551 labor education; 554 vocational and technical education; 641 long range planning for U.S. agriculture; 587 manpower problems of cities; 573 national survey of volunteers; 451 community action poverty programs; 372 evaluating alternative anti-poverty measures; 589 equal opportunities in apprenticeship; 553 manpower requirements of the 1970's; 588 disadvantaged in private industry; 248, 249, 251 reports of President's Task Force on Communications Policy; 244 video-tape in industrial training; 263 two-way radio in extension; 471 continuing education of psychiatrists; 481 in-service training of school personnel; 432 adult degree programs; 468 educational needs of hospital administrators; 735 public school adult education statistics; 670 health and safety education in university extension; 667 NET musical programming; 463 continuing education of engineers; 685 outdoor recreational resource development; 640 driver education and related laws; 689 managers overseas; 466 correspondence study in hospitals; 511 training of commercial pilots; 13 adult education in the Confederate States; 12 adult education in colonial America; 567 vocational training in Canada; 252 ETV in Canada; 750 New Zealand; 2 financing European adult education; 157 Volkshochschule in Germany; 748 history of adult education in Great Britain; 550 management education in West Pakistan; 144 conceptual analysis of the role of adult education in nation building; 725 extension systems in developing nations.

0500 HISTORY

12. ADULT AGE AND THE EDUCATING OF ADULTS IN COLONIAL AMERICA. Anania, Pasquale.

California University, Berkeley. Ph.D. Thesis. 1969. 467p. University Microfilms, Order No. 70-6053; price in microfiche \$5.95, Xerography \$21.15.

This is a report of documentary research into the nature of adulthood in England and America from about 1607 to 1776 and on how colonial adults were educated. Research on this subject is inadequate and starts from a misconception of colonial ideas of age. English and European Colonials saw adult age as a growth process in which the age-grades of adulthood were civil and social rights. The common law equivalent of adult age was the "age of discretion." This, in females, was 12; in males, 14. Thus over the next nine (female) to 11 (male) years, they lost specific social disabilities and gained reciprocal adult ages. During the 17th century in England and America, all college education and all apprenticeship (except that of involuntarily bound apprentices) was adult education. Colonials modified traditional English apprenticeship and poor laws to foster education for literacy as well as vocational skills. Adults sought knowledge from: exploration, evening schools for literacy, tutorials to prepare adults for college, town libraries, and the use of self-help teaching books. In the 18th century, there was continuing development -- literacy provisions of apprenticeship laws in various colonies, expansion of the curriculums of evening schools, a lecture movement, subscription libraries, self-teaching books, college tutorials, and so on.

13. A STUDY OF THE TYPES OF ADULT EDUCATION EXISTING IN THE CONFEDERATE STATES OF AMERICA FEBRUARY, 1861 to MAY, 1865. Puder, William H. Florida State University, Tallahassee. Ph.D. Thesis. June 1968. 333p. University Microfilms, Order No. 70-16,339; price in microfiche \$3.00, Xerography \$7.80.

This thesis, an exploration of the several types of adult education existing within the Confederate States of America from February 1861 to May 1865, describes the socioeconomic conditions in the Confederacy that generated adult education activity, identifies certain of the personalities who recognized the need and made efforts to encourage the education of adults in the Confederacy, and isolates and describes the types of adult education that were established. Among the latter were: apprenticeships on the farm and in the factory; extension training of Confederate Army physicians by means of discussion groups and lectures; religious instruction of Confederate soldiers by use of tracts and newspapers; indoctrination of Confederate civilians to the needs of the Medical Corps for volunteer services; on-the-job training of Confederate physicians; and educative use of newspapers and special lecturers.

See also: item 742 Federal educational policies; 551 labor education; 351 movement for education of women in 1830's and 40's; 715 agricultural extension; 697 higher adult education; 492 Iowa State University programs for church leaders; 261 Station WNYC in New York; 717 Kansas Extension Service 1868-1964; 643 agricultural evening schools in Iowa; 709 Brigham Young University adult programs; 706 adult education in Montana University System; 11 Corbett and the Canadian

Adult Education Association; 748 Germany to 1871; 32 adult education research in Germany; 157 German Volkshochschule; 156 Finnish folk high schools; 748 Great Britain; 582 Mechanics Institutes in Great Britain; 346 Girton College for women; 750 New Zealand; 188 medieval correspondence study; 159 folk high school in Scandinavia and U.S.; 233 participation training in Japan.

0900 ADULT EDUCATION AS A FIELD OF STUDY

14. THEORY BUILDING SEMINAR, MAY 21-25, 1969. Fales, Ann. 1969. 43p. EDRS Order No. ED 034 928; price in microfiche \$0.25, in hard copy \$2.25.

This workshop was undertaken to exchange, through face to face interaction, theoretical formulations on adult education and the social sciences; and to provide adult educators with opportunities to learn more about theory building principles and strategies. Papers for the first day discussed research dissemination and utilization, measurement of participation, interrelationships between theory and practice, and concepts in extension education. Other papers dealt with principles of adult learning, organizational structures and changes, kinds of theories and resources, adult learning projects, interactions between people and materials in instructional situations, margin theory (pertaining to the adequacy of an adult's intellectual resources for maintaining autonomy), and an approach to model building based on the elements of family, community, work institution, ego or personality, and one's physical being. A summary discussion was held to evaluate the workshop and to decide whether to schedule another such meeting. (Appendixes include seminar participants and 20 references. Appendix A removed because of poor reproducibility.)

15. TOWARD A THEORY OF PRACTICE IN EDUCATION WITH PARTICULAR REFERENCE TO THE EDUCATION OF ADULTS. Mezirow, Jack. Paper presented at the Adult Education Research Conference, Minneapolis, Minnesota, February 27-28, 1970. Aug. 1969. 28p. EDRS Order No. ED 036 755; price in microfiche \$0.25, in hard copy \$1.50.

Theorizing in adult education has been primarily concerned with questions of social philosophy which contribute little to improving the quality of professional activity. This essay suggests a rationale and strategy for developing a research based body of theory, indigenous to adult education and of practical utility to practitioners. Central to the reality upon which such theory must be constructed is a presupposition that an individual constructs meaning through an active process of interaction with others and directs his behavior accordingly. Educational process is an organized effort to assist an individual to construct meanings in a way by which he will be more effective in solving problems.

16. SOCIAL SCIENCE AND ADULT EDUCATION. Duke, Christopher & Marriott, Stuart. In Studies in Adult Education; v1 n1 April 1969. p45-64.

A need is seen in Great Britain and elsewhere for more rigorous, analytical social science research, especially in educational sociology, to undergird the emerging discipline of adult education. Ways in which adult education and its activities are integrated into the larger social structure, and how they relate to the institutions of a highly developed society, are among the useful areas of investigation for a sociology of adult education. The document includes 30 references.

17. TOWARD A CONCEPTUALIZATION OF LEADERSHIP FOR CHANGE. Robinson, Russell D. In Adult Education; v20 n3 Spring 1970. p131-139.

This paper concerns a conceptualization of leadership for change in adult education, i.e., how change can be effected and who brings it about. The change process itself is delineated in terms of research on the subject. Personal influence and opinion leadership, as these affect the change process, are examined as well as resistance forces, adoption, diffusion, and perpetuation of change. The change leader's helping and leadership roles are detailed. The author advises that this research cannot provide all the answers needed for adult education change leadership. More research regarding communication barriers between social classes, class value difference affecting group participation versus spectatorship, effective learning approaches to the lower socio-economic adult, impoverishment barriers to learning, and instruments for measuring these are needed before a definitive, reliable methodology can be provided to leaders of change in adult education.

See also: item 95 semantic study of concept "involvement"; 300 sociological characteristics of doctoral adult educators; 449 sociological concepts in extension staff training; 75 implications of Maslow's needs theory; 34 implications of Snygg-Combs phenomenological theory of perception.

0950 Adult Education Research

18. SEQUENTIAL RESEARCH NEEDS IN EVOLVING DISCIPLINES OF SOCIAL PRACTICE. Knowles, Malcolm S. 1969. 6p. EDRS Order No. ED 038 589; price in microfiche \$0.25, in hard copy \$0.40.

The author suggests that the emerging fields of social practice (such as recreation, social work, and adult education) must all go through a sequential pattern of research needs, first superficially, and then in ever deeper cycles. The six phases of these research needs are: definition of the field (survey and descriptive studies, census studies, case reports, demographic studies); differentiation of the field (comparative and exploratory studies, reports of artistic experience, need analysis); standard-setting (normative-descriptive studies, evaluative research, instrumental studies); technological refinement (experimental research, case studies, theory-building, action research); respectability and justification (historical studies, biographical research, field-evaluative and survey-descriptive studies, comparative studies); and understanding of the dynamics of the field (institutional studies, environmental studies, force-field analysis, systems analysis, and prediction studies).

19. NEW DIRECTIONS IN ADULT EDUCATION RESEARCH. CONTINUING EDUCATION FOR ADULTS, 139. DeCrow, Roger. August 31, 1969. ERIC Clearinghouse on Adult Education, Syracuse, N.Y.

In this report, some of the new trends in adult education research are illustrated in a selected annotated list of 29 studies. In an introduction, the emergence of more and better research during the 1960's is contrasted with an even greater growth in research needs. Consideration is then given to the increased interest in why adults learn, research on program planning processes, and the rising concern with staffing problems, especially the selection and training of teachers of adults. Also of interest are cost benefit analysis and related studies; the development of an international perspective in research and the beginnings of true comparative studies; a more refined and rigorous research methodology; and the greater attention being paid to research planning, analysis, and synthesis.

20. PEDAGOGIA VZROSLYKH, EE PREDMET I ZADACHI. (PEDAGOGY OF ADULTS, ITS SUBJECT AND PROBLEMS.) Darinsky, Anatol. In Convergence; v3 n1 1970. p39-44.

Director of the Research Institute of Adult Education in Leningrad, discusses the program of the Institute and outlines research needs in the field of adult pedagogy.

21. REPORT OF THE WORKSHOP ON RESEARCH IN ADULT EDUCATION IN CANADA (SATURDAY, FEBRUARY 8, 1969). Canadian Association for Adult Education, Toronto (Ontario) Feb. 1969. 10p.

Problems specific to the Canadian setting with special references to the problems presented by the Canadian environment, and the resources available for supporting important research.

22. DIE ERWACHSENENPAEDAGOGISCHE FORSCHUNG AM PAEDAGOGISCHEN FORSCHUNGSINSTITUT UND ANDEREN INSTITUTIONEN IN NORWEGEN (ADULT EDUCATION RESEARCH IN THE INSTITUTE OF EDUCATIONAL RESEARCH AND OTHER INSTITUTIONS IN NORWAY). Nilsen, Egil. Text in German; In Internationales Jahrbuch der Erwachsenenbildung, ed. By Joachim H. Knoll. 1969. 16p.

The Institute of Educational Research is the only institute in Norway where systematic instruction at university level is given in general adult education, which has its own university lectorship with adult education as its special subject, and which gives its students the chance to specialize in adult education. Despite this, no research in adult education has been produced by the Institute as such except for a few research projects by various members of the staff, and a number of student essays. The Joint Association for Study Work has taken the initiative in setting up a combined project consisting of a historical, a comparative, and two psychological and sociological research projects from which three publications have appeared. Adult education research is also being carried out at the Institutes of Psychology and Sociology at Oslo University. A center for industrial education research is to be found at the Norwegian College of Trade. Two of the investigations from there have appeared in print. Adult education research is conducted at the Norwegian College of Technology and the Agricultural College. Independent institutes have had adult educational research projects, one of which appeared in book form and the other, as a journal article.

23. DIE FUNKTION DER PAEDAGOGISCHEN ARBEITSTELLE DES DEUTSCHEN VOLKSHOCHSCHULVERBANDES (DVV) IM RAHMEN DER FORSCHUNGSAUFGABEN FUEER DIE ERWACHSENENBILDUNG (THE ROLE OF THE PEDAGOGICAL WORKING CENTER OF THE GERMAN ASSOCIATION FOR ADULT EDUCATION...IN THE SPHERE OF RESEARCH TASKS FOR ADULT EDUCATION). Tietgens, Hans. Text in German; In Internationales Jahrbuch der Erwachsenenbildung, ed. by Joachim H. Knoll. 1969. p.160-80.

The Pedagogical Working Centre (Paedagogosche Arbeitstelle - PAS) of the German Association for Adult Education has the role of coordinating scientific research and adult education. To this belongs the collection of material and documentation, the encouragement and promotion of research projects, the development of working aids, and the initial and further training of full time professional coworkers. It attempts to elucidate the practical consequences of scientifically developed views and to put theoretical systems or detailed empirical research onto an intermediate level concerned with everyday problems. The task of coordination is particularly complex because, due to interdisciplinary difficulties, various scientific methods and viewpoints have to be brought into relation with one another, and because research interests mainly lay with young people and school up to now. Among the wealth of possibilities, the PAS has emphasized the approach through the sociology of education and the theory of learning to research. The PAS carries out the task of coordination through publications, duplicated working aids, further education seminars, and specific information or advice. With all its emphasis on present and future tasks, the PAS attempts to preserve the link to the past by publishing doctoral theses.

24. SOURCES IN EDUCATIONAL RESEARCH; A SELECTED AND ANNOTATED BIBLIOGRAPHY VOLUME I: PARTS I-X. Manheim, Theodore; and others. 1969. Available from Wayne State University Press, Detroit, Michigan 48202.

This annotated bibliography provides an introduction to research in various fields of education. Only those titles considered most useful to the graduate student or advanced undergraduate have been selected.

25. VALIDITY OF QUESTIONNAIRE DATA: REPORTED AND OBSERVED ATTENDANCE IN AN ADULT EDUCATION PROGRAM. Hagburg, Eugene C. U.S. Post Office Dept., Washington, D.C. Postal Service Inst. In Public Opinion Quarterly; v32 n3 Fall 1968. p453-456.

The accuracy of ?-responses dealing with attendance in an adult education program was tested. Data were obtained from 227 local union leaders participating in a long-term Union Leadership Program conducted by Ohio State U. Responses were compared with the official attendance records which were obtained from the instructors. A significant difference between reported & observed attendance is noted. Only 36% accurately reported their attendance during the 16 classes of the adult education program. Differences were similar for each of the 2 8-week periods, although in 20 cases R's under-reported in 1 period & over-reported in the other. It appears that the time factor exerts little influence on the amount of accurate reporting & on over-reporting, but it does have some influence on the amount of under-reporting. Contrary to the expectations, however, there is more under-reporting for the later period (15%) & less during the 1st period (6%). Further response is needed to clarify the reasons for this.

See also: item 569 research needs in North Carolina vocational education; 94 theoretical framework for participation research; 422 needed research in functional literacy; 143 commentary on research in community development and social action; 716 evaluation of a Cooperative Extension research center.

0990 Reviews, Bibliographies, Information Sources

26. RESEARCH AND INVESTIGATION IN ADULT EDUCATION: 1969 ANNUAL REGISTER. DeCrow, Roger, Ed. & Grabowski, Stanley M., Ed. ERIC Clearinghouse on Adult Education, Syracuse, N.Y. Sept. 1969. 150p. EDRS Order No. ED 030 774; price in microfiche \$0.75, in hard copy \$7.60.

An annotated bibliography includes 490 items of research or investigation in adult education, mostly dated 1968 or 1969.

27. ABSTRACTS OF PAPERS PRESENTED TO THE NATIONAL SEMINAR ON ADULT EDUCATION RESEARCH (TORONTO, FEBRUARY 9-11, 1969). ERIC Clearinghouse on Adult Education, Syracuse, N.Y. July 1969. 46p. EDRS Order No. ED 030 003; price in microfiche \$0.25, in hard copy \$2.40.

Abstracts are presented of 34 papers on adult education research. They cover adult dropouts, age differences in learning, older adults, motivation and orientations of adults, interpersonal relationships; adult educators, change agents, and leaders in Cooperative Extension; teacher training and multi-media instruction; diffusion of innovation, adoption, and attitude change; professional continuing education of the clergy and retirement education; equivalency tests for adults; curiosity; research utilization; and two historical reviews--of adult education in the Confederacy and of lyceums.

28. DIGEST OF PAPERS PRESENTED TO THE ADULT EDUCATION RESEARCH CONFERENCE, February 27-28, 1970, Minneapolis. ERIC Clearinghouse on Adult Education, July 1970. 53p. EDRS Order Number ED 039 377; price in microfiche \$0.25, in hard copy \$2.75.

Twenty-seven papers on agricultural extension, adult basic education, programmed instruction, program planning, general education, research problems, motivation, behavior and attitude change, university extension, adult educators, and other areas of concern within adult education were presented at this research conference. Most of these papers are available from the ERIC Document Reproduction Service.

29. DIRECTORY OF EDUCATION STUDIES IN CANADA. ANNUAIRE D'ETUDES EN EDUCATION AU CANADA, 1968-69. Spears, Wendy, Comp. Canadian Education Association, Toronto (Ontario). November 1969. 89p. Text in English and French. EDRS Order No. ED 036 772; price in microfiche \$0.50, in hard copy \$4.55, also available from The Canadian Education Assn., 151 Bloor St. W., Toronto 5, Canada (\$3.00).

Embracing studies by graduate students and academic staff as well as by provincial departments of education and other organizations, this annotated bibliography lists about 625 different Canadian studies in education.

30. RESEARCH RELATED TO ADULT EDUCATION CONDUCTED AT THE UNIVERSITY OF BRITISH COLUMBIA. Dickinson, Gary, Comp. British Columbia Univ., Vancouver. December 1968. 69p. EDRS Order No. ED 028 364; price in microfiche \$0.50, in hard copy \$3.55.

This annotated bibliography of University of British Columbia research relating to adult education lists 232 items, including 32 abstracts of theses and dissertations.

31. ADULT EDUCATION; THEORY AND PRACTICE. Council of Europe, Strasbourg (France). Council for Cultural Cooperation. 1969. 33p. EDRS Order No. ED 038 599; price in microfiche \$0.25.

A course organized by the United Kingdom and the University of Liverpool aimed at reviewing research undertaken in European countries, and examining its significance for the practice of adult education in different countries and the possibilities of cooperative action. The three main areas of research identified were: the approach to adult education, the processes of adult education, and the results of adult education.

32. FORSCHUNGEN UEBER ERWACHSENENBILDUNG IN DUETSCHLAND (RESEARCH ON ADULT EDUCATION IN GERMANY). Strzelewicz, Willy. Text in German; In Internationales Jahrbuch der Erwachsenenbildung, ed. by Joachim H. Knott. 1969. p139-59. 21p.

The article reviews the most important results of studies on adult education in West Germany from the point of view of educational sociology, and indicates problems and unsolved questions. The beginnings of research into popular education in the Weimar Republic are sketched. New Anglo-American research methods have been applied, in particular by Wolfgang Schulenberg in his "Hildesheim Project," published as a book in 1957. For the first time, not only the motives of adult education participants, but also nonparticipant attitudes toward education, were examined. Based largely on group discussions, this study served as a pilot study for the research project "Education and Social Awareness," which was carried out in three parts. The author, who played a significant role in this project, presents findings and examines their relevance for adult education. The sociocultural determination of adults' willingness to learn, influenced above all by school background, is emphasized. It becomes clear to what extent empirical educational research can provide didactic and methodological help for practical adult education and thus clarify its position among educational institutions.

See also: item 119 abstracts of Army Behavioral Science Research Lab; 561 review of HumRRO research useful in army training; 699 innovations and action research in university extension; 438 dissertations in college and adult reading; 714 Cooperative Extension studies in 1968; 698 university extension research 1955-1967; 745 studies related to employee training in Federal government; 36 review of 20 years of research on high-level personnel; 371 review of OEO research; 672 review of research on the family; 556 register of British training research; 562 technical reports of Naval Personnel and Training Research Lab; 557 inventory of Canadian research on human resource

development; 44 annotated bibliography on short-term memory; 69 review of research on psychology of middle-age; 235 research review on instructional simulation; 92 research review on participation; 440 dissertations in reading; 204 review of studies on lab training and organization development; 274 literature review, computer aided instruction; 17 conceptualizing leadership for change in adult education; 306 definition of evaluation; 555 Federal manpower research; 71 age variable in psychological research; 327 research on aging; 323 middle-age and aging; 634 studies in vocational adult education; 563 HumRRO work program, 1970; 595 Federal manpower research; 229 review on feedback in interpersonal change experiences; 436 research review on college-adult reading; 437 research trends in college-adult reading; 494 inventory of studies of Federal employee training; 142 inventory of research on adoption process; 439 dissertations in reading; 559 digests of vocational research reports; 370 literature survey on learning ability of disadvantaged adults; 200 group dynamics research; 201 research on small group performance; 220 model and review of research in group training programs; 203 review on relation of individual characteristics to groups and organizations.

1100 ADULT LEARNING CHARACTERISTICS

1120 Mental, Perceptual Abilities

33. TRAINING METHODOLOGY. PART I: BACKGROUND THEORY AND RESEARCH. AN ANNOTATED BIBLIOGRAPHY. U.S. Dept. of Health, Education and Welfare, Washington, D.C. Health Services and Mental Health Administration. May 1969. 98p. EDRS Order No. ED 031 628; price in microfiche \$0.50, hard copy available from U.S. Government Printing Office, (0-334-245, \$1.00). Public Health Service Publication No. 1862, Part I.

The annotated bibliography, including 310 abstracts, pertains to research and theory on individual behavior, group behavior, and educational and training philosophy. Content was selected from over 6,000 items mostly published from January 1960 to March 1968. Areas included are: human factors engineering, human behavior and behavioral change, perception, motivation, communication, the adult learner, learning theory and research, programmed learning theory and research, and group dynamics, process and structure. A subject index is included.

34. THE SNYGG-COMBS PHENOMENOLOGICAL THEORY OF PERCEPTION AND ITS IMPLICATIONS FOR ADULT EDUCATION THEORY AND PRACTICE. Russell, John Tennyson. Indiana University. Ph.D. Thesis. June 1969. 245p. University Microfilms, Order No. 69-22,037; price in microfiche \$3.20, in Xerography \$11.05.

The Snygg-Combs theory of perception was examined as to its utility in subsuming and explaining the interaction of common elements found among variables in adult teaching and learning situations. Answers were sought to 15 questions regarding the origins, essential characteristics, criticisms, and methodologies of the theory; its philosophical implications for the man universe relationship, the nature of man and of learning,

the role of an adult educator, and goals of adult education; and the development of theoretical and practical hypotheses and principles. Findings included these: (1) the immediate, effective antecedents of the theory are the American psychological training of Snygg and Combs, the therapeutic experience of Combs, pragmatic philosophy, and the psychologies of the Gestaltists, Freud, Adler, and William James; (2) the theory's determinism still assumes a reasonable range of individual choice and creative behavior as well as of personal responsibility; (3) an adult educator's role is to function as an adequate person and to use his individuality to facilitate perception; (4) the goal of education is to facilitate the growth of adequate personalities. This study developed 64 hypotheses and principles by synthesizing the theory with common elements found in adults and in adult education.

35. AGE, PERSONALITY AND LEARNING APTITUDES. Leith, G.O.M. In Impact of Science on Society; v18 n3 July-Sept. 1968. July 1968. p169-177. 9p.

Mental ability is examined in the light of such factors as aging, sex, cultural and ethnic background, home environment, and personality characteristics. Adult intelligence is relatively stable, with sex differences occurring with a marked decline in non-verbal abilities for women in their 30's. Decline of certain mental faculties appears to foreshadow approaching death. Although ability to learn is maintained throughout adult years, speed and flexibility are reduced, and solving problems is more difficult. Research concerning children is reported on influence of environment, learning to learn, levels of conceptual ability, the role of language, and affect of personality factors.

36. A GENERAL SUMMARY OF TWENTY YEARS OF RESEARCH ON APTITUDES OF HIGH-LEVEL PERSONNEL. Guilford, J.P. Southern California Univ., Los Angeles. Dept. of Psychology. 1969. 30p. Clearinghouse for Federal Scientific and Technical Information, (AD-702-103; price in microfiche \$0.65, in hard copy \$3.00)

In research conducted on "over a period of 20 years" aptitudes of high-level personnel, the purpose was to analyze thinking abilities or processes into their unique components. The approach was through study of individual differences in performance on intellectual tasks varied systematically over broad ranges of psychological functioning. Thirty-six major factor analyses were carried out; the main goal was to achieve invariance of psychological factors to represent unique intellectual abilities. An unusually high level of invariance was accomplished. The most significant outcome was the development of the structure-of-intellect theory and model.

37. HUMAN ABILITIES. Fleishman, Edwin A. In Annual Review of Psychology; v20 p349-380.

38. LEARNING IN THE ADULT YEARS SET OR RIGIDITY. Monge, Rolf H. In Human Development; v12 n2 1969. p131-140.

Examines the loss of response speed with age and "deficits in concentrating

or focusing upon materials to be learned" in 40 women, using a paired-associate paradigm. Results supported the hypothesis that the deficit shown by older Ss is due to learning set.

39. ASSOCIATIVE INTERFERENCE IN THE PAIRED-ASSOCIATE LEARNING OF MIDDLE-AGED AND OLD SUBJECTS. Lair, Charles V. and Others. In Developmental Psychology; v1 n5 1969. p548-552.

Compared 20 middle-aged and 20 old patients for effects of interference on rote learning. At each age level, 1 group was tested on a paired-associate list high in response competition and 1 low in response competition. Interference was induced by re-pairing stimulus-response associates demonstrated to have a high relationship on work frequency count norms. An Age X Interference interaction was found with the elderly making significantly more errors in performance than the middle-aged.

40. AGING AND PROBLEM SOLVING. Rimoldi, Horacio J. and Vander Woude, Kenneth W. In Archives of General Psychiatry; v20 n2 1969. p215-225.

Three complex problem-solving tasks were given to Ss in a wide age range (9-78 yrs.). Results suggest first an increment and then a decrement in performances on the problems with increasing age. For the data presented, the relationship between age and performance on the problem-solving task is best explained considering both a linear and quadratic component.

41. A CROSS-SEQUENTIAL STUDY OF AGE CHANGES IN COGNITIVE BEHAVIOR. Schaie, K. Warner and Strother, Charles R. In Psychological Bulletin; v70 n6 December 1968. p671-80.

Previous cross-sectional and longitudinal studies of age changes over the adult life span have reported contradictory age gradients. The apparent contradiction was assessed with a new research design, the cross-sequential method, which involves the repeated measurement of members of a cross-sectional sample. The SRA Primary Mental Abilities Test and Schaie's Test of Behavioral Rigidity were administered to a stratified random sample of 500 subjects with quotas of 25 men and 25 women in each five-year age interval from 20 to 70 years. Seven years later, 302 subjects were retested. Significant cross-sectional age changes were found for all variables studied, but longitudinal age changes occurred for all cohorts only for those variables where response speed was of importance. Age changes over time appeared to be much smaller than differences between cohorts, with the steep textbook age gradients representing only the effects of increased environmental opportunity and/or genetic changes in the species. Limitations in the study were evaluated. Includes 20 references and 12 charts and tables.

42. A FACTOR ANALYSIS OF LEARNING IMPAIRMENT AND INTELLECTUAL DETERIORATION IN THE ELDERLY. Savage, R.D. and Bolton, N. University of Newcastle-Upon-Tyne (England). In Journal of Genetic Psychology; v113 pt2 1968. p177-182. 22 refs.

A principal component analysis of the WAIS, MWT, ART, and MPI revealed a general intelligence factor, with all the WAIS subtests except Digit Span loading very highly, an intellectual deterioration factor, identified by loadings on WAIS DQ, Wechsler-Bellevue DQ, Reynell's Index and Allen's Index, a verbal-performance factor, a learning factor, identified by the MWT and ART, a neuroticism factor, and an extraversion factor. These findings were interpreted as indicating that contrary to expectation, learning impairment in the elderly is distinct from intellectual deterioration, as defined by the patterning of WAIS subtest scores, so that the two types of deficit may have different diagnostic implications.

43. RELATIONSHIPS AMONG SCORES FOR THE ASSESSMENT OF ADJUSTMENT AND INTELLECTUAL FUNCTIONING. Gilberstadt, Harold. In Journal of the Gerontological Society; v23 n4 1968. p483-487.

The article examines the relationships between a quantitative scale of social adjustment and several measures of intellectual and psychomotor functioning in a sample of 101 elderly males at the Minneapolis VA hospital through the use of the Mandel Social Adjustment Scale and a battery of intellectual and psychomotor tests. It was found that if intellectual deficit is marked on performance tests such as Block Design and Digit Symbol and visuo-motor-recent memory tests such as the Bender Gestalt Recall, prognosis may be poor for social adjustment even in an optimum environment.

44. SHORT-TERM MEMORY: AN ANNOTATED BIBLIOGRAPHY. SUPPLEMENT 1. Fisher, Dennis F. Aberdeen Proving Ground, Md., Human Engineering Lab. Sept. 1969. 66p. Clearinghouse for Federal Scientific and Technical Information Order Number AD-695-638; price in microfiche \$0.65, in hard copy \$3.00.

A compilation of 165 references dealing with short term memory.

45. AGE DIFFERENCES IN PAIRED-ASSOCIATE LEARNING. Zaretsky, Herbert H. and Halberstam, Jacob H. In Journal of Gerontology v23 n2 April 1968. 4p.

The present study examined the effects of different levels of association strength on the paired associate learning and relearning of healthy elderly and young adults. Thirty subjects aged 20-45 and thirty aged 60-84 learned lists of paired associate words of high, medium, and low associative strength. Results showed that, compared to younger subjects, elderly subjects took increasingly more trials to criterion as associative strength decreased, recalled fewer words and took more trials to criterion during relearning, and were significantly slower to respond at each level of associative strength during learning and relearning. It was concluded that paired associate learning is related to level of associative strength, that there is an age-related learning deficit for elderly subjects, and that age differences become greater at low levels of associative strength. Three tables and 12 references are included.

46. AGE DIFFERENCE IN REACTION: AN ARTIFACT? Botwinick, J. and Thompson, L.W. In Gerontologist; v8 n1 1968. p25-28.

A fact in the psychological study of aging is that, as adults grow older, they become increasingly slow in responding to environmental events. In this study a change was noted which, while not refuting unequivocally the fact of age differences in reaction time (RT), challenges, or at least requires an elaboration of theories relating to age deficits in CNS functioning. Reaction Times of elderly subjects were compared with those of athletes and non-athletes. While the older subjects were significantly slower than the young athletes, they were not significantly slower than the young non-athletes. To make more meaningful conceptions of aging processes, control or evaluation of individual differences is needed in many factors.

47. AGE DIFFERENCES IN SPEED OF RETRIEVAL FROM MEMORY STORE. Farrimond, Thomas. In Australian Journal of Psychology; v21 n1 1969. p79-83.

Measured the recall for incidentally learned visual and auditory material in 114 male Ss, 20-70 yr. of age. Recall rates for visual material were found to decline with age whereas no inter-group differences were found in auditory recall rates. It is suggested that deterioration with age in dynamic visual acuity may partly account for the differences.

48. A COMPARATIVE STUDY OF VERBAL UNDERSTANDING IN CHILDREN AND ADULTS. Basit, A. Winwick Hospital, Lancashire, England. In Journal of Verbal Learning and Verbal Behavior; v7 n6 1968. p1121-1122.

This study investigated the verbal understanding of children and adults in an ambiguous situation. Twelve children and twelve adults were tested for their interpretation of twelve artificial proverbs. Children differed from adults in their preference for certain types of interpretation; in their justifications for their choice, however, children were not different from adults.

49. AGE AND INTELLIGENCE DIFFERENCES IN CODING AND RETRIEVAL OF WORD LISTS. Craik, F.I. and Masani, P.A. In British Journal of Psychology; v60 n3 1969. p315-319.

Presented word lists of several orders of approximation to English for immediate free recall to 16 young and 16 old adult persons. The total recall scores were broken down into "number of chunks recalled" and "number of words/chunk." The chunks recalled measure reflected retrieval efficiency: scores were lower in older persons but were unaffected by Mill Hill Vocabulary level. The words/chunk score is interpreted as a measure of coding efficiency: age had no effect on this measure, but scores were poorer for persons of lower vocabulary level. The previous conclusion that there is an age decrement in coding efficiency was not supported. It was concluded that the main effect of age is on retrieval, while coding is affected by verbal intelligence.

50. ADULT AGE DIFFERENCES IN THE ORGANIZATION OF FREE RECALL. Hulstsch, David F. In Developmental Psychology; v1 pt1 1969. p673-678.

Presented a multitrial free-recall task to three age groups of men

(16-19, 30-39, and 45-54 years) to determine if organization was a significant age-related variable in memory performance. Organization was manipulated by standard free-recall instructions (SI), nonspecific instructions to organize recalled words (OI), and instructions to organize recalled words alphabetically (AI). High-verbal-facility persons showed no significant age-related decrement in recall performance under any instructional condition. Low-verbal-facility persons showed a decrement in recall performance at ages 30-39 and 45-54 under the SI and OI conditions, but not under the AI condition. Results suggest an age-related deficit in the organizational processes of memory for certain types of persons.

51. RETENTION AND RECALL: INCIDENTAL LEARNING OF VISUAL AND AUDITORY MATERIAL. Farrimond, Thomas. In Journal of Genetic Psychology; v113 n2 1968. p155-165.

Visual and auditory tests of incidental learning were presented to 185 23-79 yr. old males. Ss with good vocabularies retained more visual information than those of lower vocabulary level but showed no advantage for retention of verbal information. Visual recall declined with age, whereas auditory recall did not. It is concluded that reduced dynamic visual acuity possibly restricts channel capacity thereby impairing visual retention and also performance on nonverbal tasks.

52. AGING AND FREE RECALL. Taub, Harvey A. Dept. of Psychiatry, State University of New York Upstate Medical Center, Syracuse, New York. In Gerontology Journal; v23 n4 1968. p466-468.

Free recall performance was measured for ten aged Ss (mean equal 70.7 years) and ten young Ss (mean equal 25.1 years). The stimuli consisted of alphabetic letters which were arranged in series of various lengths and presented one at a time by a memory drum at the rate of one letter per second. The series varied in length from 4 to 12 letters. Analyses of the number of letters recalled correctly indicated that although both age groups had identical performance levels with short series lengths, the aged Ss reached an apparent asymptote at six letters per trial, while the mean recall of the young Ss continued to increase directly with the length of the series. Analyses of error responses did not reveal any differences between the two age groups.

53. CHANGES IN INTELLECT WITH AGE. IV. CHANGES IN ACHIEVEMENT AND SURVIVAL IN OLDER PEOPLE. Berkowitz, Bernard. In Journal of Genetic Psychology; v107 September 1965. p3-14.

A random sample of 184 middle aged and older males, residents of a Veterans Administration Domiciliary, who had taken a complete Wechsler-Bellevue test five or more years before, were retested in a study of intellectual achievement and survival in older people. Forty-three subjects died within 42 months of the retest. Test score changes for the deceased and for the 141 survivors were compared. Conclusions were: (1) subjects dying within ten months of the retest showed the

greatest amount and rate of decline between tests; (2) if an accelerated rate decline is due to imminence of death, there is no evidence that the effect covers more than 20 months; (3) frequency of decline in scores did not differ significantly between survivors and nonsurvivors; (4) subjects who die from chronic illness do not show greater decline than those who die unexpectedly. Differences between results of this study and of previous studies may represent differences in the selection of the samples. Five tables and seven references are included.

54. CHANGES IN INTELLECT WITH AGE. V. DIFFERENTIAL CHANGES AS FUNCTIONS OF TIME INTERVAL AND ORIGINAL SCORE. Berkowitz, Bernard and Green, Russel F. In Journal of Genetic Psychology; v107 December 1965. p179-192.
- Changes in elderly people's intelligence test performance when retested shortly after the initial examination were compared with changes after a longer test retest interval and with results of a study of young adults. All subjects were elderly males in a Veterans Administration domiciliary. Subjects who had taken the Wechsler Adult Intelligence Scale (WAIS) less than six months before and had not previously taken any other Wechsler test, were categorized by intelligence quotient (IQ). Others who had been tested with Wechsler-Bellevue Form I (W-B) five or more years before were retested on the W-B. Findings suggested that older people average as much performance gain on an IQ test as do young adults. As with young people, variance in older subjects' retest gains tended to correlate positively with intelligence. For elderly subjects the long term tendency was for W-B scores to decline, but more so among high IQ individuals than low IQ individuals. This decline, occurring over a period in which learning ability for the same tasks showed no significant drop, is probably due to disuse of skills rather than irreversible deterioration. Five tables and 14 references are included.
55. SEX DIFFERENCE ON THE FREE RECALL-CONTROLLED RECALL TEST OF THE LEITER ADULT INTELLIGENCE SCALE. Luber, Shula A. and Walker, Ronald E. In Journal of Clinical Psychology; v25 n4 October 1969. p412-413.
56. THE WAIS AS A GROUP TEST OF INTELLIGENCE. Eme, Robert F. and Walker, Ronald E. In Journal of Clinical Psychology; v25 n3 July 1969. p277-278.
57. SHORT FORMS OF THE WAIS: A REPLY. Levy, Philip. In Psychological Reports; v24 April 1969. p654.
58. THE PEABODY PICTURE VOCABULARY TEST AS A MEASURE OF GENERAL ADULT INTELLIGENCE. Pool, Donald A. and Brown, Robert. In Journal of Consulting & Clinical Psychology; v34 n1 1970. p8-11.

Evaluates the Peabody Picture Vocabulary Test (PPVT) as a rapidly administrable test of intelligence in a county hospital adult patient population. The PPVT and the Doppelt Short Form (D) of the WAIS were administered to 150 outpatients. Although the tests correlated .81, additional analyses demonstrated (a) the PPVT underestimated the D-WAIS scores in the lower ranges and grossly overestimated them in the upper ranges, and (b) the two tests differed grossly in clinical category placement of patients. Results suggest that clinicians should be cautious in making decisions about individual patients; on the basis of PPVT scores.

59. AN EVALUATION OF THE LEITER ADULT INTELLIGENCE SCALE (LAIS). Goldsamt, Milton R. In Perceptual and Motor Skills; v28 n3 1969. p959-971.
60. A NINETEEN-YEAR FOLLOW-UP STUDY OF GOOD, AVERAGE, AND POOR READERS IN THE FIFTH AND SIXTH GRADES. Howden, Mary Evalyn. Oregon Univ. Ph.D. Thesis. 1967. 211p. University Microfilms Order No. 68-9998; price in microfiche \$3.00, in Xerography \$9.70.
61. AGE CHANGES ON AGCT: A LONGITUDINAL STUDY OF AVERAGE ADULTS. Tuddenham, R.D. and others. In Journal of Consulting & Clinical Psychology; v32 n6 1968. p659-663.

This study described adult reading skills, reading habits, and socio-economic adjustments of persons known to be good, average, or poor readers in Grades 5 and 6; and investigated relationships among adult reading characteristics, parental and adult socioeconomic adjustment, childhood reading achievement and academic aptitude, and parental reading habits. These were some of the findings: (1) current reading scores correlated significantly with adult reading behavior and with childhood reading and Stanford-Binet intelligence scores; (2) the adult reading skills and behavior of those who had been average readers were intermediate, overlapping those of good and poor readers; (3) except for one poor reader with above average Stanford-Binet scores, those who were poor or deviant readers in childhood had adult reading scores below those of good childhood readers.

Tested 164 men retiring from the Army after 20 years of service on the Army General Classification Test-3a. The results were compared with their scores earned 20 years earlier, as recorded on their Form 20s. Group means showed very small declines over time.

62. RELATIONSHIPS BETWEEN THE PROGRESSIVE MATRICES AND AGCT-3a AMONG OLDER MILITARY PERSONNEL. Blumenkrantz, Jack and Others. In Educational & Psychological Measurement; v28 n3 1968. p931-935.

Raven's Progressive Matrices (PM), was administered along with the 4 parts of the Army General Classification Test (AGCT) 3a, to 240 military personnel retiring from the Army at an average age of 43 years after 20 years service. Percentile norms for this group correlated with Raven's British norms for corresponding ages, when due allowance was made for the elevated mean and reduced variability of this sample as compared with Army-wide norms.

63. THE EFFECT OF MATURATION AND EDUCATIONAL EXPERIENCE ON AIR FORCE OFFICER QUALIFYING TEST SCORES. Gregg, George. Air Force Human Resources Lab., Lackland AFB, Texas. July 1968. 21p. Clearinghouse for Federal Scientific and Technical Information Order No. AD-687-089; price in microfiche \$0.64, in hard copy \$3.00.

To assess differences produced by maturation and education, the AFQOT was given to 415 Air Force Reserve Officers Training Corps (AFROTC) cadets in 32 institutions late in their senior year. Scores were compared with those of the same group as freshmen or sophomores. Pilot score

increases for the total group were about 20 percentile points, with the greatest gains (30 to 50 points) in categories which received light plane training as part of the AFROTC curriculum

64. THE THRESHOLD OF FUSION OF PAIRED LIGHT FLASHES AS A FUNCTION OF AGE IN NORMAL ADULTS. Farley, Frank H. In Journal of Genetic Psychology; v114 March 1969. p143-148.

65. THE PSYCHOLOGICAL AND MYTHMAKING PHENOMENA IN VISUAL SYMBOLIZATION OF ADULT ILLITERATES. REPORT FROM THE ADULT RE-EDUCATION PROJECT. Boyd, Robert D. Wisconsin Univ. August 1969. 25p. EDRS Order No. ED 034 962; price in microfiche \$0.25, in hard copy \$1.35.

This pilot study was a limited exploratory investigation of certain aspects of visual symbolization ability in matched pairs of literate and illiterate adults. It was asserted that written symbolization serves as an economical means of reality comprehension and testing. This basic function of symbolization must be learned and accepted psychologically as an essential operational premise if symbols are to be employed profitably. It was argued that the failure of the illiterate to accept this premise may account in part for his illiteracy. The performance level was first tested on symbol items which were visually tied to "real" things. The attention span of the two samples were tested on a paper-and-pencil task. Finally, an instrument using abstract symbols was administered. The results were in the direction predicted. Further studies seem warranted to differentiate the several factors involved. Nine tables and 16 references are included.

66. CULTURAL DIFFERENCES AS REFLECTED IN WECHSLER-BELLEVUE INTELLIGENCE (WBII) TEST. Wysocki, Boleslaw A. and Wysocki, Aydin C. In Psychological Reports; v25 n1 1969. p95-101.

WBII was administered to 137 white and 110 Negro veterans, of comparable age level but differing significantly in education. Negro Ss scored lower on all subtests but scored significantly higher than the whites on the Digit Span. It is noted that the Negroes scored higher on the Verbal than the Performance parts of the scale. Both groups also showed larger differences on Performance than on Verbal scales. Negro Ss exhibited greater difficulties on Information which is "white oriented" and requires more schooling. Negro Ss also experienced difficulties with pictorial perception. The influence of culture and environment upon intelligence measured by such tests as this is great.

67. COMPARISON OF NEGRO AND WHITE LOWER CLASS MEN ON THE GENERAL APTITUDE TEST BATTERY AND THE MINNESOTA MULTIPHASIC PERSONALITY INVENTORY. Flanagan, J. and Lewis, G. In Journal of Social Psychology; v78 n2 1969. p289-291.

When some (imperfect) attempt was made to control for socioeconomic status, lower class Negro men obtained lower (.05 level) scores on all the General Aptitude Test Battery (GATB) scales except the Motor Coordination scale than did lower class whites. However, with socioeconomic status at least partially controlled, none of the Negro-white differences

on the MMPI were statistically significant (.05 level) except the Ma scale. Results are interpreted as being congruent with J. McV. Hunt's theory that early experiences are more important for cognitive functions than for emotional functions.

68. PATTERNS OF POLITICAL LEARNING. Jennings, M. Kent and Niemi, Richard G. In Harvard Educational Review; v38 n3 Summer 1968. p443-467.

Recent studies have suggested one characteristic pattern whereby children are rapidly inducted into the political system & at a relatively early age adopt attitudes, feelings, & even activities previously associated only with adults. The findings leading to this model have been exaggerated to the point of ignoring contrary developmental patterns. Evidence is presented calling attention to a variety of developmental sequences. Primary data are drawn from interviews with a natural probability sample of 1,669 HSch seniors & their parents. A variety of identical indexes & scales are used to compare the students with comparably educated parents & other adults. The findings reject the notion of crystallization of political learning by the advent of adolescence. Change is noted between the elementary & HSch years. Perhaps more significantly, sizeable alterations are observed after the HSch years, particularly between the ages of 20-35. These shifts seem to be a function of discontinuities in the life-space & the confrontation with the realities of the political world.

See also: item 121 interpretation of Air Force Officer Qualifying Test scores; 105 score distribution on College Level Exams through USAFI; 112 stability of adult aptitude scores; 617 WAIS versus GATB in counseling of disadvantaged; 409 comparison of disadvantaged adults and children on reading; 114 military data banks, other studies of personnel selection and evaluation; 359 aptitudes of Navy Group IV recruits; 358 effects of differing aptitudes in military training; 102 taxonomy of perceptual-motor tasks; 389 learning ability in Project 100,000; 560 bibliography of HumRRO research; 370 review of learning ability of disadvantaged adults; 337 hyperoxygenation effect on cognitive functioning in aged; 326 review of recent studies on education of aged.

1160 Psychological, Personality Factors

69. ADULT PSYCHOLOGY. Bischof, Ledford J. 1969. 315p. Available from Harper & Row Publishers, 49 E. 33rd St., New York, N.Y. 10016. Price \$5.00.

This volume comprehensively reviews the research on the psychology of the middle aged (ages 40-65).

70. CORRELATES OF STIMULUS-SEEKING: AGE, EDUCATION, INTELLIGENCE, AND APTITUDES. Kish, George B. and Busse, William. In Journal of Consulting & Clinical Psychology; v32 n6 1968. p633-637.

Reports 3 studies relating individual differences in the Sensation-Seeking scale (SSS) score to various measures. Using hospitalized alcoholics, hospital employees, and college students as Ss, the following relationships were found: (1) sensation-seeking was positively related to educational attainment, intelligence level, and perceptual,

spatial, and numerical aptitudes, and was negatively related to age; and (2) no relationship was found between the SSS score and rural-urban factors.

71. THE AGE VARIABLE IN PSYCHOLOGICAL RESEARCH. Wohlwill, Joachim F. In Psychological Review; v77 n1 1970. p49-64.

Examines the treatment of the age variable in the conception, design, and interpretation of developmental research. It is suggested that age be incorporated into the dependent variable in developmental studies, by defining the latter in terms of specified aspects or parameters of the function describing the changes which occur over age for a given behavioral variable.

72. AGE DIFFERENCES IN SELF-CONCEPT FROM EARLY ADULTHOOD THROUGH OLD AGE. Grant, Carmen H. In Proceedings of the 77th Annual Convention of the American Psychological Association; v4 pt2 1969. p717-718.

The research of Allport, Buhler, Kuhlen, Schaie, and Cumming and Henry suggests that the course of human life proceeds in a pattern of developmental stages marked by expansion activities during early adulthood and restriction or withdrawal after middle age is reached. Postulating that self-concept might similarly reflect a curvilinear pattern of life stages, this model was explored through age differences in adult self-concept measures across age levels. Ss were 500 20-69 year old volunteers from church groups.

73. CONTINUITIES AND DISCONTINUITIES IN CHILDHOOD AND ADULT MORAL DEVELOPMENT. Kohlberg, L. and Kramer, R. In Human Development; v12 n2 1969. p93-120.

Hypothesizes a 6-stage "scheme of moral development" in an attempt to determine continuities between childhood and adult development. The criterion for development are: (1) "changes in the general shape, pattern, or organization of response," (2) "newness, a qualitative difference in response," (3) irreversibility, (4) "a pattern of universal stepwise invariant sequences," (5) a hierarchy of functioning, and (6) the "integration of a set of functional contents at the prior stage." It is shown that the way in which value is placed on the concept of human life is the primary difference between each stage. Results indicate that this "sequence is invariant for individuals in the United States" and suggests that it is also culturally universal. It was found that adulthood was characterized by stabilization of early attitudes: the exception of the college sophomore was discussed. Development during adulthood was considered a "movement toward integration in the use of moral structures" and "thought in its application to life."

74. A STUDY OF RELATIONSHIP BETWEEN SELF-CONCEPT AND CONSERVATISM. Boshier, Roger. In Journal of Social Psychology; v77 n1 1969. p139-140.

To explore the relationship between self-concept and conservatism, 40 adult education students completed the Bills Index of Adjustment and Values, and the Wilson-Patterson Conservatism Scale which avoids the acquiescence pitfalls of earlier authoritarian and conservatism scales. A significant negative correlation between self-concept and conservatism was obtained. Conservative attitudes are associated with rejection of

one's self. This contradicts earlier findings.

75. THE IMPLICATIONS OF A. H. MASLOW'S "HIERARCHY OF NEEDS" THEORY. Warren, Earle Theodore. Indiana Univ. Ph.D. Thesis. 1968. 204p. University Microfilms Order Number 69-4821; price in microfiche \$3.00, in Xerography \$9.25.

The Maslow Hierarchy of Needs was reviewed and implications were sought for adult education theory, program planning and operation, promotional activities, and program evaluation. Maslow's work suggested self-actualization as an ultimate goal, meaning that adult education programs should be structured to foster both the acquisition of facts, skills, and attitudes, and the development of inner potential. Reduction of threat until it no longer blocks learning, continuing provision of a wide range of choices between growth and safety, respect by teachers and planners for learners and their nature, the development of synergy (mutual strengthening of program elements and outcomes), and the provision of novelty and variety within programs, were set forth as conditions for the fostering of self-actualization. Suggestions included promoting maximum learner participation in program planning and evaluation, encouraging "peak experiences" of high self-actualization, making programs as attractive and free of threat and risk as possible, and evaluating programs in terms of their contribution to self-actualization and intrinsic learning.

76. INFORMATION SOURCES, DOGMATISM, AND JUDGMENTAL MODIFICATIONS. Long, Huey B. Paper presented at the Adult Education Research Conference, Minneapolis, Minnesota. February 27-28, 1970. 11p. EDRS Order Number ED 036 760; price in microfiche \$0.25, in hard copy \$0.65.

This study examined differences in the number of perceptual judgment modifications made by 36 subjects showing different levels of dogmatism when the source of information was manipulated among superior, subordinate, and peer sources. An experimental and a control group were used, and a 2x3 factorial analysis design was developed. Dogmatism was measured by Rokeach's Dogmatism Scale; and judgment modification, by Asch's Vertical Line Scale. Status was determined by the Official position of subjects within their employment group in a governmental agency. Modification scores differed significantly by information sources (status) and dogmatism. General tendencies suggest that high dogmatism subjects receiving information from a subordinate source changed their minds less; that they make more modifications when a peer source is involved; and that more modifications were made by subjects receiving from a peer source, with high dogmatic subjects making slightly more changes than low dogmatic subject. Six references and three tables are included.

77. MEASURING INNOVATIVENESS RATHER THAN ADOPTION. Presser, H.A. In Rural Sociology; v34 n4 December 1969. p510-527.
78. TASK DIFFICULTY, RELAXATION, AND ANXIETY LEVEL DURING VERBAL LEARNING AND RECALL. Straughan, James H. and Dufort, W. Henry. In Journal of Abnormal Psychology; v74 n5 October 1969. p621-624. 4p.

The hypothesis that relaxation instructions help recall of verbal material by anxious persons but hinder the recall by nonanxious ones was tested. High and low anxious groups were selected by their performance on the anxiety scale of the Minnesota Multiphasic Personality Inventory (MMPI). The 121 persons were presented with either 10 easy or 10 difficult paired associates under four conditions of relaxation: no relaxation, relaxation to acquisition, relaxation prior to delayed recall, or relaxation prior to both acquisition and delayed recall. The persons were tested immediately following acquisition and 48 hours later. Analysis of reciprocal latencies supports the hypothesis. Relaxation was significantly associated with better performance for those with high anxiety and poorer performance for those with low anxiety.

79. LEISURE, WORK, AND THE USE OF TIME. A STUDY OF ADULT STYLES OF TIME UTILIZATION, CHILDHOOD DETERMINANTS AND VOCATIONAL IMPLICATIONS. Goodman, Natalie Cohan. Harvard Univ. Ed.D. Thesis. 1969. 145p. University Microfilms Order Number 69-14,175; price in microfiche \$3.00, in Xerography \$6.80.

This was a two part investigation of leisure, work, and time use. A preliminary study replaced work and leisure as separate entities with the concept of "meaningful activity." Significant differences in views of "meaningful activity" were found for persons in two widely separated occupational levels. The second part investigated childhood determinants of adult time use styles (degrees of time autonomy and time organization). Data were gathered from taped interviews with 42 men and women reference librarians, information specialists, and journalists. Persons with an autonomous time use style tended to have an autonomous leisure time style, with marital status as an intervening variable; organized styles of work time use coincided even more strongly with organized leisure styles. Persons who had had an "Accepting" climate of parent child relations tended in adulthood to prefer an autonomous time use style in employment, while those who had experienced "Demanding" climate might or might not express such a preference. Organization patterns for work time were related, especially among women, to recalled parental patterns. No such significant relationship was found for free time except where both parents had had similar patterns of time organization.

80. A STUDY OF THE RELATIONSHIP BETWEEN RESIGNATION AND PERFORMANCE IN A JOB RETRAINING PROGRAM. Lantz, Herman R. and Alix, Ernest K. Southern Illinois Univ. 1969. 249p. Clearinghouse for Federal and Scientific and Technical Information Order No. PB-182-513; price in microfiche \$0.65, in hard copy \$3.00.

This study analyzed the attitude of resignation to inferior economic status from the standpoint of ethnic origin, social and financial background, and response to job retraining opportunities. Detachment from others, lack of commitment and ambition, aversion to work and planning, and restricted hopes and aspirations were determined to be major elements of resignation. A population of 493 in Southern Illinois was studied. These were among the major findings: (1) high degrees of resignation were significantly related to sex (male), age (16-27 and 52 and over), race (Negro), religion (non-Protestant), and lower levels of education; (2) positive reactors to retraining opportunities tended to be relatively unresigned, while negative

reactors tended to be highly resigned; (3) family cluster control variables (size and sibling structure of parental family, marital status, size of one's own family) and past occupation and desired occupation had less effect on the association between resignation and reaction than personal and regional (birthplace, place of rearing, mobility) variables. Four other brief studies of resignation are included.

81. ACHIEVEMENT MOTIVATION AND INTELLIGENCE IN OCCUPATIONAL MOBILITY: A LONGITUDINAL ANALYSIS. Elder, Glen H., Jr. In Sociometry; v31 n4 December 1968. p327-354.

The influence of class origin on a man's occupational status is mediated by intelligence, achievement motivation, values, and educational opportunities. Since entry into prestigious occupations generally requires higher education, which is more available in the middle-class, it was assumed that high intelligence would more strongly influence the occupational mobility of middle-class boys than achievement motivation. Although ambition may be closely associated with mental ability in the working class, owing to deficits in family support and training, it was assumed that working class youth mobility would be more strongly influenced by desire to achieve than by intelligence level, partly as a result of their lower educational opportunities. These expectations were supported in an analysis of longitudinal data on men of lower and middle-class origins. The influence of intelligence and academic aptitude on adult occupational status occurred almost entirely through educational achievement in both groups. Drive for achievement was more predictive of occupational than of educational status among working class men, while the reverse was true for the men of middle class background.

82. A STUDY OF THE INTERPERSONAL VALUE ORIENTATIONS OF EXTENSION HOMEMAKERS IN ROBESON COUNTY, NORTH CAROLINA. Briley, Mollye Hughes. North Carolina State Univ. M.Ed. Thesis. 1968. 71p. EDRS Order Number ED 032 499; price in microfiche \$0.50, in hard copy \$3.65.

This study investigated interpersonal value orientations (Support, Conformity, Independence, Benevolence, Leadership, and Recognition) of 267 Extension homemakers in Robeson County, North Carolina, and the relationship of these orientations to age, educational level, income, years in club work, family size, and ethnic group. Data were obtained from the homemakers (whites, Negroes, and Indians) by an information sheet and Gordon's Survey of Interpersonal Values. These were among the findings and conclusions: (1) although the homemakers were varied in orientations, the total group and 911 subgroups ranked benevolence highest; (2) in the interaction of value orientations with other factors, 14 of the 36 associations were statistically significant at the .001, .01, or .05 level; (3) there was some similarity between mean scores of ethnic groups, but much variation within groups; (4) in the Extension Service, where the group approach is used to achieve learning and a continuing relationship exists between the Extension homemakers and Extension agents, it might be desirable to use Gordon's Survey of Interpersonal Values as a guidance and counseling instrument.

83. A STUDY OF THE ADOPTION PROCESS OF A FAMILY LIVING PRACTICE BY HOME-MAKERS IN A SELECTED NORTH CAROLINA COUNTY. REPORT NO. 8. Stoud, Maidred Morris. North Carolina Univ. July 1968. 65p. EDRS Order No. ED 028 359; price in microfiche \$0.50, in hard copy \$3.35.

This study sought to determine the stage (awareness, interest, evaluation, trial, or adoption) reached by homemakers in adopting the water blanching of vegetables for freezing; to identify information sources (mass media, agencies, experts, informal personal contacts, and organizations); and to assess the relationship of certain personal, social, and situational characteristics to current stages of adoption. The three-part questionnaire was administered to 150 respondents in Columbus County, North Carolina, who had bought freezers within the past five years. Major findings included the following: (1) adoption rates were high (79% to 90%) for all four steps of the blanching process; (2) mass media were important in four of the five adoption stages; (3) respondents' own experience was the major information source in the actual adoption of the innovation; (4) length of freezer ownership and age (over 40 more than under 40) were significantly related to adoption of one or another of the blanching steps.

84. VALIDATION OF A PSYCHOPHYSIOLOGICAL TEST OF APTITUDE FOR LEARNING SOCIAL MOTIVES. Ax, Albert F. and Bamford, Jacqueline L. Reprinted from Psychophysiology; v5 n3 1968. 18p.

This study assumed that one's hierarchy of motivation (those largely unconscious systems enabling selection of alternative behavior) is learned, and that such learning requires an aptitude which varies widely in the population. A discrimination learning task requiring differential physiological responses was tested for validity in measuring aptitude for learning social motives. Sixty-three Negro subjects, classified into higher and lower motivation groups according to employment history and vocational teachers' ratings, underwent a session of conditioning involving tones and pain and were given intelligence, personality, and level of aspiration tests. Combinations of 18 variables, each statistically significant in itself, classified 92% of the subjects into their correct criterion (motivation) groups. Results strongly validated the test and indicated that presently measured aptitudes and environmental influences do not fully account for variance in performance. Implications for future research, personnel selection, and manpower development were suggested. Six tables and 13 references are included.

85. A STUDY OF VALUES IN A TRAINING EXPERIENCE. Clarey, Richard Joseph. Cornell Univ. Ph.D. Thesis. 1968. 151p. University Microfilms Order Number 68-9435; price in microfiche \$3.00, xerography \$7.20.

This study attempted to test, and in some instances develop, measures of values in a manpower training experience. An inquiry was made into the construct validity of measures of risk taking, time perspective, interpersonal trust, and fatalism. Factor analysis was used as a device for partly assessing the construct validity of a questionnaire by examining individual scales. Investigations were also made of the instrument's predictive validity and potential for evaluating training programs.

Specific results included the following: (1) risk taking, time perspective, trust, and fatalism were related but distinct concepts in the group studied; (2) associations between risk taking and time perspective (positive), risk taking and fatalism (negative), and fatalism and time perspective (negative) were significant only with program dropouts; (3) risk taking, time perspective, trust, and fatalism failed to predict dropouts and completers; (4) trust was negatively related to risk taking and fatalism among male completers; (5) in respect to risk taking, completers did not switch significantly from a preference for extreme odds to a preference for moderate odds.

86. THE RELATIONSHIP BETWEEN EXTENT OF EDUCATIVE BEHAVIOR BY ADULTS AND THEIR ATTITUDES TOWARD CONTINUING EDUCATION. Seaman, Don F. and Schroeder, Wayne L. In Adult Education; v49 n3 Winter 1970. p99-105.
87. FACTOR SCORES AND RELIABILITIES OF SOME SEMANTIC DIFFERENTIAL CONCEPTS HIGH IN AFFILIATION MOTIVATIONAL CONTENT. Boshier, Roger. In Psychological Reports; v24 n1 February 1969. p17-17.
88. THE FACTORIAL STRUCTURE OF THE MINNESOTA MULTIPHASIC PERSONALITY INVENTORY FROM AN AGED SAMPLE. Britton, Peter G. and Savage, R. Douglass. In Genetic Psychology; v114 March 1969. p13-17.
89. A STUDY OF THE EFFECTIVENESS OF SELECTED OUT-OF-SCHOOL NEIGHBORHOOD YOUTH CORPS PROGRAMS. THE MEASUREMENT OF WORK-RELEVANT ATTITUDES. Walther, Regis H. George Washington Univ. February 1969. 44p. Clearinghouse for Federal Scientific and Technical Information Order No. PB-187-933; price in microfiche \$0.65, in hard copy \$3.00.

The paper reports the initial development of a self-report inventory for measuring work-relevant attitudes. A pool of items was created after a review of the research literature. These items were administered to out-of-school Neighborhood Youth Corps enrollees in Cincinnati and to New Careers enrollees in Durham. Performance ratings were obtained from counselors for each subject. A factor analysis of the items produced three interpretable factors: optimism, unsocialized attitudes, and self-confidence.

See also: SECTION 1120 MENTAL, PERCEPTUAL ABILITIES; 1300 PARTICIPATION PATTERNS; item 618 self-concept changes in MDTA program; 166 influence of autonomy and succorance needs on evening college learning; 338 social versus objective rewards with engaged or disengaged older learners; 350 social roles, self esteem of upper-middle class women; 352 creativity, mental health of middle-aged women learners; 374 relation of self-esteem to learning among disadvantaged; 353 marriage role expectations, other characteristics of women in Missouri Delta counties; 680 interests, other characteristics young urban homemakers; 323 anthology on middle-age and aging; 207 sociability related to rates of interpersonal interaction; 331 relation of socioeconomic level and anxiety to participation of older adults; 416 motivation, attitudes in second language learning; 660 adoption characteristics among strawberry growers;

658 critical thinking, open-mindedness in agricultural education; 108 psychological, sociological variables in MDTA achievement; 412 educational level and achievement in literacy; 410 relationship of teacher and learner values in adult basic education; 692 cross-cultural role perceptions; 572 measuring work motivation; 630 self-concept in new careers training; 214 Army training in initiative and tact; 123 attitudes of dropouts in public school program; 622 psychological attitudes in training of long-term unemployed; 211 effect of personality in small group learning; 398 effect of adult basic education on non-cognitive attitudes; 95 "involvement" as a concept in adult education; 284 upward mobility as factor in training extension agents; 514 Objectively Scoreable Apperception Test in Navy training; 385 expectation of "control of environment" in prison training; 347 Maslow needs in gifted, aged 10 to 70; 348 achievement motivation and competition with males among younger and older female students; 303 personality of training directors.

1200 Age Differences

90. A STUDY OF THE INFLUENCE OF AGE ON PREDICTABILITY OF GRADUATE RECORD EXAMINATIONS APTITUDE TESTS FOR SUCCESSFUL GRADUATE STUDENTS. Lafferty, Gladys E. South Carolina Univ. Columbia. School of Education. 1969. 39p. EDRS Order Number ED 029 606; price in microfiche \$0.25, in hard copy \$2.05.

The assumption underlying the study was that significant differences in the predictability of GRE aptitude test scores would result as a direct function of age. The sample consisted of 393 students who had received master's degrees during 1966 and 1967, in 18 different areas of specialization. Findings revealed that the assumption underlying the study could not be substantiated. For the group as a whole, no significant differences in means of GRE total aptitude test scores or in mean graduate GPRs were found. The oldest group had a lowest GRE scores, showed a tendency to earn slightly lower quantitative ability scores than the younger students, but earned the highest graduate GPRs.

91. A METHOD FOR THE COLLECTION AND ANALYSIS OF RETROSPECTIVE LIFE HISTORIES. REPORT NO. 48. Blum, Zahava D. and Others. Johns Hopkins Univ. July 1969. 37p. EDRS Order Number ED 032 610; price in microfiche \$0.25, in hard copy \$1.95.

Using survey research methods, retrospective life histories have been obtained for a national sample of the noninstitutionalized population of males 30-39 years of age residing in households in the United States and a similar sample of Negro males. This paper, while not intended to be a comprehensive manual, discusses the general approach developed in the project, illustrates many of the procedures, and gives examples from the survey data.

See also: SECTION 1120 MENTAL, PERCEPTUAL ABILITIES, 1160 PSYCHOLOGICAL, PERSONALITY FACTORS, 1300 PARTICIPATION PATTERNS OF ADULTS; 4620 AGE GROUPS; item 12 adult age definitions and adult education in

Colonial America; 464 career patterns and obsolescence in engineers; 327 theory and methods of research on aging; 357 occupational problems of dual-career families.

1300 PARTICIPATION PATTERNS OF ADULTS

92. SOME PERSPECTIVES ON THE PHENOMENON OF PARTICIPATION. Douglass, Mohammad. In Adult Education; v49 n3 Winter 1970. p88-98.

93. THE INFLUENCE OF SOCIAL CLASS BEHAVIOR UPON ADULT EDUCATION PARTICIPATION. London, Jack. In Adult Education; v20 n3 Spring 1970. p140-153.

This paper discusses theoretical bases of methodology and the concept of social class as used in participation studies; and a descriptive study and analytic survey of adult education programs of a middle sized city. The goal of the study was to ascertain what parts of the population are most likely to participate; what factors are influential to participation; and what barriers keep those individuals from participating in an adult education activity. The study describes the subjects, modes of instruction, agencies, clientele, and the interconnections between these elements. The analytic survey using matched sample of male middle class and working class participants and nonparticipants traces connections of adult education participation and other facets in social life, i.e., vocations, jobs, leisure pursuits, etc. Emphasis is on differences between higher/lower socio-economic groups. Findings and implications of working class adults are presented; methodological suggestions are given for further adult education participation research.

94. FUNCTIONAL PATH ANALYSIS AS A MULTIVARIATE TECHNIQUE IN DEVELOPING A THEORY OF PARTICIPATION IN ADULT EDUCATION. Martin, James L. 1970. 14p. Paper presented at the Adult Education Research Conference, Minneapolis, Minnesota, February 27-28, 1970. EDRS Order Number ED 036 750; price in microfiche \$0.25, in hard copy \$0.80.

This paper reports on attempts by the author to construct a theoretical framework of adult education participation using a theory development process and the corresponding multivariate statistical techniques. Two problems are identified: the lack of theoretical framework in studying problems, and the limiting of statistical analysis to univariate techniques. The process of theory development is divided into: (a) definition of concepts; (b) establishment of variable relationships; (c) specification of causal ordering of variables; (d) identification or determination of relationships among variables within the same causal system; and (e) estimation of change. The use of regression analysis and models in the final phase is discussed, as is also functional path analysis to determine whether the proposed set of interpretations is consistent throughout. The final results will be presented in a doctoral thesis.

95. THE INTERNAL AND EXTERNAL VALIDATION OF THE CONCEPT INVOLVEMENT. Snyder, Robert E. 1970. 18p. Paper presented at the Adult Education Research

Conference, Minneapolis, Minnesota, February 27-28, 1970. EDRS Order No. ED 036 753; price in microfiche \$0.25, in hard copy \$1.00.

The objective of this study was to explicate the concept "involvement" so as to determine: (1) its range of meanings in both ordinary language and in the area of program development in adult education; and (2) how the range of meanings was used in empirical studies of a causal nature. The first task provided the basis for determining the internal validity of the concept (its meanings); the latter task, the external validity or relational character with other concepts. Linguistic analysis was used to provide a range of meanings in ordinary usage; then analysis was carried over to the uses of the concept in the professional literature of adult education. Secondly, the uses of the concept as found in empirical studies of the behavioral sciences were grouped according to common criterion variables and studied to determine the validity of common trends. Two major senses of involvement were isolated: the minimal sense--physical/cognitive activity--and a strong sense--an affective relationship. Findings revealed that minimal sense of the concept had been widely used in postulated hypotheses; supported the minimal sense of involvement as related to positive affective changes, desired behavioral changes, and certain ability changes; and did not support relationship between involvement (minimal sense) and greater acquisition of information.

See also: item 676, 609, 402, 448, 509, 613, 413, 153, 415, 391, 392 participation, clientele analysis and dropout studies in adult basic or remedial occupational programs for poor and disadvantaged; 344, 731, 730, 705, 122, 712, 586 studies in junior college and higher adult education; 258, 637, 331, 332, 333 studies in activities and programs for older adults; 650, 719, 316, 317, 648, 647, 657, 663 studies in 4-H and Cooperative Extension programs; 491 continuing legal education; 499 municipal officers in Florida; 473 Air Force nurses; 465 engineers; 345 wives of Army officers; 79 childhood determinants of adult leisure time use; 243 museum visitors; 6 adult population of Guelph, Ontario; 691 foreign nationals in technical assistance training in the U.S.; 426 Milwaukee Adult High School; 315 leisure time pursuits of youth; 103 learner characteristics related to instructional objectives; 738 effect of public school course on attitudes toward adult education; 375 high school for American Indians; 571 Wisconsin adult vocational programs; 354 women participants in continuing education; 534 short management courses; 194 public affairs discussion groups; 300 adult educators in Ph.D. programs; 472 public health programs in California and Illinois; 739 isolated rural community in British Columbia; 257 New York City television viewers; 147 community development course.

1500 PROGRAM PLANNING AND ADMINISTRATION

96. A CONCEPTUAL SCHEMA OF THE PROGRAMMING PROCESS IN THE COMPLEX ADULT EDUCATION ORGANIZATION WITH SPECIAL EMPHASIS ON ITS SOCIOLOGICAL ASPECTS.

Boone, Edgar J. and Others. February 1970. 19p. Paper presented at the Adult Education Research Conference, Minneapolis, Minnesota, Feb. 27-28, 1970. EDRS Order Number ED 036 767; price in microfiche \$0.25, in hard copy \$1.05.

Objectives of this paper were to define the concept of programing, to discuss programing in a complex adult education organization, and to point out aspects of programing of a sociological nature. Programing is a decision-making process. In a complex adult education organization, the process can be divided into eight phases: formulating the program framework; adapting this framework to the various levels of organization; organizing human resources at the operational level needed to plan a program; decision-making at the operational level; the planned program prospectus; the plan of work; implementing the plan; and program accomplishments. Inherent in the process are a number of interrelated steps which suggest tasks to be performed by individual(s) or groups. Performance of these tasks may be influenced by individual characteristics and behavior, interaction within a group, and the homogeneity or heterogeneity of the group. The clarity with which the general social system is understood by those within the system has considerable bearing on the nature of program decisions made.

97. TRAINING METHODOLOGY. PART 2: PLANNING AND ADMINISTRATION. AN ANNOTATED BIBLIOGRAPHY. U.S. Dept. of Health, Education, and Welfare. Washington D.C. Health Services and Mental Health Administration. May 1969. 128p. EDRS Order Number ED 031 627; price in microfiche \$0.75. Hard copy available from U.S. Government Printing Office, Order No. O-334-246; price \$1.00. Public Health Service Publication No. 1862, Part II.

Instructional design, course planning, and training program administration are the main aspects treated in this annotated bibliography. Most articles included were published between January 1960 and March 1968. The 447 abstracts appear under the main headings of: learning theory applied to instruction, planning, course management, and program administration. A subject index is included.

See also: 530 systems approach in planning management development; 383 model training system for prison inmates; 528 systems approach for training administrators; 161 typology of programs in university residential centers; 575 manpower allocation model in air training facility.

1510 Assessing Educational Needs

98. NEEDS--OF PEOPLE AND THEIR COMMUNITIES--AND THE ADULT EDUCATOR: A REVIEW OF THE LITERATURE OF NEED DETERMINATION. McMahon, Ernest E. July 1970. 86p. ERIC Clearinghouse on Adult Education. EDRS Order No. Ed 038 551; price in microfiche \$0.50, in hard copy \$4.40. Also available from Adult Education Association of the U.S.A., 1225 19th Street, N.W., Washington D.C. 20036; price \$3.00.

Focusing on community education and development, this literature review analyzes the problem of determining community and individual needs; the issue of relevance to the community; the meaning of need (as opposed to interests or desires); and the use of community studies, listening posts, surveys, and power structure analysis as evaluation tools. The issue of relevance in particular is examined with respect to teaching versus action, disciplines versus the interdisciplinary approach static programs, and the setting of program objectives. An 88 item annotated bibliography touches on adult basic education, vocational education, rural development, social change, professional continuing education, training design, participation, and other pertinent concerns.

99. PROCESSES FOR IDENTIFYING EDUCATIONAL NEEDS OF ADULTS. Saraswathi, L.S. Iowa State Univ. Ph.D. Thesis. 1969. 279p. University Microfilms Order No. 69-20,668; price in microfiche \$3.60, in xerography \$12.60.

This study focused on the relative effectiveness of three processes for identifying educational needs in adult program planning in home economics education. It also described characteristics of 40 Extension home economists and 37 vocational home economics teachers who taught both secondary school and adult classes; and sought relationships between these characteristics and measures (based on adult needs identified by the respondents) of the effectiveness of the processes. All three pertained to nutritional educational needs of a group of families of industrial workers. The processes did not differ significantly on five criteria of usefulness of program planning needs, but did differ significantly for the total number of needs and for needs in four behavioral and three subject matter categories. Process 2 (background data plus current food practices) and Process 3 (background data plus current plus desired food practices) were more productive than Process 1, but did not vary much between themselves. Need priorities did not vary significantly by process except in two categories. Differences among the economists and among teachers were insignificant, but there were variations between groups. Individual characteristics had little bearing on measures of effectiveness.

100. EDUCATIONAL INTERESTS OF DISADVANTAGED AND NON-DISADVANTAGED IOWA HOUSEHOLD HEADS. Arendt, Donald Philip. Iowa State Univ. M.S. Thesis. 1968. 113p. EDRS Order No. ED 031 623; price in microfiche \$0.50, in hard copy \$5.75.

A study was made of 538 disadvantaged and 247 non-disadvantaged household heads in Iowa -- their occupation, training desired, material possessions, membership and participation. The sample included 643 males and 142 females and was distributed in zones from open country to large urban areas. According to the prescribed criteria 14% of the households in Iowa were disadvantaged. The largest portion of the disadvantaged (31%) were located in the large urban areas in cities over 50,000. Fifty-nine percent of the participants were interested in more training; this desire increased with education but decreased with age. There was little difference in training desired by zones of residence; a division into occupational groups showed, however, that the professional

group had the most interest and farmers the least. Training in the areas of metal work, teaching, mechanics, electronics, and drafting were most often mentioned by the total group. Females desired training in licensed practical nursing, social work, office machines, computer programming, and accounting. The disadvantaged had fewer automobiles, newspapers, and magazines, and were less likely to be members of organizations or to be active participants in them.

101. CONGRUENCE IN THE EDUCATIONAL NEEDS OF HOMEMAKERS IN LAKE COUNTY, INDIANA AS PERCEIVED BY PROGRAM DETERMINERS, EXISTING CLIENTELE AND POTENTIAL CLIENTELE. Quesenberry, Evelyn Pearl. Wisconsin Univ. Ph.D. Thesis. 1968. 201p. University Microfilms Order No. 69-982; price in microfiche \$3.00, in xerography \$9.25.

This study sought mainly to determine how needs perceived by Cooperative Extension specialists and Extension Home Economics influentials (largely Homemakers) compare with perceptions by existing and potential Extension Home Economics club clientele. Rank ordered perceptions of influentials and three other respondent groups (including 207 homemakers in Lake County, Indiana) concerning educational needs were compared. Differences between influentials' perceptions and those of present and potential clients were examined in relation to five program areas and several background variables (age, education, number of children under 18, tenure in clubs, participant or not, occupation, income, residence). These were among the findings: (1) influentials ranked Individual and Community Resource Development higher, and Family Stability, Consumer Competence, and Family Health lower, than other groups; (2) "coping with tensions and pressures in everyday life" was the only statement ranked in the top 10% by every group; (3) personal and family relations, tension and pressure of everyday life, the feelings, concerns, and emotions of various age groups, and management of time and money were among the chief concerns of all groups; (4) age and number of children under 18 were the main background variables in ranking of program areas.

102. A TAXONOMY OF RESPONSE PROCESSES. Miller, Elmo E. 1969. 56p. Human Resources Research, Inc. Alexandria, Va. Clearinghouse for Federal Scientific and Technical Information Order Number AD-695-499; price in microfiche \$0.65, in hard copy \$3.00.

A system for classifying perceptual-motor tasks was devised for the purpose of distinguishing the kinds of training strategy appropriate for each task. A rationale is presented and various task elements are delineated in terms of cue functions, image or mediational functions, and movement tendency. The defined task elements were used in constructing two classifications: one of training strategies, and one of tasks.

See also: SECTION 1300 PARTICIPATION PATTERNS OF ADULTS; item 10, 9 implications of social change for educational policy; 34 implications of Snygg-Combs phenomenological theory for adult education; 3 East Orange, New Jersey; 5 Whitey County, Indiana; 286, 282 extension agents, 481 service workers in school systems; 126 adult education students in Sweden; 690 training for overseas assignments; 680 young urban homemakers; 336 older adults in "congregate facilities" (i.e., homes);

432, 431 special adult degree programs; 733 community services in Colby Junior College; 646, 657, 655, 654 various agricultural education programs; 468, 469, 470, 381 administrators, staff, patients in hospitals; 639, 506 law enforcement and correctional personnel; 515, 362, 585 flight training; 566 post-secondary occupational education in Oklahoma; 635 department store sales personnel; 570 occupational education in midwestern urban areas; 584 operatives in manufacturing firms.

1550 Determination of Objectives

103. ADULT LEARNER CHARACTERISTICS AND INSTRUCTIONAL OBJECTIVES. Etter, David Campbell George. California Univ., Los Angeles. Ed.D. Thesis. 1969. 170p. University Microfilms Order No. 70-8140; price in microfiche \$3.00, in xerography \$8.00.

Using 40 male and 40 female part time learners with an average age of 36.6, this program planning study explored relationships between selected learner characteristics and behaviorally stated cognitive instructional objectives (IOs). Variables included age, sex, socioeconomic status, verbal ability, and a measure of learners' goals or learning objectives. Experiment 1 investigated to what extent contrasting IOs, expressing the same program content, elicited differing judgments of program worth, and to what extent learner characteristics might affect program ratings. Experiment 2 investigated the effect of IOs on achievement (in contrast with a control group without IOs) and the interaction of IOs with individual characteristics. Results suggest that statements of IOs, regardless of program form or content, should be viewed as appropriate or inappropriate for specific categories of learners rather than inherently desirable or undesirable.

1600 Recruitment

104. APPLICATION OF DEMAND ANALYSIS IN MARKETING CONTINUING EDUCATION. Waters, Elzberry, Jr. George Washington Univ. January 1969. 36p. EDRS Order Number ED 028 403; price in microfiche \$0.25, in hard copy \$1.90.

This study investigated the feasibility of applying economic demand analysis (especially elasticity of demand) in marketing George Washington University off-campus degree programs. A written and graphic analysis was made of the budget justification in terms of the total contribution profit concept, break-even analysis, and the multiple functional relations affecting the demand for credit courses. A framework or model was also sought for an intelligent approach in other off-campus departments to planning, prediction, and control of functions. The resulting tuition increase was accompanied, not by the expected drop in demand, but by an increase.

1650 Selection, Prediction of Success

105. SCORE DISTRIBUTIONS, GENERAL EXAMINATIONS, COLLEGE-LEVEL EXAMINATION PROGRAM; CANDIDATES TESTED THROUGH THE UNITED STATES ARMED FORCES INSTITUTE, JULY 1965-DECEMBER 1966. College Entrance Examination Board, New York, N.Y. March 1968. 49p. EDRS Order No. ED 028 363; price in microfiche \$0.25, in hard copy \$2.55.

Score distributions were obtained for 43,877 candidates tested through the United States Armed Forces Institute (USAFI) on all five College-Level Entrance Program (CLEP) General Examinations. Findings included the following: (1) the majority of candidates were between ages 19 and 22; (2) 69.3% had completed high school but only 20.7% had attended college; (3) in general, four years of college added 100 points to individual scores; (4) overall average scores increased from age 17 to a peak around ages 22-24; (5) the oldest group (over 40) was not the lowest on any of the examinations; (6) observed differences between highest and lowest scoring age groups were smallest for English Composition (20 points) and largest for Social Sciences-History (50); (7) average scores on the five examinations were consistently related to each other for ages 17-24, but by age 30 the relationships had shifted.

106. AN INNOVATION IN HIGHER EDUCATION FOR ADULT STUDENTS. Vaselenak, Mimi Mette. Calgary Univ., Alberta, Canada. M.Ed. Thesis. April 1969. 124p.

This study investigated the achievement level of mature students, effects of a particular adult higher education program, and possible relationships between participant characteristics and grade point averages (GPA). First, examples of the historical and philosophical development of adult education in Denmark, England, the United States, and Canada were reviewed. Innovative admission procedures for adult students at 24 Canadian colleges and universities were examined, with emphasis on the background and performance of 88 mature nonmatriculated students (MNM) in the Faculty of Education, University of Calgary. It was determined, among other things, that motivation and determination appear to be deciding factors enabling MNM students to bridge the gap in educational background and succeed academically, and that GPA was not specifically related to age, previous courses, social background, or work experience. Some tentative conclusions were posed on the social and economic value of such programs, followed by suggestions for further research.

107. THE LIFE HISTORY AS A PREDICTOR OF LEADERSHIP. Umscheid, Sylvester C. Maryland Univ., M.S. Thesis. 1969. 117p. Dept. of Agricultural and Extension Education.

This study further refined a life history instrument used in previous studies believed to have potential use in programing, adult leadership selection, training, and identification of leadership potential. Subjects were 83 boys and 157 girls from five states who participated in the

Citizenship Short Course conducted by the National 4-H Foundation during July 1969. A cross-validation group was provided by dividing the subjects into two equal groups based on age and sex. Fifteen different life history items were found to be correlated with one or more biographical items yielding validity coefficients ranging from $-.42$ to $+.38$. It was concluded that these items should prove of practical value for prediction purposes.

108. PERFORMANCE RELATED TO INDICATORS OF POTENTIAL OF TUSKEGEE INSTITUTE MDTA TRAINEES. Jones, Lewis W. and Boyd, Ether D. Tuskegee Institute, Ala. August 31, 1968. 82p. EDRS Order No. ED 027 393; price in microfiche \$0.50, in hard copy \$4.20.

The objective of this study was to determine the relationship between training and job performance and 30 independent variables which were assumed to be related to success or failure of 67 adult males enrolled in vocational programs. The measures which were significant (.05 level) for successful training performance were (1) Work Interest Flexibility, (2) Intuitive Mechanics, (3) Revised Beta Examination, and (4) environmental adjustment and overall adjustment on the Emo Questionnaire. Course performance, personal characteristics, and peer evaluations were all significant (.05 level) indicators of satisfactory job performance.

109. DEVELOPMENT OF A NONREADING EDITION OF THE GENERAL APTITUDE TEST BATTERY. USES TEST RESEARCH REPORT, 23. United States Employment Service, Washington, D.C. November 1968. 35p.

This study on interrelationships of the General Aptitude Test Battery (GATB) and nonreading aptitude tests was designed to develop nonreading aptitude test composites suitable for disadvantaged adults aged 18-29 with twelve years or less of education.

110. A SET OF BASIC INTEREST SCALES FOR THE STRONG VOCATIONAL INTEREST BLANK FOR MEN. Campbell, David P. and Others. In Journal of Applied Psychology Monograph; v52 n6 December 1968. p1-54.

Twenty-two homogeneous content scales were developed for the Strong Vocational Interest Blank (SVIB) by clustering items with high inter-correlations. Mean scores are presented on each of these scales for 113 occupational samples, and test-retest statistics are included for groups tested and retested over two weeks, 30 days, three years, 22 years, and 30 years. Similar information is presented for several student samples including a group who were tested as freshmen, as sophomores, and five and ten years after graduation.

111. THE INTEGRATION OF TRAINING, ASSESSMENT AND RESEARCH IN A PEACE CORPS TRAINING PROJECT. Fitzgerald, Edward T. Hawaii University. December 1968. 49p. EDRS Order No. ED 029 260; price in microfiche \$0.25, in hard copy \$2.55.

The purpose of this research project was to devise a method of personality assessment for Peace Corps trainees. In this experiment, trainees evaluated

themselves and each other on traits and skills deemed especially relevant by the assessment staff and staff members who had just had overseas experience (host country nationals, returned Peace Corps volunteers, and the project director). Assessment and human relations training was then integrated by means of the assessment staff's constructing and evaluating their particular assessment instruments, discussing the results of their assessment with each trainee, and initiating feedback.

112. STABILITY OF APITIUDE SCORES FOR ADULTS. Showler, William K. and Droege, Robert C. In Educational and Psychological Measurement; v29 n3 February 1969. p681-686.
113. ADULTS CHANGING JOBS: PREDICTING TRAINABILITY USING BIOGRAPHICAL DATA. Mottram, R.D. In Gerontology; April 1970. p4-11.

This paper examines the possibility of using such biographical data as spare time interests and occupational history as a basis for selecting suitable adults for retraining. It was found that, for the younger trainees, what they did in their spare time did not as yet affect their trainability. For the older trainees, neither their education nor occupational history required them to exercise their faculties enough to maintain their capacity to deal with new, complex information. In their case, and particularly for the women, what they did with their spare time was very relevant to their trainability.

114. ANNUAL MILITARY TRAINING ASSOCIATION CONFERENCE (PROCEEDINGS, 11th, U.S. COAST GUARD TRAINING CENTER, NEW YORK, NEW YORK, SEPTEMBER 15-19, 1969). Military Testing Association. January 1970. 494p. Clearinghouse for Federal Scientific and Technical Information Order No. AD-700-302; price in microfiche \$0.65, in hard copy \$3.00.

Conference proceedings contain 40 pilot studies and other papers on such topics as data banks for test items; a classification system for achievement items; prediction and test validation; test construction; confidence testing; occupational proficiency; specialty proficiency testing; reporting of evaluation results; risk taking; theoretical aspects of testing and of communication; personnel surveys; motivation; leadership; and contributions of military testing to psychometric research.

115. A COMPARISON BETWEEN THE ARMED SERVICES VOCATIONAL APTITUDE BATTERY AND THE NAVY BASIC TEST BATTERY IN PREDICTING NAVY SCHOOL PERFORMANCE. Thomas, Patricia. January 1970. 20p. Naval Personnel Research Activity, San Diego, Cal. Navy Training Research Lab. Clearinghouse for Federal Scientific and Technical Information Order Number AD-702-416; price in microfiche \$0.65, in hard copy \$3.00.

The effectiveness of the ASVAB in Navy classification needed to be determined and compared with the basic test battery (BTB). The ASVAB was administered to all recruits at two Naval Training Centers and the men who subsequently attended a Navy Class 'A' school were identified and their BTB scores and school grades obtained. The validities of the

ASVAB and BTB tests were investigated within each school and linear-sum correlations were also computed to determine the best combinations of ASVAB tests as possible school selectors. Various item statistics and validities and reliabilities for the shortened tests were obtained for use in evaluating Form 1 of the ASVAB and in development of subsequent forms. Form 1 of the ASVAB was found to be too easy for effective discrimination among Navy students; comparisons of the BTB and ASVAB validities uniformly favored the BTB.

116. FLEET EFFECTIVENESS PREDICTION STUDIES AT A RECRUIT TRAINING COMMAND. Plag, John A. and Goffman, Jerry M. U. S. Navy Medical Neuropsychiatric Research Unit, San Diego, Calif. June 1968. p18-25.

Data are presented to illustrate some of the research procedures which are employed in ascertaining the military effectiveness of groups of naval enlistees. In this particular study it was found that a high percentage of enlistees who perform poorly enough in recruit training to require assignment to a special indoctrination company are judged to be noneffective enlistees in the fleet.

117. NAVAL RECRUIT CLASSIFICATION TESTS AS PREDICTORS OF PERFORMANCE IN 87 Class "A" ENLISTED SCHOOLS (1964-1966). Final Report. Thomas Edmund D. Naval Personnel Research Activity, San Diego, Calif. Feb. 1969. 70p. Clearinghouse for Federal Scientific and Technical Information Order No. AD-687-105; price in microfiche \$0.65, in hard copy \$3.00.

Results were summarized from a study involving students enrolled between 1964 and 1966 in 87 Class "A" level schools. Relationships between selection scores and final school marks are reported graphically for each school along with validity coefficients and information on academic attrition. About 11% of all students failed to complete courses for academic reasons. Attrition rates exceeding 20% were noted in 12 schools. In general, the classification tests were effective for nearly all 87 schools. For about half of them, prediction was very good.

118. MEASURES OF REACTION TO THREAT OF PHYSICAL HARM AS PREDICTORS OF PERFORMANCE IN MILITARY AVIATION TRAINING. Boyles, Wiley R. George Washington Univ. May 1969. 19p. Clearinghouse for Federal Scientific and Technical Information Order No. AD-688-817; price in microfiche \$0.65, in hard copy \$3.00.

This paper reports efforts to develop measures of reaction to physical harm threat and measures of change of confidence in ability to cope with that threat for use in the secondary selection process in U.S. Army aviation. The Background Activity Inventory test was used for assessing the stress component and the Situational Confidence Measures for the confidence component. The study showed that the confidence measure held up well. The stress measures were less stable.

119. ABSTRACTS OF BESRL RESEARCH PUBLICATIONS, FY 1969. Brown, Emma E. Army Behavioral Science Research Laboratory, Arlington, Va. Sept. 1969. 60p.

Clearinghouse for Federal Scientific and Technical Information Order No. AD-700-128; price in microfiche \$0.65, in hard copy \$3.00. Technical Research Note 217.

120. DEVELOPMENT OF IMPROVED APTITUDE AREA FOR ENLISTED CLASSIFICATION. Maier, Milton H. and Fuchs, Edmund F. U.S. Army Behavioral Science Research Lab., Arlington, Va. September 1969. 49p. Clearinghouse for Federal Scientific and Technical Information Order No. AD-701-134; price in microfiche \$0.65, in hard copy \$3.00.

Research has been conducted to develop new and improved aptitude area composites based on the Army Classification Battery (ACB) test scores for use in determining assignment of enlisted input to training courses.

121. INTERPRETATION AND UTILIZATION OF SCORES ON THE AIR FORCE OFFICER QUALIFYING TEST. Miller, Robert E. Lackland AFB, Texas. Air Force Human Resources Lab. May 1969. 38p. Clearinghouse for Federal Scientific and Technical Information Order No. AD-691-001; price in microfiche \$0.65, in hard copy \$3.00.

The report summarizes a large body of data relevant to the proper interpretation and use of aptitude scores on the Air Force Officer Qualifying Test (AFOQT). Included are descriptions of the AFOQT testing program and the test itself.

See also: SECTION 1120 MENTAL, PERCEPTUAL ABILITIES; item 127 bibliography on counseling and personnel services in adult education; 533 admission tests in part-time university business program; 84 test for aptitude for learning social motives; 148 predicting success of Peace Corps community development workers; 435 tests for university "mature non-matriculants"; 90 relation of age to Graduate Record Exams; 732 variables related to community college success; 558 abstracts of 444 technical reports on Air Force personnel; 513 educational background versus aptitude score in Air Force selection for training; 514 Objectively Scoreable Apperception Test in Naval aviation training; 519 pretesting for level in Naval programmed instruction; 420 placement tests in English as second language programs; 427 pass rates on GED exams in Colorado; 85, 617, 396, 402, 407, 624, 361 various tests and studies of selection in basic education and remedial occupational programs for poor, low aptitude or disadvantaged adults.

1700 Retention

122. A STUDY TO DETERMINE THE DROPOUT RATE AND THE REASONS WHY ACADEMICALLY ABLE STUDENTS WITHDREW FROM THE UNIVERSITY OF WYOMING DURING THE PERIOD, THE BEGINNING OF FALL SEMESTER 1963 TO THE BEGINNING OF FALL SEMESTER 1964. Mullally, Robert R. Wyoming Univ. Ed.D. Thesis. 1967. 144p.

A study was made of the total undergraduate dropout rate at the University of Wyoming for the 1963-64 school year, personal and background

characteristics of academically able dropouts, reasons for discontinuance, plans for continuing formal education, the number of dropouts transferring to other institutions of higher educations and their reasons for transfer, and the attitudes of academically able dropouts toward certain university services and facilities. Student personnel files and 238 questionnaires returned by dropouts who withdrew in good academic standing were among the sources of data. These were among the conclusions and findings: (1) withdrawals were most frequent at the end of the freshman year and among students under 20; (2) about half the dropouts transferred to other institutions; (3) lack of financial resources was the leading reason for withdrawal; (4) dropouts were generally happy with the teaching, campus instructional and recreational facilities, and library services and facilities, but not with community recreational facilities, study conditions in residence halls, opportunities to choose elective courses, or counseling assistance.

123. DIFFERENCES IN SOME INITIAL ATTITUDES OF STUDENTS WHO COMPLETE AND STUDENTS WHO DROP OUT IN THE WELLESLEY, MASSACHUSETTS, ADULT EDUCATION PROGRAM. Hurkamp, Rosemary Crosby. Boston Univ. School of Education. Ed.D. Thesis. 1968. 139p. University Microfilms Order No. 69-7854; price in microfiche \$3.00, in xerography \$6.00.

This study investigated differences in the initial attitudes of Wellesley, Massachusetts, adult education program dropouts and completers. A pre-tested questionnaire (39 attitude questions and 27 personal data questions) was administered to 595 Wellesley participants and was followed up by an analysis of 178 who withdrew for reasons other than illness. Seven attitude questions were statistically significant when no other control was used besides attendance: questions on course success or failure; time spent away from home and family; participation in "open house" activities; quality of instruction; previous school experience; amount of education desired; and course difficulty. Twenty questions were significant when one factual question was used as an additional control. Early dropouts were too few to determine whether they differed from completers even more than the overall dropout group.

124. A STUDY OF DROPOUTS IN AN ADULT BASIC EDUCATION PROGRAM AND GENERAL EDUCATION DEVELOPMENT PROGRAM AND SUGGESTIONS FOR IMPROVING THE HOLDING POWER OF THESE PROGRAMS. Hawkins, Dorothy Lee. Indiana Univ. Ed.D. Thesis. 1968. 131p. University Microfilms Order No. 69-6738; price in microfiche \$3.00, in xerography \$6.40.

This investigation sought to discover why adults dropped out of the adult basic education program and the General Education Development program in the New Orleans public schools, and to suggest ways of reducing the number of dropouts. A specially constructed interview schedule was used to obtain data from a 10% random sample of 1965-67 dropouts listed in the two programs. Responses of the 50 interviewees, all Negroes, indicated that the main reasons for withdrawal were such personal ones as personal illness, conflict in employment schedule, and child care problems. Institutional factors played a negligible part. A need was seen for small groupings, diversified programs, and flexible schedules,

and for an awareness of realistic short-range and long-range goals to serve as incentives for adult students.

125. MOTIVATIONAL ENGINEERING FOR PILOT TRAINING. Herzberg, Frederick I. and Others. Case Western Reserve Univ., Cleveland, Ohio. 1969. 51p Clearinghouse for Federal Scientific and Technical Information Order No. AD-702-123; price in microfiche \$0.65, in hard copy \$3.00.

The study was an investigation of student pilot motivation for, and toward, the Air Training Command's undergraduate pilot training (UPT) program. The motivation hygiene approach was used to identify the motivational factors operating in the UPT program systematically. This approach has been used extensively in industry and with success in a non-training military situation. The purposes of the study were: to employ motivation-hygiene theory and critical incident interview methodology for investigation and motivation in a military training situation, specifically, undergraduate pilot training; and to compare the findings from the undergraduate pilot trainee sample with another air force sample and samples from industrial organizations. Achievement was the factor which appeared most frequently; it was mentioned in 74 of the 90 satisfying incidents and 45 of the 87 dissatisfying ones. The relatively low appearance of two other factors, Responsibility and Work Itself, differs from previous industrial and air force samples.

126. ADULT EDUCATION: RECRUITMENT AND METHODS. Sjostrand, Wilhelm and others. Uppsala Univ. (Sweden). Inst. of Education. School Research Newsletter (Stockholm). December 1969. 18p. EDRS Order No. ED 039 430; price in microfiche \$0.25, in hard copy \$1.00.

The object of the research reported in this paper is to prepare guidelines for methods for the more efficient education of adult students in Sweden engaged in planned programs leading to comprehensive, vocational or secondary school competence or to corresponding degrees of competence required for further vocational education. This first stage consists of a survey of the clientele, concentrated on evening and adult secondary school classes, county colleges and correspondence schools.

See also: SECTION 1300 PARTICIPATION PATTERN OF ADULTS: 1650 SELECTION, PREDICTION OF SUCCESS; item 734 persistence of students in fundamental learning labs of North Carolina Community College system; 631 dropouts from new careers program; 602 study of dropouts from Neighborhood Youth Corps program; 413 persisters versus dropouts from basic education program; 191 attrition in correspondence study; 623 work climate related to retention of hard-core workers.

1750 Counseling, Guidance

127. COUNSELING AND PERSONNEL SERVICES IN ADULT EDUCATION. CURRENT INFORMATION SOURCES, NO. 23. Glick, Barry, Ed. February 1969. 51p. ERIC Clearinghouse on Adult Education. EDRS Order No. ED 029 234; price in microfiche \$0.25, in hard copy \$2.65.

The annotated bibliography dealing with counseling and personnel services in adult education contains 94 indexed and abstracted entries arranged under four headings: student personnel services, counseling services; admissions and selection; and retention and dropout, and financial assistance.

128. HOW AGE-BIASED ARE COUNSELORS OF ADULTS? Troll, Lillian E. and Schlossberg, Nancy. 1969. 14p. Available from the authors: Lillian Troll and Nancy Schlossberg at Wayne State Univ.

A study was made to determine the extent of age-bias among counselors working with adult clients in educational settings. An Age Norms Inquiry questionnaire was sent to counselors in 55 urban colleges and to the members of the Adult Development Guidance Association (186 of 381 questionnaires were returned). Age-bias was operationally defined as preference for completion of selected developmental tasks at earlier age levels. While no uniform opinion with respect to age norms and constraints was shown, more than half of the respondents showed some age-bias (50%+ bias on 19 of 32 items and over 75% on 5 items), there are a sizeable number who are vigorously opposed to any suggestion of age norms and who would fight for counseling each individual case on its own merits. Women counselors are generally less age-biased but no other counselor characteristic measured (age, counseling experience or training) showed any significant correlation with age-bias. The division of items into family, general, and vocational-educational categories also did not relate consistently to the bias found. Two tables of response data and the questionnaire used are included.

See also: 1700 RETENTION; 1800 STUDENT AID AND SERVICES; item 622 family service counseling in manpower training; 484 identification of adults with counselor personality attributes; 616 group orientation for hard-core unemployed.

1800 Student Aid and Services

129. A HISTORY OF THE SERVICEMEN'S READJUSTMENT ACT AND ITS EFFECT UPON EDUCATION IN INDIANA. Thompson, Jay Cecil, Jr. Ball State University, Indiana. Ph.D. Thesis. 1969. 245p. University Microfilms Order No. 70-6660; price in microfiche \$3.40, in xerography \$11.05.

With a focus on the state of Indiana, a study was made of the Servicemen's Readjustment Act and the effect of its educational provisions. A comparison of this legislation with previous veteran's benefits gives credence to the thesis that this act was a turning point in federal legislation for veterans. After its passage, there was considerable discussion regarding educational benefits. Would it decrease expected economic and employment problems? Would it make for lowering of academic

standards? The Veterans Administration's management of the program was criticized from the start. Charges regarding alleged abuses were widespread and continuous. The result was an investigation in 1951 by a committee of the House of Representatives. This was truly a significant piece of legislation; later refinements changed the approach to veteran benefits for the good of the recipients and society. It offset the serious depletion of trained personnel resulting from the war; served as a readjustment device which helped prevent any serious national problems of unemployment and unrest of dissatisfaction among veterans; it was a major contribution to the welfare of the entire society.

130. CONTINUING EDUCATION: A STUDY OF OPINIONS OF UNIVERSITY FACULTY AND INDUSTRIAL PERSONNEL. Brisco, Bill J. Wyoming Univ. Laramie. Ed.D. Thesis. March 1968. 112p. EDRS Order No. ED 029 241; price in microfiche \$ 0.50, in hard copy \$5.70.

Opinions were gathered from college faculty and industrial employees as to the number of college semester hours they felt they could take while employed full time. Roughly one-fourth of the university faculty members had no time for courses; the rest thought they could take an average of 3.5 semester hours without adversely affecting full time responsibilities. About 80% felt that all tuition should be free to the faculty. The industrial personnel felt they could devote 8.7 hours per week to continuing education and felt the company should pay three-fourths of the cost. A higher percentage of university faculty members than of industrial employees were working toward advanced degrees, but both devoted about the same amount of time to the job and community. More industrial personnel attended noncredit classes.

131. A REPORT ON THE OPERATION OF THE EVENING AND CORRESPONDENCE COURSE POLICY (TB 620135). Canadian Treasury Board, Ottawa, Training Policy Group. July 1968. 57p. EDRS Order No. ED 034 918; price in microfiche \$0.50, in hard copy \$2.95.

A study was made of the application, during the 1966-67 academic year, of a policy of tuition fee reimbursements up to 50% for Canadian public service employees in job related evening or correspondence courses.

132. EVALUATION OF UNITED STATES AIR FORCE BASE LIBRARIES SUPPORTING UNDER-GRADUATE AND GRADUATE EDUCATION PROGRAMS IN COLLABORATION WITH CIVILIAN COLLEGES AND UNIVERSITIES. Shipps, Harrold Southard, Jr. Denver Univ. May 1969. 371p. Clearinghouse for Federal Scientific and Technical Information Order No. AD-691-103; price in microfiche \$0.65, in hard copy \$3.00.

The purpose of this study was to determine the adequacy of base library service and collections to support the undergraduate and graduate study programs undertaken on United States Air Force installations by officers and airmen, through civilian institutions, during off-duty hours. With a few notable exceptions Air Force base libraries were found to be generally inadequate in their capacity to support off-duty education programs of undergraduate and graduate level. Inadequate communication between base librarians and representatives of the educational institutions,

existing personnel authorizations and levels of expenditures for library materials, were reasons for the lack of curriculum-related library resources.

See also: 1750 COUNSELING, GUIDANCE: item 397 stipends in adult basic education; 610 training allowances in MDTA program; 386 financial incentives in prison training.

1850 Administrative Practices

133. ADULT EDUCATION ORGANIZATIONS RELATIVE TO PROGRAM DEVELOPMENT AFFECTING INNOVATIVE PROCEDURES AND FLEXIBILITY TO CHANGE. Ringer, Wayne B. Chicago Univ. 1968. 226p. EDRS Order No. ED 030 076; price in microfiche \$1.00, in hard copy \$11.40.

Five bureaucratic characteristics of organizations determined by the perceptions of staff members in 45 Cooperative Extension Service organizations and obtained through a mailed questionnaire, were compared with organizational innovativeness in program development as demonstrated over the past five years and reported by 53 raters composed of extension administrators responsible for programs on a state and national basis. When tested individually, the dimensional bureaucratic administrative characteristics -- "hierarchy of authority", "rules and procedures" and "interpersonal relations" were not significantly related to innovation. Forty-nine percent of the variation in innovation was found to be attributable to four variables which were grouped in pairs -- "rules - rewards" and "personnel - budget" or "resources." "Rewards of Office" and "rules and procedures" when tested as grouped or combined variables in regression analysis, proved to be significantly related to innovation.

134. BUREAUCRATIC CHARACTER OF ADULT EDUCATION ORGANIZATIONS AND INNOVATIVENESS IN PROGRAM DEVELOPMENT. Ringer, Wayne B. Paper presented at the annual meeting of the American Educational Research Association (Los Angeles, February 8, 1969). 24p. EDRS Order No. ED 027 869; price in microfiche \$0.25, in hard copy \$1.30.

The relationship between the bureaucratic character of an adult education organization and its willingness to accept innovation in program development was investigated.

135. A MERGER OF EXTENSION: WEST VIRGINIA. Douglass, Mohammad A. and Shriver, Howard A. In Journal of Cooperative Extension; v7 n3 Fall 1969. p137-144.

A study was undertaken in West Virginia to determine the impact of the merger of the Cooperative Extension Service, General Extension, Mining and Industrial Engineering, the Center for Resource Development, the Office of International Programs, and continuing education programs in law and medicine. Data were collected from 131 respondents by means of a questionnaire. Agents indicated the degree of importance they

attached to clientele groups typically served prior to the merger (pre-merger) and those additional groups not included in job descriptions or in program emphases before the merger (post-merger groups). Based on mean importance scores, county and 4-H agents tended to accord pre-merger clientele groups more importance than post-merger ones. It was concluded that the role perceptions of agents in West Virginia have changed substantially since the merger of extension units but the changes have not been expressed by drastic changes in program emphases for any agent group; home agents appeared to be more oriented to post-merger identified clientele and subject matter than county or 4-H agents; overall attitude of agents toward the Appalachian Center was generally good; and agents realize the extent of role change brought about by the merger.

136. CALIFORNIA STATE TRAINING DIVISION; A STUDY IN INSTITUTION BUILDING. Qureshi, Anwar Ullah. University of Southern California, Los Angeles. D.P.A. Thesis. 1968. 666p. University Microfilms Order No. 68-10,247; price in microfiche \$8.45, in xerography \$30.15.

Based on a theoretical model of institution building, this study sought to assess the capability of the California State Training Division to manipulate and control its environment. A three-dimensional approach was suggested consisting of analysis of variables (leadership, doctrine, program, resources, structure) in institutional functioning; consideration of enabling, functional, normative, and diffused linkages between an institution and its environment; and the study of transactions between the two. Survival, normativeness, influence, and autonomy were given as tests of institutionality. It was found that: (1) the Training Division, despite some elements of institutionality, is not a full-fledged institution; (2) the model seems applicable to a training organization in an advanced society; (3) to become an institution in terms of social impact, a training organization needs considerable autonomy and independence.

See also: SECTION 7500-8550 INSTITUTIONAL SPONSORS: item 707 merger of two university adult education centers; 716 operation of an Office of Extension Studies.

1890 Relations with Governing, Advisory Groups

137. A STUDY OF THE EFFECTIVENESS OF UNIVERSITY OF MISSOURI EXTENSION COUNCILS. Patton, Glenn. Missouri Univ. Dept. of Extension Education. 1968. 63p.

A questionnaire designed to obtain information about the effectiveness of university extension councils was mailed to county and/or area directors in each of the 114 counties. Responses were received from 111 (97%). Replies indicated that 58% of the councils were rated good or excellent; 42% average or poor. Elected council members received a higher rating on overall effectiveness than members who were appointed.

138. PROGRAM DEVELOPMENT COMMITTEE USAGE BY AREA EXTENSION AGENTS IN THE AGRICULTURAL INDUSTRIES. Leidheiser, Paul. April 1968. 20p. EDRS Order No. ED 030 795; price in microfiche \$0.25, in hard copy \$1.10.

Using questionnaire responses from 24 out of 25 area extension agents, this Ohio Cooperative Extension Service study investigated the number and kind of area extension program development committees currently organized or used by these agents, the number of committees planned for future use, the structure and function of the committees, how agents were using the committees, and reasons for use or nonuse. Findings included the following: (1) the agents are using, or planning to use, committees for program development; (2) agents look to committees for most help in identifying problems and determining broad objectives; (3) they consider committees somewhat helpful in program evaluation and least helpful in implementation; (4) they see influential agricultural producers and representatives as active committee members along with selected agents; (5) most favor using county extension agents on committees and feel strongly that coordination and liaison with county programs is extremely important; (6) agents favor geographical distribution of committee members throughout the area served while limiting committee size to about 15 members. One major suggestion was for detailed inservice training in ways of working effectively with committees.

139. ANALYSIS OF THE FACTORS ASSOCIATED WITH AGRONOMY COMMITTEE MEMBERS' PERCEPTION OF THE PROGRAM PLANNING PROCESS IN VIRGINIA. Saunders, Walter Leroy, Jr. Virginia Polytechnic Institute, Blacksburg. M.S. Thesis. August 1967. 179p.

The major objectives were to determine (1) the perception held by agronomy program planning committee members of the program planning process of the Cooperative Extension Service in Virginia; and (2) the relation between this perception and sociocultural variables. Data were obtained through a questionnaire sent to 290 members of 44 local Virginia committees (64.8% responded). The members perceive planning as being import, feeling that planning should be a cooperative effort by committee members and extension agents, but they lack a clear understanding of their role. A majority of the members had no formal training in program planning and felt their influence on extension programs to be negligible. The relationship between the committee members' perception of planning and sociocultural variables (e.g. age, farm income) was significant (.05 level) with the exception of committee members' perception of the extension agent's role. Appendixes include the questionnaire and a bibliography.

140. FACULTY PERCEPTIONS OF CONTINUING EDUCATION AT SYRACUSE UNIVERSITY. Porter, Lee. Syracuse Univ., N.Y. March 1970. 33p. Publications Program in Continuing Education. Available from Syracuse University Library of Continuing Education, 107 Roney Lane, Syracuse, N.Y. 13210; price \$0.50. Occasional papers, 20.

This questionnaire survey investigated how Syracuse University faculty view their continuing education unit (University College), examined differences in their attitudes toward continuing education, and recommended action designed to improve attitudes. There was a definite tendency toward approval of University College. Variance by age, sex, rank, teaching and research involvement, tenure, and other biographical factors, was analyzed. Statistically significant results included favorable attitudes among females more than men; instructors more than professors; faculty involved in research or on noncredit teaching more than those not involved in either; professional school faculty more than those in Liberal Arts; and those with no adult education teaching experience more than those with various levels of experience.

See also: item 721 farmers attitudes about agricultural extension, Seneca County, New York; 681 role of home demonstration advisory committees; 718 attitudes of lay leaders toward Extension in Jefferson County, New York; 719 clientele attitudes toward agricultural extension; 708 views of University of Missouri department chairmen on participation in continuing education.

2200 LEARNING ENVIRONMENTS

2210 Community Education and Development

141. COMMUNITY DEVELOPMENT ABSTRACTS. Agency for International Development, Washington, D.C. 1970. 291p. Available from Sociological Abstracts Inc., 2315 Broadway, N.Y., N.Y. 10024.

This volume of 1,108 abstracts summarizes the majority of important works on community development during the last ten years.

142. SUPPLEMENT TO BIBLIOGRAPHY ON THE DIFFUSION OF INNOVATION. DIFFUSION OF INNOVATIONS RESEARCH REPORT, 6a. Rogers, Everett M. Michigan State Univ. Sept. 1968. 41p. EDRS Order No. ED 030 056; price in microfiche \$0.25, in hard copy \$2.15.

Lists all new publications on diffusion of innovations (75 new non-empirical and 184 coded empirical studies) added to the Diffusion Documents Center, Michigan State University, from July 1967 to September 1968.

143. RESEARCH IN SOCIO-CULTURAL DEVELOPMENT. Frei, J.W. Montreal Council of Social Agencies (Quebec) February 1969. 20p. Paper presented at the Seminar of the Ontario Institute for Studies in Education, Feb. 1969.

Research efforts relating to community development, social action, and other forms of sociocultural development seem to focus on three lines of approach: exploratory and descriptive studies of the more or less classical

type; evaluative and predictive research; and the measurement and evaluation of results. The second type of research emphasizing the study of processes, is not yet sufficiently developed, but some existing methods could be applied in it. The third approach can use many of the existing methods and techniques based on the use of standards which, however, are still in the process of development.

144. A CONCEPTUAL ANALYSIS OF THE ROLE OF ADULT EDUCATION IN NATION-BUILDING. Mantynen, Heimo T.U. Indiana Univ. Ph.D. Thesis. 1969. 266p. University Microfilms Order No. 69-17,753; price in microfiche \$3.45, in xero-graphy \$12.15.

The purpose of this study was to investigate the possible role of adult education in nation-building. The model of nation-building was divided into three sequential categories: the antecedent consisted of the background factors and goals of nation-building; the concurrent--which included the actual process of adult education and existing conditions; and the consequent--which incorporated the outcome of the whole process of nation-building. It was found that the outcome of the nation-building process appeared to be predicated upon the interaction between adult education and nation-building. Whereas the political dimensions vary greatly from nation to nation, the adult education dimensions -- intensity, effectiveness, and extension of adult education -- were found to be present in every process of nation-building.

145. THE INTENSIVE GROUP AS A FOUNDING EXPERIENCE. Bloomberg, Lawrence I. and Others. In Journal of Humanistic Psychology; v9 n1 1969. p93-99.

Describes an experiment in community development in which middle-class people participated in intensive group sessions. The importance of these groups in providing the individual growth and change necessary for the development of a community is discussed. Participation in an intensive group (a) provides a founding experience, a pattern of authentic experiences common to all, (b) focuses on the intrinsic value of each person, and (c) promotes a continuing renewing of this experience.

146. COMMUNITY ORGANIZATION AND THE MOBILIZATION OF RESOURCES FOR MANPOWER. Ferman, Louis A. Michigan Univ. November 1969. 16p. Clearinghouse for Federal Scientific and Technical Information Order No. PB-188-780; price in microfiche \$0.65, in hard copy \$3.00.

This study summarizes an exploration of community structural factors indicating the receptivity or willingness of a cluster of communities to cooperate with a wide number and variety of Federally sponsored aid programs; manpower and industrial development; urban renewal; transportation planning; poverty reduction and control. The aim of the project is to test the feasibility of relating community structure to mobilization of manpower resources, and to determine the utility of pin-pointing conditions and variables conducive to the use of Federal aid programs.

147. AN EXPLORATORY STUDY: A COMPARISON OF PARTICIPANTS IN A COMMUNITY DEVELOPMENT COURSE AND THE LARGER POPULATION IN BREVARD COUNTY, FLORIDA. Long, Huey B. Florida State Univ. March 1969. 15p. Urban Research Center.

The purpose of the study was to identify characteristics and attitudes of Brevard County community development (CD) course participants and compare them with a random sample of the larger Brevard County population. The data appeared to suggest that persons who may become active in CD activities may reflect certain characteristics: 30-40 years of age, high educational achievement level, a higher than average income, different views of the ordinary citizens' role and different views of public officials, and less mobility, than the broader population. Participation in community activities may be related to principal region of upbringing. The CD participant appears to be more involved politically than the general public, which may reflect an optimistic perception that sets him apart from the general public. Previous findings and tentative conclusions drawn from this study may suggest a framework for the development of hypotheses concerning the characteristics of community activists.

See also: SECTION 5500 COMMUNITY SERVICES AND PROGRAMS; 5550 COMMUNITY DEVELOPMENT PROGRAMS - FOREIGN; item 460 guidelines for planned change in agrarian countries; 98 review on education needs of communities.

2220 Community Development Training

148. PREDICTING THE SUCCESS OF PEACE CORPS COMMUNITY DEVELOPMENT WORKERS. Dicken, Charles. In Journal of Consulting & Clinical Psychology; v33 n5 1969. p597-606.

Compared predictor assessments obtained before and during training of 55 Peace Corps volunteers with ratings of effectiveness of performance overseas. The main criterion was a composite of judgments by field supervisors. The most valid predictors were peer ratings, life history, certain training grades, and ratings by a selection board using all data. Some psychometric measures of personality and cognitive style had modest validity, but intellectual measures had almost none. Interviews and clinicians' impressionistic interpretations of predictor data showed low validity. Females were more predictable than males. Analysis of a subsample of "least effective" Ss failed to identify predictors particularly effective in discriminating between candidates "just acceptable" and "just not acceptable."

149. A POVERTY PROGRAM INDIGENOUS LEADERS: A STUDY OF MARGINALITY. Zurcher, L.A. In Sociology and Social Research; v53 n2 1969. p147-162.

The processes of role enactment for 23 volunteer indigenous leaders associated with a community action agency were examined. Questionnaire responses found the leaders to be more oriented toward the poor and to

perceive their role as less marginal than expected by the program's professional staff. Leaders' orientation and perception changed with program participation. Findings are related to leaders' social-psychological characteristics, reasons for becoming leaders, "success," dropout rate, and biographical and participant observation data. Continuous training programs emphasizing the dynamics of marginality should be included for indigenous leaders to help alleviate some of their stresses and conflicts and to help them perform more adequately as bridges between the community and the agency.

150. INTERCULTURAL TRAINING FOR FOREIGN ASSISTANTS. Dove, Charles James. Michigan Univ. Ph.D. Thesis. 1968. 395p. University Microfilms Order No. 69-12,087; price in microfiche \$5.05, in xerography \$14.80.

Sixty-five new Agency for International Development employees attended a week of training involving skill exercises, role playing, and simulation. Gains were noted in such areas as seeking information as compared to giving it, introducing personal content into communication, ability to recommend effective communication techniques, and perception of a change agent's role as helping people to solve their own problems in their own way. Correlations between future assignments and training results were insignificant. Moreover, no conclusion could be drawn as to the influence of professional background on learning, or to indicate that changes stemmed from increased awareness of cultural and value system influences on communication.

151. URBAN MANPOWER; A STUDY OF THE TAMPA BAY REGION. Tampa Bay Regional Planning Council, St. Petersburg, Fla. December 1969. 112p. Clearinghouse for Federal Scientific and Technical Information Order No. PB-189-320; price in microfiche \$0.65, in hard copy \$3.00.

The document examines the extent and quality of manpower resources in the Tampa Bay Area (Florida) currently employed in the urban development professions. It reviews such major elements as educational background, perception of one's tasks, and mobility. More specifically, it considers the role of educational programs, both credit and noncredit, as a means of making them more knowledgeable and effective participants in urban problem solving processes.

See also: item 493 evaluation of community change institute for church workers; 695 cultural factors affecting change agents in Middle East.

2230 Rural Communities

152. A STUDY OF ECONOMIC DEVELOPMENT ACTIVITIES IN RURAL COMMUNITY ACTION AGENCIES. Yankelevich (Daniel), Inc., New York, N.Y. August 1969. 108p. Clearinghouse for Federal Scientific and Technical Information Order No. PB-185-957; price in microfiche \$0.65, in hard copy \$3.00.

Results are presented of a study on the economic development efforts of ten rural community action agencies (CAAs). This report describes the role played by the various CAAs in the economic development of their communities: the problems faced by the different agencies, the program approaches tried and how these approaches were developed, what the CAAs learned from these attempts, and why the program of one of these agencies appeared uniquely effective. These approaches include efforts to work with various local, state, and Federal agencies and with local business groups as well as to establish self-help enterprises for low income residents.

153. MOUNTAIN FAMILIES IN POVERTY. FINAL REPORT. Johnson, Cyrus M. and Others. Kentucky Univ., Lexington. May 1967. 126p. EDRS Order No. ED 027 115; price in microfiche \$0.50, in hard copy \$6.40.

Families participating in a program of Aid to Families with Dependent Children and Unemployed Parents were studied to obtain data on personal and health characteristics of adult members, socioeconomic characteristics of the family unit, and the interrelations of these variables. Interviews were conducted by trained interviewers with 324 families residing in 7 rural eastern Kentucky counties. After 3 months, 72 homemakers were reinterviewed to determine what changes had occurred resulting from the program. Most families were found to be improved financially; they were more hopeful about the future; and their children were improving in school activities.

154. A SOCIO-ECONOMIC SURVEY OF THE EAST KOOTENAY AREA IN BRITISH COLUMBIA. Verner, Coolie and Others. Canadian Dept. of Regional Economic Expansion, Ottawa, Ontario. ARDA, Canada Land Inventory, Project 49009. January 1970. 154p.

In a socioeconomic survey of East Kootenay in British Columbia, 124 household heads, (49 farmers and 75 nonfarmers) were interviewed. Data were obtained on marital and family status, age distribution, birthplace, residential patterns, attitudes toward rural living, educational and job training background, kinds of job training desired, off farm employment of farmers, income and material standard of living, contacts with agricultural extension agents, and other characteristics. It was concluded, among other things, that economic development among farm families would depend on more efficient use of available land. Off farm employment would also augment farm income, but low educational and skill levels would make this difficult. Although the farmers need basic education as a prelude to job training, their relatively advanced age and satisfaction with things as they are make such participation unlikely. The nonfarm population shows greater educational, occupational, and residential mobility, hence greater potential for change. However, neither population seems to have sufficient skills or education for urban employment.

155. MIGRATION EXPECTATIONS AND PERFORMANCES OF OPEN-COUNTRY YOUNG ADULTS: A LONGITUDINAL STUDY, 1948-1956. Yoesting, Dean R. and Bohlen, Joe M. Iowa State Univ. of Science and Technology. 1969. 26p. Paper read

at the joint session of the Midwest Sociological Society and the Ohio Valley Sociological Society, Indianapolis, Indiana, May 1969. EDRS Order No. ED 081 077; price in microfiche \$0.25, in hard copy \$1.40.

This paper discusses the migration expectations of a sample of 152 respondents interviewed while high school seniors in 1948 and reinterviewed in 1956 concerning their migration performances. The research was designed to test the general hypothesis that a relationship exists between certain social and personal characteristics and migration performances. In addition, characteristics of those with migration performances congruent or incongruent with expectations are discussed. Of the 63% of the sample which in 1948 stated their intention to migrate, 83% achieved their goal in 1956; however, only one half of the undecided migrated. More females than males migrated, and more nonfarm than farm males left. The males who migrated had a higher socioeconomic background, more frequently discussed their future plans with their parents, and aspired to obtain additional training beyond high school than those males who remained in their home communities. For these variables, no differences existed between females who migrated or remained in their home communities.

See also: SECTION 5500 COMMUNITY SERVICES AND PROGRAMS; 5550 COMMUNITY DEVELOPMENT PROGRAMS - FOREIGN; 6700 OCCUPATIONAL TRAINING - AGRICULTURE, HOME ECONOMICS; item 739 characteristics of small, rural community related to adult education participation; 373 program for disadvantaged rural youth; 683 information use among rural mothers; 578 career decisions among Iowa young adults.

2240 Urban Environment

See: SECTION 5500 COMMUNITY SERVICES AND PROGRAMS; 0250 STUDIES AND PLANNING LOCAL LEVEL; 6550 OCCUPATIONAL TRAINING-UNSKILLED, DISADVANTAGED; item 343 urban influence on education, employment and fertility of women; 151 extent, quality of urban development workers in Tampa.

2300 Residential Education

156. A CRITICAL APPRAISAL OF SELECTED FINNISH FOLK HIGH SCHOOLS. Leskinen, Heikki Ilmari. Indiana Univ. Ph.D. Thesis. 1968. 370p. University Microfilms Order No. 69-7691; price in microfiche \$4.75, in xerography \$16.65.

This study sought to describe fully the historical development of the Finnish folk high school movement, to identify the goals and principles of present provincial folk high schools and how they are expressed in the practice of adult education, and to investigate how such schools use goals and principles stressed by the Bureau of Studies in Adult Education, Indiana University.

157. THE VOLKSHOCHSCHULE: A COMPARATIVE STUDY OF ADULT EDUCATION IN THE FEDERAL REPUBLIC OF GERMANY AND THE GERMAN DEMOCRATIC REPUBLIC. Schadt, Armin Ludwig. The Ohio State Univ. Ph.D. Thesis. 1969. 167p. University Microfilms Order No. 70-6873; price in microfiche \$3.00, in xerography \$8.00.

The Volkshochschule (people's college) is the primary institution for adult education in both the Federal Republic of Germany (West Germany) and the German Democratic Republic (East Germany). The general purpose of this study is to assess similarities and differences not only in the basic aims of adult education but to examine where possible the practical consequences in the light of stated objectives. The study was based on documentary research and analysis, and uses historical and comparative methodologies. West German adult education is presently in a period of change and revision; in East Germany adult education is more fully developed and is an integral part of the country's educational system. The study finds that East Germany has been more successful in its emphasis on vocational education than West Germany's attempts to meet the intellectual and social needs of the worker through liberal and general education. Both countries have stressed citizenship education.

158. THE DANISH FOLK HIGH SCHOOL: AN EXPERIMENT IN HUMANISTIC EDUCATION. Davis, David Charles. United States International Univ., San Diego, Calif. Ph.D. Thesis. May 1969. 179p. University Microfilms Order No. 69-19,840; price in microfiche \$3.00, in xerography \$8.20.

This historical and comparative study examines the folk high school movement in Denmark from the standpoint of the New Humanism as expressed in the writings of Carl Rogers, Abraham Maslow, Sidney Jourard, and others.

159. A COMPARISON OF THE SPREAD OF THE FOLK HIGH SCHOOL IDEA IN DENMARK, FINLAND, NORWAY, SWEDEN, AND THE UNITED STATES. Larson, Dean Gordon. Indiana Univ. Ed.D. Thesis. June 1970. 258p. University Microfilms Order No. 70-11,672; price in microfiche \$3.60, in xerography \$12.60.

Comparing folk high schools in the United States and Scandinavia, this study investigated the philosophical and historical development of the movement, the relationship of folk high schools to other institutions in each nation studied, and conditions which have contributed to successful implementation of the idea.

160. FINANCING RESIDENTIAL ADULT AND CONTINUING EDUCATION. Pelton, Arthur Elwood. Nebraska Univ. Ph.D. Thesis. July 1969. 202p. University Microfilms Order No. 70-4665; price in microfiche \$3.00, in xerography \$10.15.

Using a mailed questionnaire survey of administrators, this dissertation examined sources of income, proposed expenditures, and financial practices in publicly supported college and university residential continuing education centers. General findings revealed that residential centers in the United States have assumed the characteristics of a public service agency. Programs are highly adaptive to the expressed

interest of participants, and the centers enjoy a close relationship with their clientele. This situation will probably continue because individual participants are the chief source of income for residential centers.

161. THE DEVELOPMENT AND TESTING OF A TYPOLOGY OF ADULT EDUCATION PROGRAMS IN UNIVERSITY RESIDENTIAL CENTERS. ABSTRACT. Buskey, John H. Chicago Univ. Abstract of a Ph.D. Thesis. July 1970. 29p.

This study was designed to develop and field test a typology or framework providing for the systematic description, definition, and classification of activities in university continuing education centers. Basic questions pertained to whether such a typology could be developed, and whether other investigators and practitioners could use the typology and its elements with predictable results. In a pilot study, three program elements (objectives, interaction patterns, time) were formulated from an inductive analysis of 16 University of Chicago programs. This three-step process was later used to analyze 425 university continuing education programs and to sort them into 12 hierarchically arranged program types. Using a literature review and statistical procedures, the typology and program elements were then evaluated (and found generally satisfactory) on the criteria of comprehensiveness, usefulness, consistency, and acceptance.

162. ANNOTATED BIBLIOGRAPHY ON PROGRAM EVALUATION IN RESIDENTIAL ADULT EDUCATION (CONFERENCES AND INSTITUTES). Kulich, Jindra, Ed. and Others, Ed. National University Extension Assn., Silver Spring, Md. Conference and Institute Div. March 1970. 67p. EDRS Order No. ED 038 578; price in microfiche \$0.50, in hard copy \$3.45.

Designed especially for relative novices in residential adult education conference and institute work, this annotated bibliography covers 29 books, periodical articles, and book chapters.

See also: SECTION 3000 CONFERENCES, INSTITUTES, WORKSHOPS: item 304 leadership behavior of university conference directors; 529 analysis of university executive development programs; 211 behavior in experimentally composed small groups.

2350 Organizational Development

163. PLANNED ORGANIZATIONAL DEVELOPMENT AND CHANGE: A CLINICAL STUDY. Daumer, Karl Hans-Joachim. Case Western Reserve University, Cleveland, Ohio. Ph.D. Thesis 1969. 201p. University Microfilms Order No. 70-4908; price in microfiche \$3.00, in xerography \$9.25.

The purpose of this study was to document the assumptions, strategies, and processes of a planned organizational change. Primary emphasis was on the "process" of growth and change as it occurred in individuals and groups. A number of assumptions regarding this process are first explored,

and later provide the framework within which the project is described. An evaluation by participants of the perceived progress provided the basis for later parts of the study. The consulting team operated to a great extent in collaboration with the client system. The participative process was not just advocated in theory but put into practice.

164. ORGANIZATION RENEWAL; ACHIEVING VIABILITY IN A CHANGING WORLD. Lippitt, Gordon L. 1969. 322p. Available from Appleton-Century-Crofts, Educational Division, Meredith Corporation, 440 Park Avenue South, New York, N.Y. 10016.

Drawing on behavioral and management science, this book points out the necessity for organizations to re-examine their objectives on behalf of their members, clients, and employees. Part One covers organizations as Socio-technical systems; Part two discusses organizations as people at work (motivation, personality, leadership, and work groups); and Part Three covers the process of interfacing (dialogue, confrontation, problem solving, and ethical implications). Parts Four and Five cover conditions, skills, and actions in organizational renewal and resources for it.

See also: SECTION 2920 HUMAN RELATIONS, LABORATORY TRAINING; 6200 MANAGEMENT AND SUPERVISORY DEVELOPMENT; item 133 bureaucratic characteristics of Cooperative Extension organizations; 504 organizational change program in California prison; 76 dogmatism and receptivity to information from subordinate, peer or superior.

2600 INSTRUCTIONAL METHODS

2630 Teaching Styles and Techniques

165. RELATIONSHIPS AMONG LEARNING STYLES, INSTRUCTIONAL METHODS, AND THE NATURE OF LEARNING EXPERIENCES. Tallmadge, G. Kasten and Shearer, James W. American Institute for Research, Palo Alto, Calif. In Journal of Educational Psychology; v60 n3 1969. p222-230.

Examined whether learning might be enhanced by employing instructional methods which differ in design and use as a function of learner characteristics. Two separate courses were developed for each subject-matter area. One reflects an inductive instructional approach and the other a deductive method. Each of the 4 courses was administered to 50-60 Navy enlisted men. Twenty-eight measures of aptitude, interest, and personality were obtained on each S. The primary finding is the significant interaction among instructional methods, learner characteristics, and subject matters. This strongly supports the existence of learning styles.

166. INFLUENCES ON ADULT LEARNING IN THE EVENING COLLEGE. Kitchin, William W. University of North Carolina Extension Bulletin; v49 n2 April 1970. 79p.

This study investigated relationships of evening college students' autonomy and succorance needs (or independence and dependence) to their orientations toward learning, preferred styles and methods of teaching, satisfaction with perceived styles and methods in class, and academic performance. Two hundred subjects at the University of North Carolina were surveyed with a personal information sheet, an adjective checklist, and three questionnaires. It was hypothesized that high autonomy need students would differ from high succorance need students on learning orientations, preferences, satisfaction, and performance. Possible variations by age, sex, and occupational status were also sought. These were among the conclusions: the students desired learning for its own sake; more students chose lecture-discussion than all other methods combined; teachers were preferred who were accepting and interactive; student satisfaction with teaching methods was related to academic; teacher style seemed more important than teaching methods to student satisfaction and performance; satisfaction with teaching styles was more important than personality traits to performance; sex (female) and succorance need appear related.

167. COMPARISON OF VERBAL BEHAVIOR OF TEACHERS TEACHING BOTH ADULT BASIC EDUCATION AND PUBLIC SCHOOL CLASSES. McDaniel, Gary D. East Texas State Univ. Ph.D. Thesis. August 1969. 125p. University Microfilms Order No. 70-11,294; price in microfiche \$3.00, in xerography \$6.00.

This study compared differences in the classroom verbal behavior of 30 teachers in East Texas who taught both adult basic education (ABE) and public school classes. Each teacher was observed, by means of Flanders' System of Interaction Analysis, for 30 minutes in each teaching situation. Amounts of teacher talk and student talk were determined, as well as forms of direct and indirect influence. Significant differences were found between the two teaching situations in all interaction categories except lecturing. Several conclusions were drawn: (1) teachers tend to accept student feelings and ideas more readily, ask more questions, give more directions, use more criticism, and lecture slightly more, in public school than in ABE classes; (2) teachers involved in both types of classes used more praise, and tended to exert more direct influence, in the ABE classes; (3) more student talk seems to occur in ABE classes than in public school classes; (4) there is more silence or confusion in public school than in ABE classes.

168. THE EFFECTS OF VARIATIONS IN EDUCATOR BEHAVIOR ON THE LEARNING PROCESS IN LABORATORY HUMAN RELATIONS TRAINING. Bolman, Lee Garrison. Yale Univ. Ph.D. Thesis. 1968. 172p. University Microfilms Order No. 68-14,841; price in microfiche \$3.60, in xerography \$12.60.

Using a cognitive learning theory as a conceptual base, predictions were developed as to the effects of various kinds of trainer behavior in laboratory human relations (T group) training. Data were collected by questionnaires administered to members of ten laboratory training groups, each with two trainers. Factor analysis was done on seven dimensions of trainer behavior. These dimensions were then correlated with

the following criterion measures: identification with the trainer; discomfort with the trainer; group tension; group withdrawal; self perceived learning; peer-rated learning. Principal findings were: (1) "Competence" (including elements of personal security, empathy, and congruence) was a crucial trainer dimension related to member learning; identification with the trainer, and liking for the trainer; (2) Affection was positively related to liking for the trainer but not to other criteria; (3) Conditionality (tendency to reward or punish group members) was related to discomfort and to group tension but not to other criteria; (4) Conceptual Input, Openness, and Use of Influence were largely unrelated to the criteria; (5) identification with the trainer was positively related to learning, replicating the results of an earlier study.

169. A FRAMEWORK FOR EXPLORING THE ADULT EDUCATOR'S COMMITMENT TOWARD THE CONSTRUCT OF "GUIDED LEARNING." Landvoigt, Penny L. February 1970. 7p. Paper presented at the Adult Education Research Conference, Minneapolis, Minnesota, February 27-28, 1970. EDRS Order No. ED 036 765; price in microfiche \$0.25.

Present literature of adult education appears to be negating learners' responsibility in making decisions in the curriculum development process and gives little attention to procedures for securing active involvement. There seems to be a need for bringing "guided learning" to the attention of those working in the field of adult education. The framework for identifying when an adult educator is guiding learning was developed, based on "philosophical patterns" which identify the basis for operationalizing the education process and on the "operational pattern" which identifies actual acts and moves on the part of the adult educator that indicate commitment to the construct of guided learning. It was developed in terms of a limited set of crucial criteria. Each criterion was then defined in terms of conditions which must be met if it is present. It was apparent that commitment to guided learning was a matter of degree; therefore, most of the means of measurement have been developed in the form of a continuum. Document not available in hardcopy due to marginal legibility of original document.

170. THE STUDY OF ADULT LEARNING. Jamieson, G.H. In Studies in Adult Education; v2 n1 April 1970. p18-27.

Some methodological problems are noted, followed by descriptions of learning sets, transfer of learning, paced learning, mediated (paired associate) learning, and discovery learning. Twenty-four references.

171. IMPROVING COMMUNICATION SKILLS AND ATTITUDES BY TESTING. Smith, Ralph D. Colorado State Univ. M.S. Thesis. Summer 1968. 77p.

To study effects of a "teaching by testing" method in improving the communication skills of change agents, the investigator designed an experiment around a series of writing mechanics tests. The tests were given by mail to a random sample of University of California

agricultural extension workers. With pretest and posttest exercises and writing mechanics, the subjects received attitude tests and news evaluation tests. An experimental group received manipulatory treatment through instruction by test corrections and marginal notes. There was significant evidence that a teaching by testing method will improve change agents' understanding of writing mechanics.

172. PRINCIPLES OF SELF-REWARD FOR STUDY SKILLS. Wark, David M. March 1969. 19p. Paper presented at the meeting of the College Reading Assn., Boston, Mass., March 13-15, 1969. EDRS Order No. ED 033 822; price in microfiche \$0.25, in hard copy \$1.05.

A description is given of quasi-automated techniques used to increase students' motivation to improve reading rate and study skills in a University of Minnesota adult extension course for study improvement.

173. THE EFFECTS OF GROUP COMPETITION UPON STUDENT PERFORMANCE. Kubala, Albert L. and Christensen, Harold E. George Washington Univ. HumRRO Technical Report 68-7. June 1968. 52p. Available from Human Resources Research Office, George Washington University, 300 North Washington Street, Alexandria, Va. 22314.

In a study to determine whether group competition is effective in improving motivation in technical training, two experimental classes at the U.S. Army Air Defense School were divided into four groups each, equal in size and mean aptitude. Each group competed with each of the other groups during successive two-week intervals. The winner in each pairing was the group that failed the smallest percentage of regularly scheduled school examinations during the period. Low-cost recognition-type rewards were presented to members of winning groups. Peer ratings and an attitude questionnaire were administered before the first examination, and again after four weeks. The peer rating on desire to succeed and the questionnaire, both presumably measuring motivation, seemed to be valid predictors of success. Group competition did appear effective in improving academic performance of the lower aptitude men.

174. LEARNING TIME WITH A MNEMONIC SYSTEM. Berla, Edward and Others. In Psychonomic Science; v16 n4 1969. p207-208.

Tested 56 adults trained either in the use of a commercial mnemonic technique or a traditional rote procedure on the total time required to learn a list of 20 concrete nouns. Mnemonically trained Ss learned the list in significantly less time than did rote-control Ss.

175. THE EFFECT OF SERIAL STRUCTURE ON CHILDREN'S AND ADULTS' PAIRED-ASSOCIATE LEARNING. DiVesta, Francis J. and Bernstein, Martin E. In Journal of Experimental Child Psychology; v8 n1 August 1969. p63-73.

176. RESEARCH INTO THE ADAPTIVELY CONTROLLED INSTRUCTION OF COMPENSATORY TRACKING SKILLS. Pask, Gordon and Scott, B.C.E. Systems Research Ltd., Richmond, England. October 1969. 66p. Clearinghouse for Federal Scientific and Technical Information Order No. AD-698-817; price in microfiche \$0.65, in hard copy \$3.00.

The report describes a number of experiments designed to compare the acquisition of a compensatory tracking skill in adaptively controlled and open loop conditions.

177. THE EFFECTS OF ADAPTIVE STEPPING CRITERION ON TRACKING PERFORMANCE: A PRELIMINARY INVESTIGATION. Bancroft, Norris R. and Duva, James S. Naval Training Device Center, Orlando, Fla. October 1969. 14p. Clearinghouse for Federal Scientific and Technical Information Order No. AD-698-792; price in microfiche \$0.65, in hard copy \$3.00.

The effects of using various adaptive stepping criteria upon performance were studied. Comparison of adaptive and nonadaptive training techniques were also made. The tested hypotheses were that: (1) there is an 'optimum' adaptive stepping criterion for any given task of learning; (2) adaptive training produces superior training than does nonadaptive training. Findings supported both hypotheses.

178. COMPREHENSION OF REPEATED TIME-COMPRESSED RECORDINGS. Sticht, Thomas G. Human Resources Research Organization, Alexandria, Va. January 1970. 6p. PP2-70 Reprinted from Journal of Experimental Ed., v37 n4 Summer 1969.

Time-compressed tape recorded messages were used to determine if listening to the message twice, in the same amount of time required to listen to the uncompressed message once, would improve listening comprehension scores of both high and low aptitude men. The results indicated that for both groups of subjects, listening to the compressed messages twice improved comprehension scores obtained by listening to the compressed tapes once.

179. SOME RELATIONSHIPS OF MENTAL APTITUDE, READING ABILITY, AND LISTENING ABILITY USING NORMAL AND TIME-COMPRESSED SPEECH. Sticht, Thomas G. Human Resources Research Organization, Alexandria, Va. October 1968. 20p. Human Resources Research Organization, 300 North Washington St., Alexandria, Va. Report No. PP33-68 (Reprinted from Journal of Communication; v18 n3 p243-258. September 1968.)

Three studies tested the differences between reading and listening ability, and performance on comprehension and intelligibility tests using time-compressed speech, for Army inductees of high, average, and low mental aptitude. The results indicated that there were no differences in reading or listening performance for men of either average or low mental ability.

180. SOME RESULTS OF THREE BASIC SKILLS TRAINING PROGRAMS IN AN INDUSTRIAL SETTING. Mollenkopf, William G. In Journal of Applied Psychology; v53 n5 October 1969. p343-347.

Test scores obtained before and after instruction were analyzed to evaluate outcomes of three types of training. The training programs were designed to improve basic skills of present and prospective employees in production, office, and laboratory work.

See also: SECTION 1120 MENTAL, PERCEPTUAL ABILITY; item 411 relation of achievement in basic education to use of various methods and materials; 291 relation of leadership behavior and effectiveness of adult teachers; 75 implications of Maslow needs theory for adult education; 78 "relaxation instructions" to help verbal recall by anxious persons; 419 use of ITA in English for Spanish speaking adults; 579 "vestibule training" for sewing machine operators.

2730 Lecture

See: item 266 lecture versus telelecture in money management course for extension specialists; 479 comparison of programmed text, text-book, lecture-demonstration and lecture-workshop in physician training.

2740 Personal Contact, Visits

181. PERSONAL CONTACTS AND THE ADOPTION OF INNOVATIONS. Alleyne, E. Patrick and Verner, Coolie. British Columbia Univ., Vancouver Dept. of Agricultural Economics. 1969. 116p. Rural Sociology Monograph, No. 4. EDRS Order No. ED 039 432; price in microfiche \$0.50, in hard copy \$5.90.

A study undertaken among commercial strawberry growers in the Fraser Valley of British Columbia, Canada, sought to define the network of personal contacts as used by the farmers in obtaining information relevant to growing practices. Growers were divided into four adopter categories: laggards, late majority, early majority, and innovator-early adopters. Although the level of adoption was generally high, the higher levels of practice adoption occurred among those growers characterized by larger farms and higher incomes who were relatively younger, were better educated, and who had better educated wives. Ethnic differences in patterns of personal contact and of adoption were noted. The study concluded that personal contacts were far more effective than impersonal sources of information in effecting the adoption of innovations; that the extension service tends to concentrate on personal contacts with a few farmers and to use impersonal contacts for the majority; and that the extension service's use of group instruction and local opinion leaders can extend the range of personal contacts and thus more effectively encourage innovation.

See also: item 675 home counseling for low-income parents; 682 home teaching for disadvantaged parents; 478 client perception of nurse home visits.

2750 Circulars, Mail

182. EFFECTIVENESS OF COOPERATIVE EXTENSION SERVICE NEWSLETTERS WITH DIFFERENT FORMATS RECEIVED BY DAIRYMEN IN PENNSYLVANIA. Mazer, Homer F. and Brown, Emory J. February 1970. 7p. Paper presented at the Adult Education Research Conference, Minneapolis, Minnesota, February 27-28, 1970. EDRS Order No. ED 036 771; price in microfiche \$0.25, in hard copy \$0.45.

The purpose of this study was to measure the effectiveness of various newsletter formats in increasing knowledge among dairymen. There was no significant difference in knowledge gained among dairy farmers receiving the newsletter with different formats. There was a significant difference between dairymen who received the letters and those who did not: the ones who received them had higher knowledge scores. Younger dairymen showed a higher gain than older ones.

183. DO EXTENSION NEWSLETTERS REALLY WORK? West Virginia University, Morgantown., Cooperative Extension Service. May 1970. 21p.

A survey was done of the opinion leader in the West Virginia eastern panhandle to test the communication efficiency of the newsletter of the University of West Virginia Cooperative Extension Service. While it was found that the opinion leaders read the newsletter, there was less evidence to suggest that they used it in influencing public opinion toward the university's extension programs.

184. ONTARIO FARMERS' USE OF SELECTED TECHNICAL PUBLICATIONS. Bell, Ian C. and Blackburn, Donald J. February 1970. 10p. Paper presented at the Adult Education Research Conference, Minneapolis, Minnesota, February 27-28, 1970. EDRS Order No. ED 036 770; price in microfiche \$0.25, in hard copy \$0.60.

This study sought to determine the extent to which selected publications of the Ontario Department of Agriculture and Food were received by farmers in the Province of Ontario. Investigations were made of relationships between various social and demographic characteristics of respondents, and their receipt of these publications. A positive relationship was found between receipt of publications and the following characteristics of respondents: age, formal education, marital status, main source of income, size of farm, working status, commercial status, number of agricultural meetings attended, membership in organizations, childrens' membership in 4-H or Junior Farmer clubs, and district of residence in Ontario.

See also: item 425 testing low cost periodical for use in developing countries; 683 information services of parents of elementary school children; 199 mailed information versus other means of changing school teachers attitudes toward adult education.

2780 Programed Instruction

185. TEACHING MACHINES AND PROGRAMMED INSTRUCTION. VOLUME I. Defense Documentation Center, Alexandria, Virginia. February 1970. 390p.

Clearinghouse for Federal Scientific and Technical Information Order No. AD-702-500; price in microfiche \$0.65, in hard copy \$3.00.

The bibliography contains annotated references to teaching machines and programmed instruction as they relate to efficient learning in military and civilian training, and adaptive learning techniques.

186. INNOVATIONS FOR TRAINING. McFann, Howard H. and Others. George Washington Univ. February 1969. 46p. Clearinghouse for Federal Scientific and Technical Information Order No. AD-685-498; price in microfiche \$0.65, in hard copy \$3.00.

Four papers on research and innovation in military training within the Army Training system deal with procedures for individualizing training, the Project IMPACT prototype system of computer assisted and programmed instructions, student motivation and performance, and prospects for the 1970's and 1980's, and the implications of research in learning processes, individual differences, and training management.

187. PROGRAMED INSTRUCTION FOR SELECTED CIC WATCH OFFICER TASKS. 2. EVALUATION OF THE AUDIO NOTEBOOK IN THE TEACHING OF THE ALLIED NAVAL SIGNAL BOOK. Brock, John F. U.S. Naval Personnel and Training Research Laboratory, San Diego, Calif. Final report. January 1970. 19p. Clearinghouse for Federal Scientific and Technical Information Order No. AD-664-235; price in microfiche \$0.65, in hard copy \$3.00.

The research evaluated oral program instruction used with a multtape recorder, the audio notebook, as a means of promoting adaptation to student differences and flexibility in instructional scheduling. Use of the Allied Naval Signal Book required by the CIC (Combat Information Center) watch officer position was programmed for the audio notebook in terms of learning objectives as currently stated for the standard watch officer course. The oral learning program took less time, much less for those with Navy experience, and achieved the objectives better than the classroom lecture method.

See also: item 33 annotated bibliography on training methods; 287 in-service training of Extension staff; 386 combined with financial incentives in prison education; 399 in adult basic education; 636 Army clerk-typists; 364 programmed text in training low aptitude Navy recruits; 519 time saving in Navy training; 517 in training for sound identification; 518 Naval electronics training; 275 model CAI system in Army; 272 overview of CAI for adult educators; 273 annotated bibliography on use of computers in education.

2800 Correspondence Study

188. MEDIEVAL CORRESPONDENCE EDUCATION: THE RESPONSA OF THE GAONATE. Blinderman, Abraham. In History of Education Quarterly; v9 n4 Winter 1969. p471-474.

A history of the renaissance of Jewish letters and sciences in Arab lands from 637 until 1050.

189. A STUDY OF CORRESPONDENCE STUDENTS OF THE OREGON STATE SYSTEM OF HIGHER EDUCATION. Fairbanks, Dwight Wesley. Oregon Univ. Ph.D. Thesis. 1968. 135p. University Microfilms Order No. 69-12,604; price in microfiche \$3.00, in xerography \$6.40.

A survey was made of characteristics of correspondence students of the Oregon State System of Higher Education, reasons for choosing correspondence study, and attitudes toward it. A questionnaire mailed to 3,241 students, and returned by 1,040, asked 26 questions relating to experiences at each stage (awareness, interest, evaluation, trial, adoption) in the choice of the correspondence method. Data were analyzed from the seven largest occupational groups represented: teachers, college students, high school students, others studying high school courses, armed forces students, homemakers, and meteorologists. Findings included the following: (1) the majority felt that the role of correspondence study was to provide diploma and degree courses to which one would otherwise lack access; (2) faculties gave relatively little advice or encouragement concerning correspondence study; (3) the majority of the students first learned of the availability of their course, and received the most encouragement to enroll, from such sources as parents, teachers, advisors, and employers; (4) the majority had favorable attitudes toward the correspondence study method.

190. THE EFFECTS OF SELECTED PROGRAMMING-ANALOG TECHNIQUES AND VOICE-CONTACT ON COMPLETION BEHAVIOR IN CORRESPONDENCE EDUCATION. Wilson, Robert Roy. Michigan Univ. Ph.D. Thesis. 1968. 195p. University Microfilms Order No. 69-2409; price in microfiche \$3.00, in xerography \$8.80.

This study tested the effect, on completion behavior in correspondence study, of substituting certain analog techniques for traditional correspondence procedures. Eight lessons of a psychology correspondence course were used. Experimental procedures and materials involved mailing lessons each week instead of all at once; providing immediate feedback by answer guides with each lesson; encouraging review through partially cued self-tests; providing voice contact between instructors and students through biweekly telephone conferences; and requiring participation in How to Study materials. The major finding was that, in terms of numbers of students submitting Lesson One, their completion rate, time required for completion, and the number completing all lessons and the examinations, the performance of the E groups was significantly better than that of C subjects.

191. ATTRITION AND ACHIEVEMENT IN CORRESPONDENCE STUDY. Pfeiffer, J. William and Sabers, Darrell. National Home Study Council News, February 1970 Supplement. Feb. 70. 2p. EDRS Order No. ED 036 707; price in microfiche \$0.25, in hard copy \$0.20.

In the one-semester-hour courses nearly 13% of students did not submit even one lesson. The figures for the two- and three-hour courses were both over 20%. In the four-hour courses, nearly 32% do not submit the first lesson. A student in a one-hour course who submitted one lesson

had an 85% chance of completing the course. Of students in two- and three-hour courses who submitted one lesson, over 70% went on to complete the course. Grade point averages (GPA) were not related to length of time taken to complete the course. The highest GPA's were earned by those who completed in one month; the next highest were earned by those who took over two years to complete the course. However, since this latter group comprised 13 students, no significance can be attributed to the finding.

192. 1968 CORRESPONDENCE EDUCATION SURVEY (RESUME). National Home Study Council, Washington, D.C. 1969. 2p.

During 1968 at least 4,782,961 persons (United States) were studying in all types of institutions through correspondence study. This figure is a result of a survey by the National Home Study Council of private home study schools, federal government and military organizations, religious groups, and business and industrial firms or associations. Of the 815 organizations contacted, 298 reported a student body of 4,555,201. Based on previous experience with the schools not reporting, it is estimated they have 227,760 students. The institutions with the largest enrollments were the federal and military programs (2,063,760 students). Those with the least were business and industry (10,153 students). Survey of major correspondence schools throughout the free world outside the United States revealed they had a student body of 1,492,869.

193. CORRESPONDENCE STUDY: FACULTY EVALUATION; PHASE I OF THE STATE-WIDE CORRESPONDENCE STUDY. Washington Univ., Seattle, Office of Institutional Educational Research. November 1968. 38p. EDRS Order No. ED 028 317; price in microfiche \$0.25, in hard copy \$2.00.

The first of a two-part evaluation of correspondence studies in the State of Washington was concerned with opinion, descriptions, and recommendations of faculty at four state institutions on (1) how the faculty member is affected personally, (2) how students are affected, and (3) program improvement. A need was found for better remuneration and for professional recognition for correspondence teaching. The administration should specify the institutional commitment to correspondence studies, the resources it will allocate, and the recognition and reward it will give to participating faculty. All faculty felt that the State had a definite commitment to its citizens to provide correspondence courses. Correspondence programs might be made more effective by establishing a central organization for correspondence and continuing education services; by eliminating duplications in the state; or by inviting the participation of the community colleges. The State should provide monetary support for correspondence courses for college credit.

See also: 466 survey of correspondence study in hospitals; 131 tuition remission for Canadian public service employees for correspondence study.

2900 Discussion

194. DISCUSSION GROUPS AND PUBLIC AFFAIRS EDUCATION; AN ANALYSIS OF GROUP SURVIVAL. Harp, John and Cummings, Gordon J. New York State Univ. Ithaca, College of Agriculture at Cornell. January 1968. 60p. EDRS Order No. ED 034 165; price in microfiche \$0.50, in hard copy \$3.10.

This study in upstate New York investigated certain characteristics of 602 public affairs education discussion groups; relative group stability in terms of change in size over time; whether characteristics affect group survival; and how group structure is related to certain attitudes on individualism and community growth. Data were gathered by questionnaire (about a 50% response) on community size, residence, age, sex, educational level, occupations, group size, and number of communities represented in each group. Members (52.5% men and 47.5% women) were largely farmers, housewives, or professionals, aged 25-65, high school graduates or beyond, and residents of populations centers and of urban or transitional counties. Single community representation was dominant (60%), especially in rural areas (63%). Most groups were relatively heterogeneous, but on a consistent basis. Those with eight to eleven members more often stayed the same size than larger or smaller groups. Ages under 35, postgraduate education, and professional, technical, or related employment were related to group survival; ages 36-55 were positively related. Farm residence negatively affected attitudes toward community economic growth. Education, residence, and occupation affected perceived dependence on the future of one's community.

195. AN EXPERIMENT IN POLICE-COMMUNITY RELATIONS: A SMALL GROUP APPROACH. Lipsitt, P.D. and Steinbruner, M. In Community Mental Health Journal; v5 n2 1969. p172-179.

To study the effectiveness of group discussion in mitigating the rising hostility between police and residents of the urban ghetto, two 15-member groups of police and ghetto residents held weekly discussions for 12 weeks, led and observed by university researchers. Attitude scales administered at the beginning and end of the study, as well as recorded logs of the meetings, revealed increased understanding and empathy between initially hostile and defensive participants by the end of the study. With increased awareness of each others' problems came an increased faith in the power of co-operation.

196. A STUDY IN STRUCTURED DISCUSSION. Gutzmer, Willard Ernest. Utah Univ. Ph.D. Thesis. June 1969. 120p. University Microfilms Order No. 69-17,912; price in microfiche \$3.00, in xerography \$5.80.

This study tested the hypothesis that group interaction skill and useful learning occur in a discussion group which is academically structured. A class procedure involving a cognitive map, member skills and roles, and group etiquette was incorporated into a class at the University of Utah. Evaluation of class performance was done mainly on the Hill Interaction Matrix (HIM) and postmeeting reaction sheets. One meeting a week was tape recorded and scored. Pre and post HIM tests measured individual ability to interact in a group. The class began by behaving all over the two

dimensions--WORK (or how members interacted) and CONTENT (or subject matter), but reactions eventually gravitated almost wholly to the TOPIC-SPECULATIVE and TOPIC-CONFRONTIVE cells of the matrix. Text assignments, outside reading, and related subject matter exemplified these kinds of behavior; namely, intellectually concerned, controlled, and pursuing topics which did not originate with the class. Results indicated a decided improvement in the group's ability to interact.

197. SOCIAL POWER IN GROUP DISCUSSION LITERATURE. Jacobson, Wally Dale. Washington Univ. Ph.D. Thesis. 1968. 512p. University Microfilms Order No. 69-7060; price in microfiche \$6.50, in xerography \$23.20.

The group discussion literature was examined to determine how fully its principles had incorporated social power principles, and to incorporate relevant power principles into the principles of group discussion. Discussion principles were classified by properties of group members, properties of groups, conditions imposed on groups, interaction processes, and subjective and objective measures of member and group performance. Power principles were classified in terms of power agents, methods of exerting power, and recipients of power attempts. These were among the findings: (1) of the 84 discussion principles discussed, all but nine needed some modification to reflect established power principles and become more useful and dependable; (2) a member's influence in a group depends, not on speaking skill or the ability to use and recognize logical thinking and dialectic, but on how often he contributes to discussion; (3) recognized power discrepancies (including the much maligned element of conformity) are helpful to a group, while unsettled power structures lead to less member satisfaction and a poorer group product; (4) leaders are more successful when they participate and offer evaluation than when they serve only as process regulators.

198. EFFECTS OF NORM-ORIENTED GROUP DISCUSSION ON INDIVIDUAL VERBAL RISK TAKING AND CONSERVATISM. Alker, H.A. and Hogam, N. In Human Relations; v21 n4 1968. p393-405.

Group discussion of risk-relevant material has led to systematic risky shifts. Three studies were designed to test whether discussion of risk-irrelevant material would produce similar effects. In Exp. I, discussion of current fashions produced no shift in risk-taking levels in 97 women. In Exp. II, discussion of ethical conflicts between universalist and particularist norms produced a conservative shift in 60 females. In Exp. III, the same conflicts were discussed but with recommendation of a particular course of action. This produced no significant shift, but groups converging on norm-maintaining alternatives become more risky, and those converging on norm-violating alternatives more conservative.

199. A STUDY OF ELEMENTARY PUBLIC SCHOOL PERSONNEL ATTITUDES TOWARD CONTINUING EDUCATION IN SELECTED COMMUNITIES IN WYOMING; AN EXPERIMENT IN CHANGING ADULT ATTITUDES AND CONCEPTS. Burrichter, Arthur W. Wyoming Univ. Ed.D. Thesis. June 1968. 125p. EDRS Order No. ED 029 239; price in

microfiche \$0.50, in hard copy \$6.35. Also available from Adult Education Library, Wyoming University, Laramie, Wyo. 82070.

A study was made to determine the attitudes of elementary public school teachers and administrators toward education as a lifelong process and the possibility of isolating, testing, and changing adult attitudes to encompass new concepts. Full time elementary school personnel (455) in Albany and Laramie counties completed a tested adult attitude scale. From these, 88 were selected for the experimental study; and of these 88, 41 completed the experiment. In Albany county, 12 of the 41 persons met in two sessions with a film, lecture, and small group discussions; while 29 from Laramie county received the information only through the mail in written form. Both methods of disseminating information about the tested concepts on the attitude scale were significantly effective in changing total scores in the low and high groups. Neither method showed greater effectiveness when comparing changes between low and high groups. However, the Albany county method of small group discussion produced a significantly greater change in total scores than did the Laramie county method of mailed information.

See also: SECTION 2920 HUMAN RELATIONS, LABORATORY TRAINING; item 246 training Army officers with sound film and discussion; 264 effectiveness of discussion in Indian radio forums.

2920 Human Relations, Laboratory Training

- 200 GROUP DYNAMICS. RESEARCH AND THEORY. Cartwright, Dorwin, Ed. and Zander, Alvin, Ed. 1968. 586p. Available from Harper & Row, Publishers, Inc. Keystone Industrial Park, Scranton, Pa. 18512. Third edition.

A systematic summary of results and a collection of the more significant articles describing the methods and research in group dynamics, this volume contains 42 articles on various aspects of the subject.

201. SMALL GROUP PERFORMANCE. Roby, Thornton B. 1968. 364p. Available from Rand McNally & Co., P.O. Box 7600, Chicago, Ill. 60680; price \$7.75. Document not available from EDRS.

This book looks at the essential components in small group behavior, how they interrelate, and how variation affects the overall performance. It identifies significant variables and illustrates the research techniques used in securing the data. There are a series of models for the examination of small group performance.

202. SENSITIVITY TRAINING AND THE LABORATORY APPROACH: READINGS ABOUT CONCEPTS AND APPLICATIONS. Golembiewski, Robert T. and Blumberg, Arthur. Available from F.E. Peacock Publishers, Inc., 401 W. Irving Park Rd., Itasca, Illinois 60143.

This book includes 37 selected articles and extensive editorial comments on the laboratory approach to sensitivity training.

203. PEOPLE, GROUPS, AND ORGANIZATIONS. Indik, Bernard P. Ed. and Berrien, F. Kenneth, Ed. 1968. 284p. Available from Teachers College Press, Columbia University, 525 West 120th St., New York, N.Y. 10027; price \$5.50.

Papers presented at a symposium at Rutgers in 1966 have been brought together in an effort to link studies of individual characteristics to those of group phenomena and organizational features and also to help break down semantic differences within these levels. Papers cover taxonomic issues; reviews of research and theory in the various subareas of concern in the understanding of organizational behavior; and consideration of methodological problems.

204. LABORATORY TRAINING AND ORGANIZATION DEVELOPMENT. Buchanan, Paul C. In Administrative Science Quarterly; v14 n3 September 1969. p466-480.

Reviews studies published between 1964-1968 on laboratory training in human relations and its use and relationship to the improvement of organizational effectiveness.

205. THE EFFECTS OF T-GROUP TRAINING AND GROUP VIDEO RECALL PROCEDURES ON AFFECTIVE SENSITIVITY, OPENMINDEDNESS AND SELF-PERCEPTION CHANGE IN COUNSELORS. Cerra, Patrick Frank. Indiana Univ. Ed.D. Thesis. 1969. 151p. University Microfilms Order No. 69-13,236; price in microfiche \$3.00, in xerography \$7.20.

This study investigated the relative effect of T group training and Group Video Recall (GVR) procedures in the growth of affective sensitivity, openmindedness, and self-perception in 17 Indiana University students majoring or minoring in Counseling and Guidance. Relationships among the three behaviors were also sought. The Rokeach Dogmatism Scale (Form D), the Affective Sensitivity Scale, and the Person Description Instrument were used. One group received T group training three hours daily for six days, whereas the other group received one hour of GVR and two hours of T group training daily. Both groups were pretested and posttested. These were among the findings and conclusions: (1) neither technique significantly affected the three behaviors; (2) gains in openmindedness are very negatively related to gains in self-perceived interpersonal warmth and acceptance under conditions of T group training for low dogmatic counselors in training; (3) gains in affective sensitivity are very negatively related to gains in self-perceived activity and expressiveness under conditions of GVR for highly dogmatic subjects.

206. THE MEASUREMENT OF CHANGE DURING A LABORATORY TRAINING EXPERIENCE; PERSON PERCEPTION AND VERBAL BEHAVIOR PATTERNS. Dralle, Penelope Wasson. Louisiana State Univ. Ph.D. Thesis. January 1969. 166p. University Microfilms Order No. 69-17,102; price in microfiche \$3.00, in xerography \$7.80.

Using participant, trainer, and observer reports and resources, this study examined perceptual and other training laboratory behavior. Twelve executives in a 3 1/2 day laboratory gave free-response descriptions of themselves and other group members. They completed interval-type ratings on each of 20 descriptive items. During the final session, participants

and trainers ranked group members on behavior change, help given to other members, and defensive (guarded) behavior during the group meetings. Two observers independently recorded verbal behavior. Observers could reliably report who spoke, to whom, and the general content of the message, but could not agree on the "affect" or tone. Recordings also suggested that groups have developmental stages and that two way communication exists in T groups. Participants disagreed on specific descriptive words, but the words "sincere," "capable," and "competent" predominated. Changes varied by items and by individuals, but the group as a whole was seen as "more dedicated," "more capable," and "less slow."

207. THE RELATIONSHIP BETWEEN SOCIABILITY AND TYPE AND RATE OF INTERACTION. Rose, Norman Harold. Florida State Univ., Tallahassee. Ph.D. Thesis. 1969. 143p. University Microfilms Order No. 69-17,682; price in microfiche \$3.00, in xerography \$6.40.

The variation in the interaction patterns of group members was investigated in this study. Data on the three major variables -- Sociability, Interaction, and Demographic factors were collected by means of the Social-introversion-extraversion scale in Guilford's "An Inventory of Factors STDCR," the Reciprocal Category System, and a brief questionnaire. Sixty-five educators participating in a three-week workshop were assigned to seven groups through a process of random stratified sampling based on sex, race, and age. Seven other participants served as group leaders. In an effort to eliminate the effects of different leadership styles, the seven leaders were rotated among the seven groups. A total of 48 observations lasting for 30 minutes to two hours were made. Sociability was correlated with Rate of Interaction beyond the .001 level but was not correlated with any demographic factors. These were correlated with Rate of Interaction beyond the .05 level.

208. IMPACT OF LABORATORY TRAINING ON SOCIOPOLITICAL IDEOLOGY. Nadler, Eugene and Fink, Stephen L. In Journal of Applied Behavioral Science; v6 n1 Winter 1970, p79-91.

To learn if the experience of small group democracy in a training laboratory generalizes to the more broadly theoretical issues of ideology, a before and after experimental design was used at a college training laboratory to gather more direct information. Results showed highly significant shifts in democratic directions on each of four scales measuring democratic attitudes.

209. TWO APPROACHES TO GROUP WORK WITH PARENTS IN A COMPENSATORY PRESCHOOL PROGRAM EARLY EDUCATION PROGRAM. Wittes, Glorianne and Radin, Norma. Ypsilanti Public Schools, Mich. June 10, 1969. 37p. Paper presented at the National Council on Family Relations Convention, Washington, D.C. October 24-26, 1969. EDRS Order No. ED 035 056; price in microfiche \$0.25, in hard copy \$1.95.

The hypothesis of this study was that a behavioral, activity oriented approach to group meetings would produce a greater change in maternal

child rearing practices than one utilizing a lecture, question and answer paradigm. A total of 65 women whose children were in an early education program, were divided into two experimental groups and a control group. The parents were told about their role in their child's school performance, the skills their children would need in school, and how they could foster the development of these skills in their child rearing practices. Results show that participation in a parent education program can produce significant changes in child rearing attitudes and practices. The experimental mothers showed a significant increase in behaviors nurturant of identification and cognitive growth in the child. Among the greatest changes in group members were an increased sense of mastery, and enhanced aspirations for themselves. Suggestions for further studies are made, including investigation of the father in the parental education program.

210. A STUDY CONCERNING THE DIFFERENTIAL EFFECTIVENESS OF TWO APPROACHES TO HUMAN RELATIONS TRAINING IN FACILITATING CHANGE IN INTERPERSONAL COMMUNICATION SKILL AND STYLE OF INTERPERSONAL PERCEPTION. Heck, Edward John. Syracuse Univ., N.Y. Ph.D. Thesis. 1968. 180p. University Microfilms Order No. 69-17,695; price in microfiche \$3.00, in xerography \$8.20.

This study investigated and compared the effectiveness of T groups and the Human Development Institute (HDI) in changing interpersonal perception styles and communication skills. In 20 hours of instruction over a ten week period, the two training conditions were systematically varied with groups of elementary school teachers differing on the personality variable of conceptual level (CL). T group and HDI training both proved effective, for the different CL groups, in improving interpersonal style. Controls showed no significant change on either variable. As regards communication skills, the HDI procedures were slightly more effective with low CL trainees, while T groups were slightly more so with high CL trainees.

211. ROLE PERCEPTION AND TASK PERFORMANCE OF EXPERIMENTALLY COMPOSED SMALL GROUPS. REPORT NO. 1 FROM NIMH PROJECT "USE OF SMALL GROUPS TO ADAPT PROBLEM STUDENTS" 1965-1970. Thelen, H.A. and Others. Chicago Univ. 1969. 174p. Available from University of Chicago, 5801 E 71st Ave., Chicago, Illinois 60637.

This report is concerned with the problem of what personality combinations are likely to produce the most effective group in learning situations. Chapter II explores 15 selected personality characteristics that were expected to affect behavior (independent variables). Chapter III explores certain aspects of group behavior whose measurement provides data bearing on group effectiveness (dependent variables). Chapter IV examines the relationships between the independent and dependent variables. Chapter V explores certain hypotheses concerning criteria for group composition. Chapter VI explores in depth the relationship of the variables to group tasks in terms of Work, Process, and Productivity. Chapter VII presents comparative analysis of the group effects of each independent variable. Chapter VIII points up the contribution of the

experimental study in terms of its methodology and findings concerning the dynamics of group effectiveness, and Chapter IX raises implications for residential continuing education.

212. A MEASUREMENT OF SENSITIVITY TO ONE'S IMPACT ON OTHERS. Fitzgerald, Edward T. Hawaii University. June 1968. 26p. Peace Corps Training Program. In Trends; v1 n1 June 1969.

The aim of this study was to evaluate small-group training during a seven-week Peace Corps training project by measuring changes in the volunteers' sensitivity to their impact upon others at four points: openness to experience; dependability; independence; and sensitivity to others. Subjects were 43 male trainees. A forced-choice Peer Nomination Form was given on which subjects rated their peers on various personality traits. They also estimated how they would be rated by their peers, and they rated themselves. The measure of sensitivity was the correlation between how one is rated by his peers and how he estimates that they will rate him. The ratings were done independently without discussion or collusion, and no feedback was given to the subjects during the project. In effect, each subject acted as his own control. Results indicate that the peer nomination scales were highly reliable. Subjects did show an increase in sensitivity to their impact upon others on two personality traits (openness to experience and sensitivity to others); a slight increase in independence; and no change in dependability. The peak in sensitivity occurred in the third week of training.

213. LEADERS UNLIMITED; RESOURCES FOR TRAINING. DEVELOPED IN JUNIOR LEADERS SCHOOLS 1961-1965. National Council of Young Men's Christian Associations, New York, N.Y. 1967. 230p. EDRS Order No. ED 032 490; price in microfiche \$1.00, in hard copy \$11.60.

This study of Young Men's Christian Association (YMCA) junior leader training programs for teenagers, 1961-65, investigated program elements thought to affect leader growth and development. The training experience was keyed to broad YMCA purposes, objectives of the training schools, and individual goals. Personal goal setting, stressed as a means of instilling responsibility for oneself and others, entailed developing a working relationship between advisors and junior leaders, helping individuals become aware of their growth potential, and conducting human relations skill training and modified sensitivity training. Procedures included written scales and personal inventories, Christian social influence skills courses, decision making and gaining group consensus, and varying uses of discussion, role playing, and demonstrations for training in moral values. Sentence completion tests, content analysis of goals, evaluations of school programs and junior leader performance, followup questionnaires and interviews, and other evaluation techniques were described, together with major findings obtained.

214. EDUCATION FOR RESPONSIBILITY. PART 1. INITIATIVE TAKING BEHAVIOR. PART 2. PEER EVALUATION AND RELATED DATA. George, Clay E. and Others. Texas Tech. Univ., Lubbock, Center of Biotechnology, Fatigue and Human Performance. 1969. 41p. Clearinghouse for Federal Scientific and

Technical Information Order No. AD-703-844 and AD-703-845; each priced at microfiche \$0.65, hard copy \$3.00, two microfiche. 1969. 4lp.

This report was concerned with educating ROTC cadets to recognize their strengths and weaknesses as mature, responsible adults. Part I described an initial experimental trial of an experience designed to create awareness of any tendency to take responsibility in a group setting. Combinations of initiative taking and tact were examined. Some lack of tact was tolerated by other trainees if it was accompanied by much initiative taking. Moreover, substantial agreement was found between observer and peer reports. Part 2 presented intercorrelations among initiative, positive critical incidents, and negative critical incidents, and the additional variables of grade point average, cadet rank, birth order, family size, and peer evaluation. Two leadership clusters or aspects (Technical Competence and Academics, and Responsibility-Taking) were defined.

215. A DECISION MAKING APPROACH AS A TEACHING-LEARNING STRATEGY FOR PREPARING PATIENTS FOR SELF CARE. Hallburg, Jeanne Claire. University of Calif. Berkeley. Ph.D. Thesis. 1969. 179p. University Microfilms Order No. 70-6114; price in microfiche \$3.00, in xerography \$8.20.

A study was made of the decision making approach to the medication-taking behavior of 103 older patients attending the general medicine clinic at a university medical center. Results indicated there was no statistically significant difference in the number of deviations or serious errors made by patients in the two groups. Difference in the proportion of patients who deviated and made serious errors also did not reach statistical significance. However, twice as many patients in the control group made serious errors as compared with the experimental group.

216. GROUP DYNAMICS TRAINING AND IMPROVED DECISION MAKING. Hall, Jay and Williams, Martha S. In Journal of Applied Behavioral Science; v6 n1 January-March 1970 p39-68.

Thirty groups training in group dynamics were compared with 30 untrained groups with respect to their performance on a decision-making task. Within each of the trained and untrained samples three populations of decision-makers were studied (20 groups each of college, management, and neuropsychiatric subjects) in order to provide varying levels of substantive and procedural skills relative to the task. The groups within each population and trained/untrained conditions were evenly split between established entities and ad hoc assemblies. Trained groups consistently performed more effectively than untrained groups on measures of decision quality, utilization of superior resources, and creativity. No tradition effects were discernible, and only expected population differences were obtained. Several differences among covarying performance and process variables were identified for trained versus untrained groups.

217. AN EVALUATION OF THE HUMAN RELATIONS TRAINING PROGRAMS. Khanna, J.L. 1969. 113p. EDRS Order No. ED 032 965; price in microfiche \$0.50, hard copy not available from EDRS.

A Human Relations Training Program conducted with an experimental group of 150 educators is evaluated in this document. In an effort to assess the effects of the program, internal and external criteria, and matched control groups were utilized. It was found that educators exposed to Human Relations Training become less authoritarian and more self-actualized. They develop better interpersonal relationships in addition to developing greater self-insight and leadership skills. These individuals were also perceived more positively by their supervisors and their students. A detailed discussion of the measurement instruments utilized and numerous statistical tables are also included. Not available in hard copy due to marginal legibility of original document.

218. PROBLEMS, PROBLEM-SOLVING AND HUMAN COMMUNICATION: A LABORATORY APPROACH TO TRAINING IN INTERPERSONAL COMMUNICATION. TECHNICAL REPORT. Brissey, F.L. and Others. February 1969. 204p. U. S. Air Force Office of Scientific Research, Arlington, Va. Directorate of Information Science. EDRS Order No. ED 030 955; price in microfiche \$1.00, in hard copy \$10.30.

This technical report is in three parts. Part I is a conceptual treatment of communication in which the human being is viewed as a goal-attainment system. The goal-attainment problem is defined as a discrepancy between the current state of the system and a specified goal state. Several forms of the communicative relationship are outlined. Part II describes a Task-Directed Learning (TDL) approach to communication training in which participants generate and critically examine their interpersonal communication in relation to selected measures of effectiveness in solving laboratory problems. Brief descriptions of problems and related materials (Vocom problems) are included. Part III summarizes objective performance data (time, error, and recall) for selected Vocom problems, and presents some informal suggestions for research in interpersonal communication.

219. THE EFFECT OF SHORT-TERM INSTITUTE EXPERIENCES INVOLVING SENSITIVITY TRAINING ON ATTITUDES OF EMPLOYMENT SECURITY PERSONNEL. Keith, James A. American Personnel and Guidance Assn, Washington, D.C. March 1969. 12p. Paper presented at the American Personnel and Guidance Assn. Convention, Las Vegas, Nevada, March 31, 1969.

This study evaluated and measured the effectiveness and enduring effects of two training groups with respect to transmitting knowledge and affecting change. It was concluded that the short-term training institutes had little measureable effect upon participants in terms of the goals of the training and that the study was limited by the weaknesses of the measuring instruments.

220. PEOPLE FEELING: JOY, MORE JOY, AND THE "SLOUGH OF DESPOND." Dunnette, Marvin D. In Journal of Applied Behavioral Science; v5 n1 1969. p25-44.

Points to the explosive growth of group training programs as 1 of many manifestations of man's need for more love, or people feeling. An interpersonal perception model for guiding research is described and its implications for past and future research are explored at some length.

221. AN APPLICATION OF WORK-EMOTIONALITY THEORY TO ADULT EDUCATION. Portal-Foster, C.W. In Adult Education; v20 n2 Winter 1970. p67-87.

222. ACCELERATING LABORATORY LEARNING THROUGH A PHASE PROGRESSION MODEL FOR TRAINER INTERVENTION. Culbert, Samuel A. In Journal of Applied Behavioral Science; v6 n1 January-March 1970. p21-38.

Trainers can use methodologies that accelerate a group's rate of learning. This paper describes one such methodology for accelerating a group's rate of learning: a phase progression model for trainer intervention. This article cites an example of how the author-trainer experimented in systematically using his understanding of T-group phenomena to conceptualize and to point to a sequence of phases which might be optimum for a particular group in accomplishing its learning objectives.

223. IMPACT OF LABORATORY TRAINING ON SOCIOPOLITICAL IDEOLOGY. Nadler, Eugene B. and Fink, Stephen L. In Journal of Applied Behavioral Science; v6 n1 Jan-Mar, 1970. p79-92.

This article discusses whether the essentially interpersonal lessons individuals learn from the experience of small-group democracy in a training laboratory generalize to the more broadly theoretical issues of sociopolitical ideology. Related research and theory by others suggest an affirmative answer. A before-after experimental design was utilized at a college training laboratory to gather more direct information. The results showed a highly significant shift in a democratic direction on each of four different scales measuring aspects of democratic attitudes; the shift was general and not specific to any scale subset. A secondary finding showed that there were individual differences in this change related to the participants' initial scale positions.

224. THE PROCESS OF CHANGE IN SENSITIVITY TRAINING; MUTUALLY RECEIVED SUPPORT, CONFRONTATION, AND COGNITIVE ORIENTATION IN A MEMBER-MEMBER RELATIONSHIP. Frankiel, Harry H. California Univ., Los Angeles. Ph.D. Thesis. 1968. 130p. University Microfilms Order No. 69-11,882; price in microfiche \$3.00, in xerography \$6.20.

This study tested propositions from two theories of the personal change process in sensitivity training, and investigated whether mutually perceived support relationships (MPSR) and confrontation between members of MPSRs are both necessary for personal change. The Person Description Instrument, the Support Ranking Questionnaire were used to gather data from four sensitivity training groups, one of which was more heterogeneous in terms of members' cognitive orientation. Two of the groups had two trainers; two others had one. The trainers varied widely in experience. These were among the findings: (1) personal change tended to correlate with the number of MPSRs; (2) low correlations in groups with two trainers suggested that support and confrontation within a trainer formed relationship are less frequent in such groups; (3) interpersonally oriented participants were perceived as supporting by both interpersonally and nonpersonally oriented participants, while participants with similar orientations tended to confront one another.

225. LEARNING FROM GROUP EXPERIENCE: AN ANALYSIS OF THE EXPERIENTIAL STRUCTURE OF THERAPEUTIC DIALOGUE. Borofsky, Ruth B. Boston Univ. Ed.D. Thesis. 1969. 164p. University Microfilms Order No. 70-12,153; price in microfiche \$3.00, in xerography \$8.00.

The psychotherapy groups studied in this thesis have as their goal the therapeutic modification of participants through enhancement of self understanding and of the relationship of the self with others. Certain of the complex processes that occur in such groups have been singled out for study by procedures which developed as the study evolved. These procedures made possible detailed exploration of the following areas: (1) As members interacted they spoke of cognitive-affective experiences which appeared to be evoked through dialog with one another under guidance of the therapist. Statements of such experiences were designated experiential statements. (2) Some of these experiential statements, moreover, indicated learning experiences and were accordingly designated learning statements. Further close analysis of these statements led to understanding of the relationship between experiential and learning statements, and the role of the therapist and other members in affecting such relationships. This led to the development of an eight step method for the study of the structural and dialogical character of group interaction.

226. A PLEA FOR A SYSTEMATIC EVALUATION OF TRAINING. Burke, Ronald J. In Training and Development Journal; v23 n8 August 1969. p24-29.

A study was made of the impact of 33 hours of human relations training on the managerial ideology and beliefs of 57 undergraduate business students. The course focused on applying behavioral science concepts and theories to superior and subordinate relationships and intergroup relations in organizational settings. Unlike an earlier study by the author, results of this investigation indicated little or no course impact on stable, pervasive attitudes; only slight effects on their beliefs concerning certain managerial concepts; and no effect on the organization and grouping of these concepts.

227. A STUDY OF THE DIFFERENTIAL RESPONSES OF YOUNG ADULTS WITHIN THE CHURCH TO CUSTOMARY APPROACHES AND CONDITIONS OF STRATEGIC LENIENCY IN LEADERSHIP EDUCATION. Chandler, Donald Gene. Emory Univ., Atlanta Ga. Ph.D. Thesis. 1968. 105p. University Microfilms Order No. 68-11,961; price in microfiche \$3.00, in xerography \$5.20.

This study dealt with differences in the responses of young adults within the Methodist church to two differing approaches (strategic leniency and customary methods) to leadership training. It was hypothesized that young adults approached through strategic leniency (the permission and encouragement of freedom of thought in the setting of small-group dynamics) will show greater increases in positive emotional and behavioral responses to the organization involved, be more selective in their patterns of response, and show greater change in belief, than those approached in the usual manner. A test group and a control group of 60 persons each were used, with the test group participating in small-

group sessions for ten weeks. Changes in the two groups were measured primarily by questionnaires administered before and after the ten-week period. Findings supported the original hypotheses and lent indirect support to an additional hypothesis predicting change in the sponsoring organization as a by-product of other changes.

228. THE IMPACT OF T-GROUPS ON MANAGERIAL BEHAVIOR. Mangham, I. and Cooper, C.L. In The Journal of Management Studies; v6 n1 Feb. 1969. p53-72.

Studies into behavior change effected by T group training include evaluation of training effects with respect to transfer of learning into the working situation and followup evaluation of the use of sensitivity training to promote organizational change. There is fairly strong evidence of lasting and effective change in individuals participating in T group training; the studies of the use of T groups as tools of organizational change, however, are much less complete and more difficult to compare than those evaluating individual change; more complete and organized data are needed in this area.

229. INTERPERSONAL CHANGES THROUGH IMMEDIATE FEEDBACK APPROACHES. Watson, Eugene R. In Adult Education; v19 n4 Summer 1969. p251-267.

Improvement of the quality of interpersonal behavior is an increasing responsibility of adult educators, but the objectives and outcomes of traditional planned approaches to change in this dimension may not be adequate. Systems for immediate and direct feedback on behavior apparently are instrumental in accomplishing interpersonal change. Certain programmed materials and human relations laboratory training provide for immediate feedback on "live" behavior as a crucial element in behavioral improvement but the statement of change objectives and assessment of outcomes remain critical problems. Research on these approaches is discussed. Changes are reported in individual perception, openness, acceptance of others, extreme emotionalized tendencies, group understandings and skills, and self-confidence in interaction.

230. ACQUAINTANCE: STRUCTURAL AND RELATIONAL FEATURES OF LABORATORY TRAINING. Blumenstiel, Alexander David. Washington Univ., St. Louis, Mo. Ph.D. Thesis. 1968. 226p. University Microfilms Order No. 69-8986; price in microfiche \$3.00, in xerography \$10.35.

A study was made of two sensitivity training laboratories as settings providing a casual context for acquaintance of an intimate nature. Two major dimensions of knowledge in human relationships are structural and relational knowledge. Structural knowledge is the definition of the situation; participants define the laboratory as a casual community with reference to environmental and status features of the situation. Another aspect of the definition of the situation is termed an ideology of intimacy, with revelation and privacy as central components. Relational features of the construction of intimate relations include the relationship between trust and what is considered "the problem of intimacy." It is proposed that trust provides for intimacy by providing for a definition of behavior as "revelation." The laboratory situation provides for revelation in a "casual" situation, when "casualness" includes components of privacy and allows participants to believe

that they are being intimate with each other. Revelation is the relational feature and privacy the structural feature of intimacy in this case.

231. TRAINER SELF-DISCLOSURE AND MEMBER GROWTH IN TWO T-GROUPS. Culbert, S.A. In Journal of Applied Behavioral Science; v4 n1 1968. p47-73.

This study analyzed the degree of effectiveness of a trainer as related to more (M) or less (L) self-disclosing. Two experimental groups, each comprising six female and four male graduate students, met twice weekly for two-hour sessions over fourteen weeks. Training (T) group effectiveness was measured by the Relationship Inventory which identified perceived and therapeutic relationships, and the Problem Expression Scale which tested increased self-awareness. Results showed that: an equivalent number of two-person "perceived therapeutic relationships" were formed in each group; L Subjects often entered them with their trainers and dyad partners, and M Subjects more often with other members. Although both groups attained the same level of self-awareness, the M group did so earlier. It is suggested that the trainer might begin his participation with a high rate of self-disclosure and become more selective with time.

232. THE EFFECT OF LEADERSHIP STYLE UPON THE PERFORMANCE AND ADJUSTMENT OF VOLUNTEER TEAMS OPERATING IN A STRESSFUL FOREIGN ENVIRONMENT. Fiedler, Fred and Others. In Human Relations; v22 n6 December 1969. p503-14.

This study investigated the effect of leadership style and characteristics of the group-task situation upon performance and adjustment of small medical volunteer teams working in relatively isolated Central American villages. Following upon previous research to develop a model for the prediction of leadership effectiveness in interacting groups, and to define the informal interpersonal relations which promote the psychological adjustment of team members, the present study attempts to integrate these two lines of research by showing the interrelations between adjustment, group performance, and leadership style under different conditions of environmental stress. Leaders were classed as task-oriented or relationship-oriented on the basis of a Least Preferred Coworker (LPC) scale: task-oriented leaders tend to describe LPCs in very unfavorable terms, and relationship-oriented leaders in relatively favorable terms. Task-oriented leaders were found more effective in very favorable and very unfavorable situations; relationship-oriented leaders were more effective on intermediate levels of favorableness.

233. A CONCEPTUAL SCHEME FOR AN ADAPTATION OF PARTICIPATION TRAINING IN ADULT EDUCATION FOR USE IN THE THREE LOVE MOVEMENT OF JAPAN. Kamitsuka, Arthur. Indiana Univ. Ph.D. Thesis. 1968. 308p. University Microfilms Order No. 69-4762; price in microfiche \$3.95, in xerography \$13.95.

This study concentrated on developing a conceptual scheme for adapting participation training, an adult education approach based on democratic concepts and practices, to the Three Love Movement (Love of God, Love of Soil, Love of Man) in Japan. (This Movement is an outgrowth of Protestant folk schools.) While democratization is an aim, the Movement also reflects social relationships within a hierarchical social system,

group decisions, responsibility, loyalty, and solidarity rather than individual action and responsibility, conforming for the sake of unity, and being taught what to think rather than how. An examination of participation training, especially the two basic structural elements of voluntary leadership roles and learning tasks, and the concepts of participation, participants as individuals, and participants as group members, led to the conclusion that the Three Love Movement could adapt this form of adult learning as an educational program for Japan's democratic reconstruction.

See also: SECTION 2900 DISCUSSION; item 33 annotated bibliography on training methods; 163 case study of planned organizational change; 540 effectiveness of participation methods in managerial training; 288 in training 4-H leaders; 168 predicting effects of leader behavior in T group training; 145 intensive group as "founding" experience in training middle-class for community development; 164 in management development and organizational change.

2950 Simulation, Gaming

234. MANAGEMENT GAME TEAMS IN EDUCATION AND ORGANIZATION RESEARCH: AN EXPERIMENT IN RISK TAKING. Lewin, Arie Y. and Weber, Wesley L. Carnegie Institute of Technology, Pittsburgh, Pa. November 1968. 22p. Clearinghouse for Federal Scientific and Technical Information Order No. AD-687-463; price in microfiche \$0.65, in hard copy \$3.00.

The paper describes an experiment on changes in individual and group risk taking tendencies recurring during a semester play of the Carnegie Tech management game. The paper concludes with a discussion of the methodological problems associated with using management games in research, emphasizing the need for games designed specifically for research.

235. INSTRUCTIONAL SIMULATION: A RESEARCH DEVELOPMENT AND DISSEMINATION ACTIVITY. FINAL REPORT. Twelker, Paul A., Ed. and Others Oregon State System of Higher Education, Monmouth, Teaching Research Div. February 1969. 236p. EDRS Order No. ED 032 657; price in microfiche \$1.00, in hard copy \$11.90.

This report describes design techniques, areas of effective application, and research directions in educational simulations. The five chapters contain (1) a review of recent literature; (2) an overview of the field of simulation including definitions and some of the rationales for using simulation in instruction; (3) an outline of the design approaches of several major simulation centers and a model containing 13 specific guidelines for use in designing an instructional simulation system; (4) an analysis of the implications for education of simulation applications in the military, government, and industry; (5) examples of the application of simulation to several areas of vocational education; and (6) illustrations of the use of simulation as a measurement device for assessing educational progress and predicting complex human behavior.

236. INDIVIDUAL VARIATION IN BEHAVIORAL CHANGE FOLLOWING ROLE PLAYING. Platt, Ellen S. and Others. In Psychological Reports; v24 n1 1969. P155-170.
Studied the effect of role playing on cigarette smoking. All Ss who reduced smoking were internally oriented on the Internal-External scale. Verbalized intentions were not related to reductions in smoking levels. Situational anxiety predicted verbal intentions but not behavioral change.
237. "EMOTIONAL" ROLE PLAYING AND CHANGES IN SMOKING ATTITUDES AND BEHAVIOR. Keutzer, Carolin S. and Others. In Proceedings of the 77th Annual Convention of the American Psychological Association; v4(pt 1) 1969. p373-374.
Evaluated the effectiveness of an "emotional" role-playing procedure for modifying smoking attitudes and behavior in 3 studies using 54 female smokers. While experimental and control groups did not differ in attitude or behavior change, the comparison of pre- and postmeasures of smoking attitudes showed significant within-group changes on several items for both Ss and controls. Paradoxically, the measured "emotional arousal" was more closely associated with change scores for controls than for the role-playing Ss.
238. GAMING AS AN INSTRUMENT OF FARM MANAGEMENT EDUCATION-A DEVELOPMENT AND EVALUATION. Schneeberger, Kenneth Clifford. Oklahoma State Univ., Stillwater. Ph.D. Thesis. 1968. 214p. University Microfilms Order No. 69-14,327; price in microfiche \$3.00, in xerography \$9.70.
A study of the Oklahoma Farm Management Decision Exercise was made to explore and appraise ways of teaching farm management. A general computer model was developed which allowed the administrator flexibility in teaching, accommodated any size of farm and any set of feasible crop and livestock activities, and identified superior strategies for the "game farm" using computer simulation. The exercise was a model of 2,000 acre Oklahoma Panhandle farm that was used to illustrate the characteristics and the problems of the farm decisioning environment. Two versions could be used in gaming--the hand computed version and the computer version. The computerized version eliminated time consuming computations and required less administrative manpower and less participant time. It also showed the responsiveness of the model to different organizational plans and allowed comparison of the profitability and risk of different strategies.
239. PROSIM V, STUDENT MANUAL. Mize, Joe H. and Others. June 1969. 62p. Clearinghouse for Federal and Scientific Information Order No. AD-691-449; price in microfiche \$0.65, in hard copy \$3.00. Technical Report.
A production system simulator has been developed which is capable of simulating a wide variety of realistic manufacturing environments. The simulator is used as an aid in teaching the concepts of designing production control systems and as a research vehicle for investigating various aspects of control theory for production systems. This report contains the student manual, which explains how the simulator works and how it can be used to assist in designing a complex control system.

240. COLLECTED PAPERS PREPARED UNDER WORK UNIT SPANOCON: HUMAN FACTORS INFLUENCING SPAN OF CONTROL WITHIN MILITARY ORGANIZATIONS. Olson, Howard C. George Washington Univ. June 1969. 14p. Clearinghouse for Federal Scientific and Technical Information Order No. AD-693-302; price in microfiche \$0.65, in hard copy \$3.00.

Two studies were made of leadership games in training military officers in decision making. In the first exercise, a tank platoon officer received messages by tank radio and from maps and instructions. Responses were recorded and evaluated immediately and at the end of the exercise. Participants felt the exercise had great training value. In the second study, 30 young Army officers were pretested on a leadership game, then divided into two groups. One group received three days of instruction in principles of information handling; the other group received no instruction. The trained group performed reliably better after training; the untrained group did not improve reliably.

See also: item 693 in cross-cultural training; 696 an on-going cross-cultural simulation and multi-national student survey; 150 in foreign assistance training; 485 developing simulation materials in training of special teachers; 521 testing in a simulated maintenance task environment; 201 computer simulation studies related to small group performance.

3000 Conferences, Institutes, Workshops

See: SECTION 2300 RESIDENTIAL EDUCATION; item 285 evaluation of workshop for Cooperative Extension personnel; 476 evaluation of two-day institute for nurses; 700 inventory of conferences, workshops in Pennsylvania universities.

3100 EDUCATIONAL MEDIA

241. TRAINING METHODOLOGY. PART 3: INSTRUCTIONAL METHODS AND TECHNIQUES. AN ANNOTATED BIBLIOGRAPHY. U.S. Dept. of Health, Education, and Welfare, Washington, D.C. Health Services and Mental Health Administration. Public Health Service Publication No. 1862, Part III. May 1969. 109p. EDRS Order No. ED 031 628; price in microfiche \$0.50. Hard copy available from U.S. Government Printing Office; price \$1.00.

Bibliography listing 332 documents with abstracts contains selected references on the media aspects of training; audiovisual theory and methods, aids, facilities, and equipment.

- 241a. TRAINING METHODOLOGY. PART 4: AUDIOVISUAL THEORY, AIDS, AND EQUIPMENT. AN ANNOTATED BIBLIOGRAPHY. U.S. Dept. of Health, Education and Welfare, Washington, D.C. Health Services and Mental Health Administration. Public Health Service Publication No. 1862, Part IV. May 1969. 89p. EDRS Order No. ED 031 629; price in microfiche \$0.50. Hard copy available from U.S. Government Printing Office, (0-334-248); price \$0.75.

The annotated bibliography listing 332 documents with abstracts on training methodology contains selected references on the media aspects of training: audiovisual theory and methods, aids, facilities, and equipment. Most items were published from January 1960 to March 1968. Specifically, the bibliography includes such media as television, computers, radio, telephone, films, and overhead projections and transparencies. A subject index is included.

242. THE MASS MEDIA AS SOURCES OF PUBLIC AFFAIRS, SCIENCE, AND HEALTH KNOWLEDGE. Wade, Serena and Schramm, Wilbur. In Public Opinion Quarterly; v33 Summer 1969. p197-209.
243. THE MUSEUM VISITOR; SELECTED ESSAYS AND SURVEYS OF VISITOR REACTION TO EXHIBITS IN THE MILWAUKEE PUBLIC MUSEUM. PUBLICATIONS IN MUSEOLOGY, 3. De Borhegyi, Stephan F., Ed. and Hanson, Irene A., Ed. 1968. 181p. Available from Milwaukee Public Museum, 800 West Wells St., Milwaukee, Wisconsin 53233.

Using the personal interview technique, the Milwaukee Public Museum has made a statistical analysis of visitor response to a series of variations on a central anthropological theme: concepts versus specimens, extensive versus minimal labeling, many specimens versus a few selected pieces, color versus monochrome presentations. Analyses have also been made of factors influencing information retention.

3180 Video Tape

244. THE USES OF VIDEO TAPE IN TRAINING AND DEVELOPMENT. Scroh, Thomas F. American Management Association, Inc. 1969. 59p. Available from American Management Association, Inc., 135 West 50 Street, New York, N.Y. 10020; price \$6.00.

A questionnaire, which drew responses from about 200 companies, identified the advantages as well as the problems of video tape usage. Most of the companies surveyed felt that their investment in video tape equipment was worthwhile.

245. USE OF VIDEOTAPE FOR TEACHING IN-PLANT GRADUATE ENGINEERING COURSES. Neidt, Charles O. and Baldwin, Lionel V. In Adult Education; v20 n3 Spring 1970. p154-167.

Colorado State University has inaugurated a program wherein engineers in remote plant sites enroll for graduate credit in courses taught via video tape. The video tapes involved are courier-delivered recordings of campus classes prepared on the previous day. Comparison of achievement data for 192 on-campus students and 432 industry students reflected no significant differences in achievement between the two groups. Attitudes toward the course declined more for the off-campus than the on-campus students. Pronounced differences among reactions to instructors were noted with a tendency for instructors to receive higher ratings as the year progressed. In general, the videotape technique was considered effective.

3190 Film

246. TRAINING LEADERS WITH SOUND FILMS AND GROUP DISCUSSION TECHNIQUES. Lange, Carl J. and Others. George Washington Univ. February 1969. 10p. Presented at the American Psychological Association Convention, San Francisco, California, Sept. 1955. Clearinghouse for Federal Scientific and Technical Information Order No. AD-684-205; price in microfiche \$0.65, in hard copy \$3.00.

A leadership course for Army officers used sound films for the presentation of officer problems. Each film terminated at the point where the leader was faced with making a decision and taking action; a small group discussion followed. A manual for instructors included the purpose of the course, the technique used, the function of the instructor, and narrative descriptions of the leadership problems. The course was used for leadership training, with control groups taking conventional classes. Analyses indicated that the experimental training was superior to the conventional training.

247. AN EVALUATION OF SELF-LEARNING CENTERS IN ADULT EDUCATION. Lifer, Charles William. Ohio State Univ. Ph.D. Thesis. 1969. 151p. University Microfilms Order No. 70-6824; price in microfiche \$3.00, in xerography \$7.40.

To determine how much personnel in an urban business would view agricultural films during their lunch hour; their reaction and how much they would learn, employees of the home office of the Nationwide Insurance Company were the experimental group and employees of the regional office, the control group. It was concluded that adults in urban businesses will watch films during lunch hour if they know in advance the topic, date, and time of showing. Women prefer home economics films and men prefer lawn care films. There was no evidence that there was a significant gain in knowledge from viewing the films.

3200 Educational Television

248. A SURVEY OF TELECOMMUNICATIONS TECHNOLOGY. PART I. STAFF PAPER ONE, PART I. Rostow, Eugene V. President's Task Force on Communications Policy, Washington, D.C. June 1969. 145p. Clearinghouse for Federal Scientific and Technical Information Order No. PB-184-412; price in microfiche \$0.65, in hard copy \$3.00.
249. A SURVEY OF TELECOMMUNICATIONS TECHNOLOGY. PART II. STAFF PAPER ONE, PART II. Rostow, Eugene V. President's Task Force on Communications Policy, Washington, D.C. June 1969. 315p. Clearinghouse for Federal Scientific and Technical Information Order No. PB-184-413; price in microfiche \$0.65, in hard copy \$3.00.
250. SATELLITE COMMUNICATIONS AND EDUCATIONAL TELEVISION IN LESS DEVELOPED COUNTRIES. STAFF PAPER THREE. Rostow, Eugene V. President's Task Force on Communications Policy, Washington, D.C. June 1969. 203p. Clearinghouse for Federal Scientific and Technical Information Order No. PB-184-415; price in microfiche \$0.65, in hard copy \$3.00.

251. FUTURE OPPORTUNITIES FOR TELEVISION. PART II. TELECOMMUNICATIONS IN URBAN DEVELOPMENT. STAFF PAPER SIX, PART B. Rostow, Eugene V. President's Task Force on Communications Policy, Washington, D.C. June 1969. 125p. Clearinghouse for Federal Scientific and Technical Information Order No. PB-184-420; price in microfiche \$0.65, in hard copy \$3.00.
252. EDUCATIONAL TELEVISION ACROSS CANADA. THE DEVELOPMENT AND STATE OF ETV. 1968. Rosen, Earl, Ed. and Whelpdale, Elizabeth, Ed. 1969. 95p. Metropolitan Educational Television Assn. 84 Queens Part, Toronto, Ontario.
253. CONTINUING PUBLIC EDUCATION BROADCASTING: TODAY AND TOMORROW. Cohen, Edwin G. In Educational Broadcasting Review; v4 n1 February 1970. p3-11.
Based on a questionnaire profile of continuing public education broadcasting (CPEB), and on information about the development and use of programs, a representative sample of broadcast and related materials was examined by a panel of broadcasting, educational, and research specialists. This panel also discussed the present nature of CPEB, its future goals, and requirements for meeting these goals. Kinds of public broadcasting (cultural, public affairs, educational) were analyzed as to purpose, developmental approach, derivation of content, presentation mode, attention and activity demands upon the audience, and resource requirements, as well as the application and effective life of a broadcast. Recommendations on purposes, research, and availability of CPEB materials, and for creation of a national CPEB project, were also offered.
254. SCIENCE PROGRAMMING AND THE AUDIENCES FOR PUBLIC TELEVISION; AN EVALUATION OF FIVE PROGRAMS IN THE NET "SPECTRUM" SERIES. National Educational Television, New York, Educational Services Dept. 1969. 85p. EDRS Order No. ED 034 933; price in microfiche \$0.50, in hard copy \$4.35.
Questionnaires returned by science teachers across the country and reaction forms completed by selected high school, college, and adult learners, were analyzed to judge the impact of, and acceptance by public television audiences, of five half-hour programs broadcast in the "Spectrum" science series. A general significant knowledge gain was achieved by all three groups of learners; science teachers and learners surveyed reported satisfaction that science programs should be broadcast for the general public.
255. A LOOK AT THE ETV AUDIENCE. Siegle, Henry J. In Educational Broadcasting Review; v3 n5 October 1969. p23-29.
256. EDUCATIONAL BROADCASTING: RESEARCH AND ITS IMPLEMENTATION. Brown, Roger L. In Studies in Adult Education; v1 n2 October 1969. p157-171.
Two British studies on educational broadcasting (Trenaman's "Communication and Comprehension" and Belson's "The Impact of Television") exemplify, respectively, research on the results achieved by broadcasts, and the evaluation of audience reaction in order to plan more effective programs. Although these studies represent a high level of technical research expertise and a long tradition of empirical communications research, they neglect

the mass media institutions themselves. They especially illustrate the need, not only for educators and program producers to consider more closely the knowledge and ability of the general public, but for researchers to make their findings more comprehensible and to work more closely with educational broadcasters.

257. THE USES OF TELEVISION AND THEIR EDUCATIONAL IMPLICATIONS; PRELIMINARY FINDINGS FROM A SURVEY OF ADULT AND ADOLESCENT NEW YORK TELEVISION VIEWERS. Gans, Herbert J. Center for Urban Education, New York, N.Y. June 1968. 210p. EDRS Order No. ED 026 860; price in microfiche \$1.00, in hard copy \$10.60.

To collect data on how to make television a more effective learning instrument outside of the classroom a standard probability sample with quotas consisting of 200 adults and 200 adolescents living in New York City was interviewed to study how people use TV, their attitudes toward various types of programming, and their viewing preferences. Designed to exclude light viewers, the interview schedule featured questions on viewing habits, relevance of TV to personal problems, audience preferences in news coverage, and entertainment vs. information. An attempt was made to correlate opinion with variables of age (by describing TV use among adolescents), class, race (by describing the effects of white television in the black community), emotional health (as judged by the respondents), and frequency of viewing.

258. THE ROLE OF TELEVISION IN THE LIFE OF THE AGED PERSON. Schalinske, Theo Fred. Ohio State Univ. Ph.D. Thesis. 1968. 112p. University Microfilms Order No. 68-12,873; price in microfiche \$3.00, in xerography \$5.60.

This study sought to relate the dynamic patterns of older adults to their use of television within the whole range of activity patterns available to them. Central to the study was an intensive interview study of a select sample (32 women and 18 men in a Columbus, Ohio, senior citizen community); this precluded derivative generalizations for the aged as a class. These were among the findings and conclusions: (1) television's attractiveness for the sample was related to their role of dependence, social and physical isolation, and routinism, although their value systems provided conflict within the endorsement of television and their depreciation of its depiction of life; (2) television was a preferred activity, and programs and activities scheduled opposite favorite television programs had little chance of success; (3) patterns of use varied widely, with indiscriminate use being associated with passivity and dependency and discriminate use being associated with a "keep active" role and an attitude of independence; (4) older adults' use of television may be in spite of programs designed primarily for younger persons; (5) educational television stations have a potential for satisfying the interests and needs of aged persons.

259. RELIGIOUS TELEVISION PROGRAMS; A STUDY OF RELEVANCE. Bluem, A. William. 1969. 235p. Available from Hastings House, Publishers, 10 East 40th St. New York, N.Y. 10015; price \$2.50. Document not available from EDRS.

A nationwide questionnaire survey of over 430 television stations as to religious program activity during the year July 1, 1964, to June 30, 1965, sought data on such matters as weekly hours of program time, program types and styles, and subjective evaluations of the value and professional quality of programs used or created by the stations.

260. TELEVISION IN ARMY TRAINING: EVALUATION OF TELEVISION IN ARMY BASIC TRAINING. Kanner, Joseph H. and Others. George Washington Univ. Nov. 1954. 67p. EDRS Order No. ED 034 424; price in microfiche \$0.50, in hard copy \$3.45.

The major aim of this study was to obtain a measure of the relative teaching effectiveness of television instruction as compared to regular instruction, utilizing as subject matter parts of the Army basic training program. The study was not designed to reorganize the curriculum for television, nor was it designed to maximize the television presentation. The same instructors taught the courses to both the experimental and control groups. The groups were matched for intelligence on the basis of the Army Area I scores. The use of Kinescope recordings as a review method was also explored. The results of the study indicate that television instruction was at least as effective as regular instruction and was especially effective for lower-aptitude groups. When Kinescope recordings were used for review purposes following initial instruction, test performances were significantly higher, especially in the low-aptitude groups. These results suggest that the two possible applications for television contemplated by the Army, mass training during emergency situations and routine training at Army Schools and installations, could be carried out without a loss in learning effectiveness. The appendices contain information relating to research methodology.

See also: item 248 analysis of costs and feasibility of television and other communications media; 667 survey of music programming of NET; 711 role of educational broadcasting in extension merger at University of Wisconsin; 703 technical feasibility of linking six New England universities; 480 effectiveness of TV in medical training; 666 impact of TV on farmers in India; 713 TV in education of employed in Poland.

3250 Educational Radio

261. WNYC: 1922-1940--THE EARLY HISTORY OF A TWENTIETH-CENTURY URBAN SERVICE. Luscombe, Irving Foulds. New York Univ. Ph.D. Thesis. 1968. 388p. University Microfilms Order No. 69-11,824; price in microfiche \$4.95, in xerography \$17.55.
262. FINAL REPORT ADULT RADIO: A COMMUNITY SERVICE AND CONTINUING EDUCATION PROJECT THROUGH BROADCAST UTILIZATION (TITLE I OF THE HIGHER EDUCATION ACT OF 1965). Morehead State Univ., Ky. 1969. 33p. EDRS Order No. ED 036 686; price in microfiche \$0.25, in hard copy \$1.75.

WMKY-FM, the student radio station at Morehead State University, undertook a research project to provide special programming for the senior citizens within their listening area and evaluate the response to their

programs. First, the listening area was surveyed to find how many senior citizens had radios at their disposal. Of 227 potential enrollees, 133 were initially enrolled in a regular listening program. Series of tapes for broadcasts were obtained from the Institute of Lifetime Learning, Long Beach, California, which specializes in preparing tapes for the aging. Six separate series of thirteen lessons each were presented through radio broadcasts, and then reactions were solicited in informal interviews with the enrollees. Evaluative comments were not entirely favorable, and some of the listeners felt that the programs were not directed to their interest group. Reactions were favorable to a series on music and to a "Talkback" series (guest speakers who answered telephoned questions). The project was found to have significant positive impact, however, and proposals are laid forth for its continuance.

263. TWO-WAY RADIO FOR EXTENSION. Swoboda, Donald W. In Journal of Extension; v8 n2 Summer 1970. p42-45.

In investigating two-way radio as a communication tool for Extension, Swoboda surveyed all the states and learned that 60% did not use two-way radio; another 35% used it on a limited basis. Three states are attempting to use it throughout the state. Nebraska has been developing a two-way radio communication system for the Cooperative Extension Service, using the master microwave towers of the statewide emergency communication network.

264. AN EXPERIMENTAL INVESTIGATION OF THE EFFECTIVENESS OF GROUP LISTENING, DISCUSSION, DECISION, COMMITMENT, AND CONSENSUS IN INDIAN RADIO FORUMS. Jain, Navin Chand. Michigan State Univ. Ph.D. Thesis. 1969. 171p. University Microfilms Order No. 69-16,149; price in microfiche \$3.00, in xerography \$8.00.

Using 74 adult farmers in four matched groups in Central India, this study examined the impact of group radio listening, discussion, decision, commitment, and consensus on the effectiveness of Indian radio forums. These were among the major findings: (1) group radio listening plus group discussion were more influential than group listening alone; (2) group discussion and group decision making was more influential than group discussion plus group listening; (3) public commitment was more influential in the listening plus discussion group than in the listening group without discussion.

265. AN EXPERIMENTAL STUDY OF THE EFFECTS OF RADIO UPON THE RURAL INDIAN AUDIENCE. Sitaram, Kondavagil Suryanarayana. Oregon Univ. Ph.D. Thesis. March 1969. 139p. University Microfilms Order No. 69-16,685; price in microfiche \$3.00, in xerography \$6.60.

This study focused on whether radio increases the awareness level of the rural population in India, whether increases in awareness vary by the type of subject matter broadcast, and what the characteristics are of the rural radio listeners. Findings included these: (1) general awareness in communities with radio is higher than in communities without it; (2) the general awareness level of illiterate radio listeners exceeds that of literate persons in communities without radio; (3) radio

messages on politics and farming significantly increase rural dwellers' political awareness and farming knowledge; (4) whenever religious and cultural programs are broadcast along with farming programs, the former were retained more than the latter.

See also: item 489 radio credit courses for teachers.

3270 Telephone

266. A COMPARISON OF THE EFFECTIVENESS OF FACE-TO-FACE AND REMOTE TEACHING IN COMMUNICATING EDUCATIONAL INFORMATION TO ADULTS. EXTENSION STUDY 4. Blackwood, Helen and Trent, Curtis. Kansas State Univ., Manhattan, Extension Service. October 1968. 16p. EDRS Order No. ED 028 324; price in microfiche \$0.25, in hard copy \$0.90.

Research studied the effectiveness of class lecture compared to tele-lecture, and the association between amount learned and the personal and situational factors of age, level of education, time of day, and attitude. Pretests and posttests collected level of knowledge and personal information from 71 women during a short course on Money Management given by University Extension Specialists in Reno County. The sample was randomly divided into an experimental and control group. It was found that no significant difference in amount of learning existed. Several tendencies, not statistically significant, were revealed: age was negatively associated with amount learned; level of education was positively associated with pre and posttest scores; scores were higher in the afternoon than morning, although attitudes were higher in the morning.

267. ADULT EDUCATION BY MEANS OF TELEPHONE. Peterson, Bernadine H. 1970. 7p. Paper presented at the Adult Education Research Conference, Minneapolis, Minnesota, February 27-28, 1970. EDRS Order No. ED 036 758; price in microfiche \$0.25, in hard copy \$0.45.

Using a graduate credit and a noncredit home economics course, this study of the University of Wisconsin Educational Telephone Network (ETN) investigated whether telephone instruction can be effective in adult education, and how adults would react to this medium. Tentative evaluations led to these conclusions: (1) ways of handling telephone course content and format need to be identified and implemented; (2) participants and program lecturers need preparation for the mechanical aspect of such experiences; (3) certain types of individuals function better with articulated media than others do; (4) visual aids in telephone instruction enhance presentations and ease remoteness; (5) certain skills can be learned which enable persons to increase their effectiveness under telephone instruction.

268. EVALUATION INFERENCE APPLIED TO INSTRUCTIONAL PROGRAMMING ON AN EDUCATIONAL TELEPHONE NETWORK - A BEGINNING. Zimmerman, Harry P. February 1970. 11p. Paper presented at the Adult Education Research Conference Minneapolis, Minnesota, February 27-28, 1970. EDRS Order No. ED 036 763; price in microfiche \$0.25, in hard copy \$0.65.

A study was made of a noncredit home economics program presented by the University of Wisconsin Extension over the statewide Educational Telephone Network (ETN). The study was limited to the total population involved in one program (54) and their immediate reaction to that program. Methodology used was a combination of action research and field research. The instrument was developed around six factors: environment, content, program process, lecturer, moderator, and technical qualities of the ETN. Variables concerned with the various factors were interspersed and resulted in 48 items plus a 9-point scale for an overall assessment of the program. A four-point interval scale was used with each of the 48 variables. The instrument was open-ended, with provision for suggestions for improvement. Subjective evaluative inference based on means and standard deviations indicated the overall program was somewhat better than a possible average but with room for improvement. A better approach to organization and a more careful analysis of the level of content could lead to increased effectiveness. The moderator should assume the role of group leader in an attempt to bring about more group interaction.

269. INSTRUCTIONAL SYSTEMS FOR EXTRAMURAL COURSES. Everly, Jack C. 1970. 11p. Paper presented at the Adult Education Research Conference, Minneapolis, Minnesota, February 27-28, 1970. EDRS Order No. ED 036 754; price in microfiche \$0.25, in hard copy \$0.65.

This report reviews evaluations of two instructional systems in extramural teaching: (1) "Univex Net," which transmits audio and visual signals via telephone lines from one campus classroom to another classroom located somewhere else in the state, and (2) auto-tutorial carrel units which provide for independent study. A combination of the auto-tutorial and the Univex system is also evaluated. The evaluations are learner oriented. Attitude was measured with the Illinois Course Evaluation Questionnaire. Actual performance was measured by grades and specific criteria for success in obtaining educational objectives.

270. CENTRALIZED TRAINING FOR PERSONNEL IN REMOTE LOCATIONS. Griver, Jeannette A. and Robinson, Margot B. In Human Factors; v11 n2 April 1969. p175-180.

Telephone instruction for off-site industrial procurement personnel was developed and tested. In an earlier study the approach had successfully reduced communication errors among purchasing agents in the procurement division of a major aerospace firm. The total approach to motivation, communication, and learning devised at the main plant was modified and extended to improve job performance of personnel in remote locations. Its application resulted in a level of learning comparable to that of the on-site personnel.

271. TELEWRITER; A SURVEY OF ATTITUDES, INFORMATION AND IMPLICATIONS. Douglass, Stephen A. September 1969. 27p. EDRS Order No. ED 038 606; price in microfiche \$0.25, in hard copy \$1.45.

A research review was undertaken to assess the effectiveness of telewriting (the transmission of graphics and of speech through special

telephone circuits) as a teaching technique or device in university extension. This involved a survey of pilot projects. It was concluded that telewriting can save much time and money, but that its effectiveness depends heavily on user attitudes, teacher preparation, and adequate service and facilities.

See also: item 190 use of telephone in correspondence teaching.

3400 INSTRUCTIONAL MATERIALS

See: item 406. 393, 400, 399, 417, 411 construction, use, evaluation of various materials in adult basic education; 322 member and leader use of 4-H manuals; 678 materials for family finance education; 485 developing simulation materials for teacher education; 543, 544 volumes for use in Army leadership training; 425 low-cost periodical for use in developing countries.

3500 INSTRUCTIONAL DEVICES

272. AN OVERVIEW OF COMPUTER-ASSISTED INSTRUCTION FOR ADULT EDUCATORS. Dick, Walter. Florida State Univ., Tallahassee. Computer-Assisted Instruction Center. October 1, 1969. 27p. EDRS Order No. ED 033 611; price in microfiche \$0.25, in hard copy \$1.45.

After a detailed history and definition of Computer-Assisted Instruction (which identifies drill and practice, tutorial, and problem-solving activities as comprising CAI), the development and implementation of a college level computer based multimedia physics course is described as an example of tutorial activities in CAI for those interested in applying CAI to adult education.

273. USE OF COMPUTERS IN EDUCATION. VOLUME I. Defense Documentation Center for Science and Technology, Alexandria, Va. November 1969. 398p. Clearinghouse for Federal Scientific and Technical Information Order No. AD-697-300; price in microfiche \$0.65, in hard copy \$3.00.

This annotated bibliography contains 338 unclassified references covering the period from July 1959 through June 1969.

274. COMPUTER-ASSISTED INSTRUCTION: A SURVEY OF THE LITERATURE, THIRD EDITION. Entelek, Inc. 42 Pleasant St., Newburyport, Mass. 01950. October 1968. 160p.

References to literature published before July 1968 on computer-assisted instruction are presented in this survey.

275. PROJECT IMPACT; DESCRIPTION OF LEARNING AND PRESCRIPTION FOR INSTRUCTION. Seidel, Robert J. and Others George Washington Univ. June 1969. 17p. Clearinghouse for Federal Scientific and Technical Information Order No. AD-691-707; price in microfiche \$0.65, in hard copy \$3.00.

Project IMPACT is a comprehensive advanced development project designed to produce an effective and economical computer administered instruction (CAI) system for the Army. In this paper, the rationale for conceptualizing the instructional process in a form implementable by computer is described. The instructional decision model, the heart of the CAI system, is discussed. Major issues are summarized and expectations for future model development are projected.

276. MEMORY FACTORS IN COMPUTER-CONTROLLED MAINTENANCE TRAINING. Hansen, Duncan N. and Dick, Walter. Florida State Univ., Computer-Assisted Instruction Center. August 1969. 44p. Final report, November 1967-November 1968. Clearinghouse for Federal Scientific and Technical Information Order No. AD-697-980; price in microfiche \$0.65, in hard copy \$3.00.

This investigation explored those characteristics of training variables that might be incorporated into the design of computerized training devices and systems for computer controlled training (CCT). Memory aids, computer controlled graphics, electronics circuit analysis, and CCT training schedules were studied. Findings included the following: the feasibility of a CCT electronic circuit analysis course containing conceptual presentations from Boolean algebra, logic, and set theory was established; memory processes and related criterion performance were facilitated by graphic presentations via CCT; the availability of CCT memory aids during application of complex concepts and relationships led to improved performance and a 64% saving in response time. Trainees having some prior knowledge used memory aids more effectively.

277. ACQUISITION, RETENTION, AND RETRAINING: GROUP STUDIES ON USING LOW FIDELITY TRAINING DEVICES. Grimsley, Douglas L. George Washington Univ. 1969. 41p. Clearinghouse for Federal Scientific and Technical Information Order No. AD-686-741; price in microfiche \$0.65, in hard copy \$3.00.

To examine the effects of varying fidelity of training devices on acquisition, retention, and reinstatement of a procedural task, soldiers were trained in groups of four to operate the Section Control Indicator (SCI) console of the Nike-Hercules guided missile system during preparation and firing status. Results indicated that groups trained for procedural tasks on high and on low fidelity devices did not differ significantly on training time, initial performance level, amount remembered after four and six weeks, or retraining time.

278. INFLIGHT PERFORMANCE AFTER ZERO, TEN OR TWENTY HOURS OF SYNTHETIC INSTRUMENT FLIGHT TRAINING. Isley, Robert N. George Washington Univ. 1968. 19p. Clearinghouse for Federal, Scientific and Technical Information Order No. AD-675-379; price in microfiche \$0.65, in hard copy \$3.00.

Three groups of warrant officer candidates were given zero, ten, or twenty hours of synthetic instrument flight training. End-of-phase flight proficiency measures were obtained from photographic records

of the aircraft instrument panel taken during a hypothetical tactical instrument mission. The results indicated generally that there were not significant differences in flight performance among the three groups in terms of the relative incidence of aircraft control and procedural errors.

See also: item 241a annotated bibliography on training technology; 186 computer aided instruction in Army training; 269 various devices used in instructional system in agricultural education; 366 low-fidelity devices in training low-aptitude recruits; 530 systems approach to computer aided management education.

3600 LEARNING FACILITIES

279. DUAL USE OF PREMISES IN ADULT EDUCATION. Leslie, Margery. In Studies in Adult Education; v1 n1 April 1969. p31-44.

A British survey of dual use of premises in adult education revealed many types of facilities and arrangements, along with numerous instances of difficulty in such areas as scheduling, equipment, custodial services and overlapping use by adults and younger students.

See also: item 8 survey of adult education, including facilities, in Calgary, Alberta.

3800 PERSONNEL AND STAFFING

3820 Personnel Policies and Practices

280. AN ANALYSIS OF THE LEVEL OF INVOLVEMENT OF THE COUNTY STAFF MEMBERS BY THE COUNTY EXTENSION CHAIRMAN IN DECISION MAKING IN THE NORTH CAROLINA AGRICULTURAL EXTENSION SERVICE. Erwin, Max Gettys. North Carolina Univ. M.Ed. Thesis. 1969. 61p. EDRS Order No. ED 030 046; price in microfiche \$0.50, in hard copy \$3.15.

This study was to investigate some determinants and effects that relate to the degree of involvement of the county staff members by the County Extension Chairman in decision making. The population included 79 County Extension Chairmen who had been appointed to the position in the county and had been on the job at least one year, and 419 county staff members who had had at least one year's work experience in their counties. Two questionnaires, one for the County Extension Chairmen and one for the county staff members, were prepared by a team of researchers for the North Carolina Agricultural Extension Service during 1968, to examine various aspects of staff relations, job performance, and satisfaction associated with the leadership role of the County Extension Chairmen. Perceived level of involvement was highest among (1) agents in counties with small staff sizes, (2) youngest and oldest staff members, and (3)

agents who rated chairmen highest in interpersonal skills. Moreover, perceived involvement was associated with the level of job satisfaction and performance of county staff members, but was not significantly associated with the level of career satisfaction, as measured in the study.

See also: item 134 bureaucracy in adult education organizations related to innovativeness in program development; 729 personnel practices in community college evening programs; 4 county or multi-county staff organization in Cooperative Extension; 722 job analysis of secretarial duties in Cooperative Extension.

3900 Staff Training

281. AN ANALYSIS OF COURSES, COURSE CONTENT, AND SUBJECT MATTER AREAS MOST APPROPRIATE FOR USE IN DEVELOPMENT OF A MASTER'S DEGREE IN EXTENSION EDUCATION FOR YOUTH WORKERS. Bunch, Donald Keith. Oklahoma State Univ. M.S. Thesis. 1968. 43p. Department of Agricultural Education.

Through an evaluation of opinions and judgments submitted by agents working directly with 4-H programs, this study attempted to gain insight into the type of courses which would be included in the curriculum for Extension Youth Workers. Information gathered through a questionnaire revealed a desire on the part of the younger agents to participate in more courses in applied psychology and sociology as well as teaching methods. Courses involved in the leadership and character development of youth received the highest rating by agents in all groups. The agents expressed; 1) concern that so little interest had been shown in developing an extensive professional improvement program for county extension agents; and 2) the desire to pursue an advanced degree. Those in the older age group seemed to rank the courses higher if they had taken them. The group of agents who were or had recently become county extension directors expressed a need for courses in office management, personal management, and office machines.

282. CURRICULUM DEVELOPMENT FOR PROFESSIONAL LEADERS IN EXTENSION EDUCATION. Findlay, Edward Weldon. Cornell Univ. Ph.D. Thesis. June 1969. 512p. University Microfilms Order No. 70-3760; price in microfiche \$6.50, in xerography \$23.20.

A sample of 211 extension agents (in agriculture, home economics, and 4-H work) in 30 counties in New York State provided 419 incidents of behavior which respondents thought critical to the achievement of effective outcomes in extension activity. A structure of categories of agent behavior was developed and linked to the concepts. The four functional areas derived were: systems, their growth and development; planned change and development; management of change and development; and influencing adoption and innovation. Use of the general systems concept as an ordering mechanism has provided a general model or a series of models of aspects of the different functions and processes involved. It also provides a way of perceiving the role of the extension agent within the general extension education process.

283. OBJECTIVES FOR EXTENSION STAFF TRAINING AND DEVELOPMENT DERIVED FROM SOCIOLOGICAL CONCEPTS. Utz, Alan P. 1969. 30p. Paper presented at the annual meeting of the Rural Sociology Society, San Francisco, Aug. 1969. Sociological Abstracts Order No. SA D8902; price in microfiche \$1.00.

This paper treats sociological concepts and those from other disciplines as tools for deriving objectives for staff training. The Cooperative Extension educator's job was considered as one in which he uses these concepts in achieving change in individuals and groups by performing the functions of teaching, linking systems, maintaining and developing the organization, and conditioning the public for acceptance and support of educational programs. The behavioral components of objectives were described as appropriate only inasmuch as they are derived from staff members' needs relating to their job and its inherent functions. Determination of objectives was treated as a process that provides for continuous development and training. Some criteria were set forth for deriving and rank ordering objectives in a way conducive to the active, meaningful learning essential to staff development.

284. ORGANIZATIONAL ACCOMMODATION TYPES AND THE CONTINUING LEARNING ACTIVITY OF ADULT EDUCATORS. Copeland, Harlan Gene. Chicago Univ. Ph.D. Thesis. December 1969. 383p. Available from Dept. of Photoduplication, Univ. of Chicago, Library, Swift Hall, Chicago, Illinois 60637.

This study tested the effects of an individual variable (indifferent, upward mobile, or ambivalent individuals in work organizations) and an organization variable (presence or absence of an organizational training specialist) in differing educational participation among Cooperative Extension Service (CES) professionals. "Leisure time" and "job time" educational participation were the dependent variables. Ten states with CES training specialists, and ten without, were sampled. Questionnaire data were sought from 35 individuals in each state, with an overall return rate of 95.5%. Major findings included the following: (1) differences in leisure time education were associated more with individual differences than differences among work organizations; (2) differences in "job time" education correlated with the organization variable and personality type (indifferent, upward mobile, or ambivalent); (3) out of 36 potential relationships between personality types and leisure time education, only nine were significant; (4) the two types of educational participation share a common variance linked to the organization variable.

285. AN ANALYSIS OF THE IMPROVEMENT OF QUALITY INSTRUCTION PROGRAMS FOR COOPERATIVE EXTENSION PERSONNEL IN OHIO. Ali Khan, Ansar. Ohio State Univ. Ph.D. Thesis. 1968. 138p. University Microfilms Order No. 69-4917; price in microfiche \$3.00, in xerography \$6.60.

This study investigated the attitudes and understanding of participants and nonparticipants toward a program to improve the quality of instruction by Ohio Cooperative Extension Service personnel. Using a questionnaire and rating scales, data were obtained on personal background, teaching methods and techniques, and educational aids and practices, as related

to attitudes and cognitive learning. These were some of the conclusions: (1) the workshops had enabled participants to use a greater number of approved teaching methods and educational practices and to use educational practices more effectively; (2) participants perceived the value of the workshops more favorably; (3) respondents aged 30-49 had higher cognitive knowledge scores than older or younger groups; (4) respondents' experience in the Cooperative Extension Service did not affect attitudes or knowledge scores; (5) neither formal education nor position in the organization affected attitudes toward the workshops; (6) higher position respondents had higher knowledge scores than lower position respondents; (7) over half the respondents were using more than half the approved methods and procedures.

286. AN ANALYSIS OF CRITICAL INCIDENTS FOR RECENTLY EMPLOYED MICHIGAN COOPERATIVE EXTENSION AGENTS WITH IMPLICATIONS FOR TRAINING. Peabody, Fred J. Michigan State Univ. Ph.D. Thesis. 1968. 207p. University Microfilms Order No. 69-5928; price in microfiche \$3.00, in xerography \$9.45.

Using the critical incident method, this study described job requirements perceived as critical by Michigan Cooperative Extension agents, identified training needs, and determined possible differences in training needs and job requirements according to employment position and tenure. The research involved collecting 444 written descriptions of effective and ineffective job performance from 74 subjects in 23 small group meetings. Incidents were classified by six functional areas. Functions, in order of frequency, were teaching and communicating; organizing; conducting programs; administration; program planning; and evaluation. Other findings included the following: (1) agents of differing tenure reported incidents with similar frequency in all categories except evaluation; (2) the importance hierarchy consisted of organizing, conducting programs, program planning, evaluation, teaching and communicating, and administration; (3) the difficulty hierarchy consisted of evaluation, organizing, administration, program planning, teaching and communicating, and conducting programs; (4) home economists and agriculture and natural resource agents stressed teaching and communicating, while Four-H youth agents stressed organizing.

287. THE EFFECT OF SOCIAL REINFORCEMENT WITH PROGRAMMED AND NON-PROGRAMMED INSTRUCTION IN IN-SERVICE INDEPENDENT STUDY BY NEWLY EMPLOYED UNIVERSITY EXTENSION STAFF. Keske, Eldora E. 1970. 14p. Paper presented at the Adult Education Research Conference, Minneapolis, Minnesota. February 27-28, 1970. EDRS Order No. ED 036 752; price in microfiche \$0.25, in hard copy \$0.80.

This paper reports on an experimental study whose principle purpose was to determine the effect of social reinforcement and no social reinforcement as used with two formats of material (programed and non-programed instruction) to: (1) gain knowledge about the use of radio in Extension teaching; and (2) improve performance in radio broadcasting. The second purpose was to determine: (1) when and where professional staff study self-instructional materials in on-the-job situations; and (2) their attitude toward independent study methods. Thirty-two University of

Wisconsin Extension Community Program Staff were randomly assigned to four treatment groups. Two received programmed instruction units, and two non-programmed instruction units. Positive social reinforcement was given to half of them through verbal communication and telephone calls. A knowledge test administered two weeks after the staff completed the use of the material showed that there were no significant differences in the resulting knowledge of test scores or in gains in radio broadcast performance.

288. GROWTH AND DEVELOPMENT OF ADULTS THROUGH UNDERSTANDING SELF AND OTHERS. Atkins, Wayne Lewis. Nebraska Univ. Ph.D. Thesis. 1969. 153p. University Microfilms Order No. 69-17,309; price in microfiche \$3.00, in xerography \$7.20.

This study investigated changes among Four H Club leaders after participation in a short human relations course, as well as in club members' growth and development following application by their leaders of the training received. Participants (30 adult leaders and 200 members) were divided into experimental and control groups. Adults in the control group took a short course in local government. Total teaching contact time (five months) and group interaction were the same for both groups of leaders. A personal checklist and the Self-Portrait were administered to all leaders before and after training; a simplified version was used with club members. Compared to control subjects, adults in the experimental group gained significantly on personality, level of achievement, and acceptance of others, while members of clubs led by them showed significantly greater gains in "desirable positive behavior" and in favorable self-evaluation.

289. THE EFFECT OF LEADERSHIP TRAINING ON ATTITUDES RELATED TO THE JOB OF THE GIRL SCOUT LEADER. Corley, Ellen. Indiana University. M.S. Thesis. June 1969. 71p.

An investigation was made of the effect of a new leadership training design developed by the Girl Scouts of the U.S.A. on meanings trainees related to concepts associated with the job of a Girl Scout leader. It was hypothesized that trainees would have a significantly different attitude toward the concepts "Girl Scout," "leadership," and "Girl Scout leadership" and the trainees having a low indicated external locus of control would have more positive attitudes toward these concepts than those trainees with a high indicated external locus of control. At the beginning and the end of the course three instruments were given--a Semantic-Differential Inventory, the Internal-External Control Scale, and a generalized questionnaire designed to give background information and knowledge of Girl Scouting. Due to the small number of subjects available (11), only the Semantic-Differential Inventory was considered amenable to statistical analysis. The results of tests concerned with the first three hypotheses were inconclusive; the fourth hypothesis could not be confirmed or denied due to the lack of adequate information. However, a positive result of the training was in the attitude of the trainers, which was helpful and constructive and encouraged full group participation.

290. EVALUATION OF ATTITUDE CHANGE THROUGH CREATIVE ART AND EXPRESSION COURSES IN REMSCHEID (W. GERMANY). Leirman, Walter. February 1970. 6p. Summary of a paper presented at the Adult Education Research Conference, Minneapolis, Minnesota, February 27-28, 1970. EDRS Order No. ED 037 632; price in microfiche \$0.25, in hard copy \$0.40.

This presentation deals with an evaluation research project undertaken at the Remscheid Academy for Free Creative Art Expression and Media Education. This institution aims at education and training of present or future adult educators and youth leaders. Course participants, who are between 18 and 26 years of age, are instructed by seven trained artists. Evaluation was attempted through a series of measures of attitude change, to determine the effect of three short courses and one semester-length course in introducing a positive approach towards a progressive type of art education. A Thurstone- and Likert-type rating scale was used, as well as a 20 item multiple choice test.

See also: item 486, 487 evaluation of a training program for Specialist in Continuing Education; 314 UNESCO paper on training youth leaders; 728 teacher preparation in community colleges; 455 evaluation of training for Civil Defense teachers; 23 training program of German Association for Adult Education; 646 communication concepts needed by agricultural agents; 171 "teaching by testing" method in improving communication skills of change agents.

4000 Teachers, Leaders, Change Agents

291. ADULT EDUCATOR LEADERSHIP DIMENSIONS; CONSIDERATION AND INITIATING STRUCTURE IN THE CLASSROOM. Stuerzebecher, Robert E. Colorado State University. M.Ed. Thesis. 1968. 50p.

The purpose of this study was to examine the relationships between adult education teacher effectiveness and leader behavior dimensions-- consideration and initiating structure. The study also examined the interrelationship of effectiveness ratings, factors of class size, and methods used to establish course objectives. Adult education teacher effectiveness was measured by three procedures: summation of student rating scores, teacher self ratings, and combined administrator ratings using a pair comparison system. A student opinion form was used to determine the scores for consideration and initiating structure. The difference between student ratings of teachers, and between scores for teacher self rating and student rating of effectiveness were statistically analyzed. The study indicated that the leader behavior dimensions-- consideration and initiating structure--were closely related to teacher effectiveness ratings by students.

292. PROFILE: THE ONTARIO ADULT BASIC EDUCATION TEACHER. Brooke, W. Michael. In Continuous Learning; v8 n3 May-June 1969. p103-111.

This study investigated the Ontario adult basic education (ABE) teacher's background, his major professional problems, and his need for continuing professional education. Data were collected by questionnaires from 76% of the Ontario Manpower Retraining teachers who instruct the Basic Training for Skill Development Courses. The greatest single problem was that of widely differing intellectual ability in one class; the greatest group of problems faced related to the lack of resources. Data indicated that teachers are anxious to further their knowledge about ABE in a formal organized setting.

293. ADULT HOMEMAKING EDUCATION IN RELATION TO TEACHER PREPARATION AND PROGRAM PLANNING. Nunn, Helen Robinson. In Journal of Home Economics; v6 n9 November 1968. p728-730.

This study investigated the relationship of vocational home economics teachers' backgrounds (level of education, higher educational preparation to teach adults, vocational teaching experience) to effective program planning, teacher evaluation, procedures, and effectiveness of teaching as measured by dropout rates in adult homemaking classes. Questionnaire respondents were 2000 vocational home economics teachers in Arkansas who had taught at least one adult. These were among the findings: (1) the most effective teachers were flexible in program planning and teaching methods, sensitive to the progress of their students, skillful at obtaining useful feedback, and responsive to the needs of the particular group; (2) these teachers depended on their own teaching abilities rather than those of resource persons; (3) formal education showed little correlation with effective program planning and teacher evaluation, and the background variables as a whole contributed to effectiveness only if teachers had learned appropriate methods of program planning and evaluation. A need was seen for preservice and inservice education incorporating practical experience working with adults.

294. ROLE PERCEPTIONS AND JOB ATTITUDES OF WEST VIRGINIA COUNTY EXTENSION AGENTS IN A MERGED EXTENSION SYSTEM. Shriver, Howard Arnette. Wisconsin Univ. Ph.D. Thesis. 1969. 295p. University Microfilms Order No. 69-4430; price in microfiche \$3.80, in xerography \$13.30.

This study was to discover the effect of the merger of various extension units at West Virginia University into the Appalachian Center. Data were collected by a questionnaire. The 131 respondents consisted of 50 county agents, 46 4-H agents, and 35 home agents, and comprised 96% of the state extension agents. Regression analysis, consisting of zero order, partial and multiple correlations, and Beta weights was used to determine statistical relationships between the dependent and independent variables. The major conclusions were: the role perception of all agents had changed significantly since the merger; the importance that agents accorded non-traditional clientele was positively related to the extent that they had worked with these groups; home agents appeared to be more traditionally oriented than either county agents or 4-H agents; older agents showed a more non-traditional orientation and a more comprehensive role definition than younger agents. Mean scores for agents' level of job satisfaction indicated that they were somewhat satisfied.

295. CHARACTERISTICS OF LOW AND HIGH PROJECT LEADER TASK PERFORMANCE AND TASK QUALIFIED GROUPS IN SELECTED TENNESSEE COUNTIES. Lucas, Anna B. and Carter, Cecil E. Tennessee Univ. Agricultural Extension Service. July 1969. 19p. Extension Study, No.2. EDRS Order No. ED 038 564; price in microfiche \$0.25, in hard copy \$1.05.

Conducted in 14 Tennessee counties, this study concentrated on the relationship of Four H project leaders' personal characteristics to performance of, and their feeling of being qualified to perform, a high or low number of tasks. It also investigated relationships between how often extension agents provided information to leaders by various teaching methods, and agents who have a high or low percentage of leaders who perform many tasks. Some of the major findings were: (1) high task performance leaders were more likely to be females, to be teachers, housewives, laborers, or professionals; (2) leaders with more leadership experience and training were more likely to be in the high task performance groups than leaders with little or no leadership experience or leadership training; (3) leaders with more training more often felt qualified to perform more tasks; (4) how often extension agents had given leaders information did not significantly affect the percentage of high task performance leaders per agent. Recommendations stressed further studies on the information provided to leaders and on teaching methods used.

296. PERFORMANCE, GOAL AND ROLE AMBIGUITY. Ham, Don Gay. Colorado State Univ. Ph.D. Thesis. 1968. 120p. University Microfilms Order No. 69-12,459; price in microfiche \$3.00, in xerography \$5.80.

Focusing on youth agent positions in the University of Missouri Extension Division, this study tested the relationship between performance, conceptual skills were measured from word associations by the Remote Associates Test (RAT); youth agent performance ratings were made by specialists and district directors. As performance rankings increased, perceived ambiguity decreased (goal and role) and actual ambiguity increased; as actual and perceived goal ambiguity rose, actual and perceived role ambiguity also increased. Performance ratings tended to increase with increasing RAT scores. As actual ambiguity increased, perceived ambiguity decreased. Performance ratings, RAT scores, and ambiguity increased with greater tenure in Extension and with increased scope of occupational experience. Performance ratings were positively related to perceptual skills and actual ambiguity, but negatively related to perceived ambiguity. Conclusions point to considerable goal displacement, especially among field staff.

297. A RESEARCH SUMMARY OF A GRADUATE STUDY: AN ANALYSIS OF FACTORS RELATED TO THE ROLE PERFORMANCE OF 4-H JUNIOR LEADERS IN SELECTED TENNESSEE COUNTIES. Fussell, Polly L. and Carter, Cecil E. Extension Study No. 5. February 1970. 26p. EDRS Order No. ED 036 723; price in microfiche \$0.25, in hard copy \$1.40.

This study explored role perceptions of junior Four H leaders and identified some factors in role performance. Hypotheses were tested relating to their role expectations, performance and self evaluation of preparedness for the role. Questionnaires were administered to 279

junior leaders, 121 adult leaders, and 36 Extension agents in 15 Tennessee counties. These were among the findings: (1) adult leaders felt that junior leaders should perform more tasks than Extension agents felt they should; (2) the three groups disagreed as to the relative importance of the five task groups, or roles, of junior leaders; (3) task expectations, task performance, and self perceived preparedness were significantly related, especially for number and frequency of tasks performed; (4) sex and junior Four H club meeting attendance were significantly related to junior leaders' role perceptions; (5) high task performance and sense of preparedness were both related to such characteristics as membership in clubs other than Four H, attendance at Four H events, offices held in Four H, attendance at junior Four H meetings, time spent working with adult leaders, and parental involvement past or present.

298. AN ANALYSIS OF CONSTRUCT VALIDITY OF MOTIVATION AS IT RELATES TO NORTH CAROLINA COUNTY AGRICULTURAL EXTENSION SERVICE AGENTS. Calloway, Pauline Frances. North Carolina Univ. Ed.D. Thesis. 1968. 89p. University Microfilms Order No. 69-16,821; price in microfiche \$3.00, in xerography \$4.60.

This study investigated the construct validity of the Herzberg theory of motivation as it relates to county Extension agents; and developed an inventory to measure the job satisfaction of county agents in North Carolina. The inventory was administered to 419 agents in 79 counties. Factor analysis was used to determine the number of job satisfaction dimensions in a set of 45 items constructed from the Herzberg theory. Nine dimensions were derived: achievement, recognition, the work itself, responsibility, advancement, organizational policy and administration, supervision, salary, and working conditions. An examination of the items with the highest rotated loadings on each factor indicated the dimension to be assigned to the factor. Only items with rotated factor loadings above .500 were included in the final inventory. Eight of the dimensions were rank ordered by percent of total variance. ("The work itself" was never factored out as an independent dimension.) Levels of reliability were as follows: responsibility, .643; organizational policy and administration, .592; working conditions, .542; recognition, .537; advancement, .430; achievement, .380; salary, .276; supervision, .190.

299. THE RELATIONSHIP BETWEEN 4-H DIVISION LEADERS' PROPENSITY TOWARD DELEGATION AND INVOLVEMENT IN AND RESPONSIBILITY FOR LEADER IDENTIFICATION AND INVOLVEMENT IN AND RESPONSIBILITY FOR LEADER IDENTIFICATION AND SELECTION. Dunbar, Mary Elizabeth. North Carolina State Univ. Masters Thesis. 1968. 97p. Dept. of Adult Education. EDRS Order No. ED 030 811; price in microfiche \$0.50, in hard copy \$4.95.

This research was to determine the relationship between New York State Cooperative Extension 4-H Division Leaders' propensity toward delegation of work responsibility and (1) their degree of involvement in the performance of leader identification and selection tasks, (2) assignment of major responsibility for these tasks, and (3) other selected personal

and program factors. The sample comprised New York State 4-H Division Leaders in 55 counties. Of the 55 leaders polled, 46 returned usable questionnaires. Based on a review of literature on delegation, 20 administrative factors were selected to elicit 4-H Division Leaders' propensity toward delegating responsibility. In addition, 18 tasks of leader identification and selection tasks that incorporated planning, executing, and evaluating on a county-wide and local or area basis, were developed. Data revealed that (1) leaders were the most highly involved of all positional groups in tasks of leader identification and selection, and (2) the respondents perceived themselves and 4-H agents to be more highly involved than subprofessionals and voluntary leaders in these tasks. Findings indicated that 12 of the factors used in the study appeared to be significantly associated with the dependent variable, 4-H Division Leaders' propensity to delegate.

See also: item 401, 167, 388, 410, 413, 400 studies of teachers in adult basic education; 168 consequences of leader behavior in human relations training; 645 identifying opinion leaders among vocational agriculture teachers; 99, 723, 138, 665 studies of leaders, change agents in agriculture and home economics; 318, 321, 320 4-H and youth leaders.

4100 Administrators

300. SOME SOCIOLOGICAL CHARACTERISTICS OF DOCTORAL ADULT EDUCATORS. Adams, Albert. 1969. 18p. Paper delivered at the National Seminar on Adult Education Research (Toronto, February 9-11, 1969).

This study was an analytical sociological profile of professional adult educators with doctorates. A questionnaire was mailed to 200 of them; 86% responded. Findings included the following: (1) respondents tended to be Protestant married men, middle-aged (between 46 and 50) and middle-class liberal Democrats, with rural Midwestern origins; (2) the typical respondent had earned his Master's or first professional degree in the social sciences between ages 20-30 and his doctorate in adult education (Ed.D.), between ages 36-40; (3) he had been employed in adult education from 16 to 20 years, had worked largely in universities, was currently an administrator, and had daily job-related contacts with other adult educators; (4) he was "midly satisfied" with his national professional organization, satisfied with adult education as an occupational field, and very satisfied with it as an educational field; and he was more closely identified with his field than with his employing organization; (5) he felt that his field should be under the influence of professors of adult education, and that "improving adult learning" deserves prime emphasis; (6) he preferred group discussions and the seminar method for his own continuing education.

301. PROFESSIONALIZATION IN HIGHER ADULT EDUCATION ADMINISTRATION. Farmer, James A., Jr. February 1970. 27p. Paper presented at the Adult Education Research Conference, Minneapolis, Minnesota, February 27-28, 1970. EDRS Order No. ED 036 749; price in microfiche \$0.25, in hard copy \$1.45.

Ninety-three higher adult education chief administrators served as subjects in this study to test whether there was evidence of increased professionalization between 1957 and 1967. Utilizing Hall's Professionalization Scales and some background scales to measure attitudinal and structural attributes of professionalization, an analysis of variance technique and a chi square analysis were used to determine the difference between the extent of professionalization of three groups of administrators. Findings revealed no significant change over time between the three groups at the .05 significance level. The average scores in this study were higher than those reported in previous studies using the Professionalization Scales with other occupations. These unexpected findings were viewed as attributable, at least in part, to characteristics of the field of higher adult education during the past decade which mitigated against further professionalization of the occupation. Using a supplementary questionnaire, additional comparisons were made between 93 respondents and a sample of the 143 non-respondents to the initial questionnaire. Differences were not significant.

302. A SURVEY OF THE FUNCTIONS AND RESPONSIBILITIES OF THE DIRECTOR OF ADULT EDUCATION IN THE PUBLIC SCHOOL SYSTEM. Sharples, Brian. Calgary Univ. Alberta Dept. of Educational Administration. M.Ed. Thesis. September 1969. 176p. Available from National Library of Canada, Bibliography Division, Ottawa, Ontario; order no. 4689; price in microfiche \$2.00, in xerography \$13.75.

The purpose of this study was to survey and analyze biographical data of the directors of adult education in Canadian public school systems, and the perceptions held by directors and superintendents across Canada of the goals of adult education and the functions of directors of adult education. The analysis consisted primarily of determining the effects of certain variables on the views of the directors, namely: the type of director, his training in adult education, administrative experience in adult education and geographic location. The data were obtained by questionnaire. The biographical section revealed that many directors were relatively new to the position, previously employed in some other capacity by the same school board, and generally without training in adult education. There was a lack of strong agreement on goals. In broad terms, the data suggest that directors perceive their primary responsibilities to be with the internal duties of the adult program rather than the work required outside the schools such as public relations.

303. PERSONALITY CHARACTERISTICS OF TRAINING DIRECTORS. Jurgensen, Clifford E. In Training and Development Journal; v24 n6 June 1970. p15-20.

Adjective Word Sort research into descriptors of managerial groups compared perceptions of business, industrial, and public utility executives by psychologists and other executives; psychologists' perceptions of military officers and government administrators; and training directors as viewed by members of the American Society for Training and Development.

304. A STUDY OF THE LEADER BEHAVIOR OF SELECTED DIRECTORS OF UNIVERSITY CONFERENCE OPERATIONS. Coleman, David Steward. Wisconsin Univ. Ph.D. Thesis. January 1969. 152p. University Microfilms Order No. 69-12,352; price in microfiche \$3.00, in xerography \$7.20.

This study tested the relationship between self-perceptions of leader behavior by 57 directors of university conference operations, and their perceived degree of autonomy and role conception. The directors responded to an instrument consisting of five background questions, 100 leader behavior statements, 25 items on autonomy in decision making, and 30 statements on areas of emphasis (client, image, operations, institutional, or problem orientation) in role conception. These were among the findings; (1) perceived autonomy and the Initiating Structure factor in leader behavior were virtually unrelated; (2) Initiating Structure was positively, but not significantly, related to high autonomy; (3) Consideration was negatively, but not significantly, related to low autonomy; (4) the client oriented role was only slightly related to the Consideration factor; (5) the problem oriented role was both negatively and significantly related to Consideration.

See also: item 724 supervision of agricultural extension in Argentina; 720 leadership characteristics of Cooperative Extension Chairmen in North Carolina.

4300 EVALUATION

305. THE CRITERIA PROBLEM IN PROGRAM EVALUATION. Steele, Sara M. and Moss, Gwenna M. February 1970. 37p. Paper presented at the Adult Education Research Conference, Minneapolis, Minnesota, February 27-28, 1970. EDRS Order No. ED 036 748; price in microfiche \$0.25, in hard copy \$1.95.

The nature and role of criteria in evaluation of adult education programs are presented in this study. The goal of evaluation is to use program judgments in the program decision making process. Criteria are essential to judgment and determining the type of criteria that is relevant is an important part of the evaluation process. Criteria may function at various levels of specificity. Effectiveness of evaluation rests mainly with the quality of the criteria used; and efficiency in evaluation is determined by the evaluator's competency in developing criteria. The second half of the paper asserts that criteria are not adequately understood and used. Reasons suggested for this include: (1) too narrow a concept of evaluation; (2) too great an emphasis on information and program description; (3) the wish to avoid decision making; (4) the wish to escape challenge by avoiding subjectivity; and (5) poorly defined guides to data interpretation. Suggestions for improving the use of criteria are given.

306. PROGRAM EVALUATION--A BROADER DEFINITION. Steele, Sara M. In Journal of Extension; v8 n2 Summer 1970. p5-17.

Criteria, evidence, and judgment are the three essential elements in evaluation, which should be done with a view to contributing to present and future programs.

307. OPTIONS FOR EVALUATION OF ADULT EDUCATION: RESEARCH OR SUBJECTIVE JUDGMENT. Caplan, Eleanor K. February 1970. 14p. Paper presented at the Adult Education Research Conference, Minneapolis, Minnesota, February 27-28, 1970. EDRS Order No. ED 036 768; price in microfiche \$0.25, in hard copy \$0.80.

Evaluation research is currently facing a crisis. At the same time that federal and other funding sources are placing increasing emphasis on evaluating on-going programs, action personnel are becoming more and more skeptical about the value of such research. Certainly, different frames of reference guide researchers and educational programmers. However, in the long run, both are aiming at the same goal -- a more effective program. This suggests that there is enough common ground between researchers and programmers to provide a basis for working together, and that some adequate compromise can be struck between the needs of research and those of education programs.

308. THE ASSESSMENT OF CHANGE IN TRAINING AND THERAPY. Belasco, James A. and Trice, Harrison M. 1969. 170p. Available from McGraw-Hill Book Company, 330 West 42nd Street, New York, N.Y. 10036.

Designed to serve training oriented professionals, therapy oriented practitioners, and practicing managers, this book presents insights into the change process, along with problems contained in efforts to evaluate this process in management training and in therapy.

309. IDENTIFICATION OF DIFFICULTY UNITS IN A TRAINING PROGRAM. Johnson, Kirk A. and Harding, Larry G. January 1969. 30p. Naval Personnel Research Activity, San Diego, Calif. Clearinghouse for Federal Scientific and Technical Information Order No. AD-684-785; price in microfiche \$0.65, in hard copy \$3.00. Final Report

This study sought to determine whether student judgments, instructor judgments, or conventional norm referenced tests should be used to measure residual difficulty in military technical training. Opinions were obtained from instructors and students in electronics and aviation maintenance technology courses at the Naval Technical Training Center, Memphis, Tennessee. There was fairly close agreement between student opinions and instructor opinions, but neither provided a good estimate of the index based on the tests. There were wide fluctuations in agreement over the four studies reported. In one of the studies, comparisons were made between the three indexes mentioned above and a fourth index derived from criterion referenced tests. Each of the former accounted for between 20% and 30% of the variance of the latter. It was concluded that none of the three estimates provides a safe substitute for an index based on criterion referenced tests.

310. COST-BENEFIT ANALYSIS OF MANPOWER POLICIES. Wisconsin Univ., Industrial Relations Centre, Madison. & Center for Studies in Vocational and Technical Education; Queens Univ. Kingston, Ontario. Proceedings of a North American Conference, May 14-15, 1969. 290p.

A series of articles focuses on the theoretical aspects of cost-benefit analysis and its application to manpower programs.

311. DETERMINANTS OF RATES OF RETURN TO INVESTMENT IN ON-THE-JOB-TRAINING. Rasmussen, Dale Bruce. Southern Methodist Univ., Dallas, Tex. Doctoral Thesis. March 1969. 159p. Clearinghouse for Federal Scientific and Technical Information Order No. PB-184-024; price in microfiche \$0.65, in hard copy \$3.00.

The study evaluates public investment in on the job training (OJT) and tries to identify systematic determinants of the profitability of this investment. Age-earnings profiles by occupation are estimated for the South, Non-south, and White, Non-white, from data in the 1-in-1,000 Census sample and are then adjusted to the regional level using wage survey indices. Concepts of profitability reflect three assumptions: transfers are not a cost; transfers are a cost; increase in tax revenue is the sole benefit derived from OJT. The methodology of the study is an aggregate approach to evaluating investment by utilizing detailed information describing individuals.

312. RENTABILITE DES INVESTISSEMENTS EN EDUCATION DES ADULTES: ASPECT SOCIAL (THE RETURN ON INVESTMENTS IN ADULT EDUCATION; THE SOCIAL ASPECT). Jobin, Ghyslain. Laval Univ. (Quebec) Text in French. 1968. 10p.

This study investigated the return on public investments in adult education for the Province of Quebec as well as greater Montreal and Quebec City. Emphasis was on the cost effectiveness of part time and full time formal study at ages 19, 24, 34, 44, and 54. It was found that returns on investments favor full time over part time study; that cost effectiveness increases with age and with educational level; and that promoting higher adult education in the Montreal area would prove especially advantageous.

313. AN EXPERIMENTAL APPROACH TO THE ESTIMATION OF THE CONTRIBUTION OF SKILLS ACQUIRED DURING MILITARY TRAINING AND SERVICE IN THE CIVILIAN SECTOR. Spencer, Daniel L. and Woroniak, Alexander. Howard Univ., Washington, D.C. Economics Dept. June 1968. 35p. Clearinghouse for Federal Scientific and Technical Information Order No. AD-695-061; price in microfiche \$0.65, in hard copy \$3.00.

This report attempts to establish and quantify the transfer of military-acquired technical skills to civilian occupations. It provides a concrete demonstration of a method by which the military's non-defense contribution to the civilian economy can be estimated in money terms. It uses a methodology of capitalization of earnings over an estimated remaining life-span of individuals. The problem of separating the proportion of skills derived from military education is faced; and a method of segregation offered. The report holds that continuing economic benefits have not been numerically established in the past and concludes that while further research and refinements may be required, it is feasible to estimate the benefits of these military by-products by quantitative economic methods.

See also: SECTION 2600-3300 INSTRUCTIONAL METHODS; item 625, 590,601, 612, 606, 600, 632, evaluation studies in remedial occupational and new careers programs; 396, 405, 391, 395, 398 adult basic education; 428 follow-up

study of evening high school graduates; 649, 658, 642, 650 agricultural education; 574, 523, 580, 520, 581 various adult vocational and technical programs; 527, 538, 539 management development programs; 486, 487, 477 professional continuing education; 445, 444, 588, 493 community action and development programs.

4600 EDUCATION OF PARTICULAR GROUPS

4620 Age Groups

4625 Young Adults

314. TRAINING OF YOUTH LEADERS. United Nations Educational, Scientific, and Cultural Organization, Paris. October 1969. 23p.

The location and kinds of youth leaders are surveyed. A survey of existing programs in both the developed and developing nations reveals that: (1) the attendance rate of youth in the bodies and institutions created for them is extremely low; (2) masses of youth feel left out because of the selective and discriminatory nature of these out-of-school institutions; (3) the programs existing have achieved little in terms of what is needed; and (4) these institutions exhibit an authoritarian attitude toward youth. Several existing attitudes have to be abandoned if youth programs are to be successful: (1) the authoritarian concept of youth education; (2) absence of up-to-date knowledge of youth; and (3) failure to listen to the attitudes of youth.

315. A SURVEY OF HOW BOYS AND GIRLS USE THEIR TIME. Rader, Gilbert L. Missouri Univ., Columbia 1969. 179p. Available from University of Missouri, Columbia, Missouri 65201, price in microfiche \$6.65, in xerography \$36.00.

Freshmen and sophomores in three Howell County, Missouri, high schools were surveyed to determine how boys and girls aged 14 and 15 use their spare time, and whether they have enough time to participate in an informal educational program such as Four H clubs. These were among the findings: (1) categories were watching television, doing chores at home, study, sleeping, eating, and returning from school; (2) sophomores belong to more organizations than freshmen; (3) boys living in town spend less than the average time returning from school, doing chores at home, and sleeping, but more time participating in school sports and activities, and in outdoor sports; (4) town boys participate in more diversified activities; (5) farm and rural nonfarm boys spend their time more nearly like the average youth in the sample than do town boys; (6) girls living in town spend the majority of their time more nearly like the average boy in the sample than do town boys.

316. A STUDY OF THE ASSOCIATION BETWEEN SELECTED FACTORS OF COUNTY FOUR-H EXTENSION PROGRAMS AND SENIOR FOUR-H ENROLLMENT IN TENNESSEE COUNTIES. Reed, Billy J. and Carter, Cecil E. Tennessee Univ. July 1970. 24p. Agricultural Extension Service. Extension Study No. 6.

This study on decreasing senior Four H enrollment in Tennessee investigated what the variation in number of senior members per county accounted for by the number of leaders, number and size of Four H clubs, number of participants in Four H activities, potential membership, place of member residence, the numbers of county Extension agents, and combinations of the above. Nineteen independent variables relating to leadership, organization, participation, and enrollment were studied, along with four dependent variables. Conclusions were: (1) senior enrollments rose whenever the total number of adult leaders, junior leaders, organizations, or all star or honor club members increased; (2) increases in the number of senior clubs, average number of seniors per club, total number of senior district project winners, or Four H camp participants, participation in farm products judgments, total full time staff, or Extension agent staff members, were also related to increased enrollments; (3) increases in the number of adult leaders, camp participants, senior clubs, and Extension staff members were the most significant factors.

317. RELATIONS BETWEEN JUNIOR 4-H ENROLLMENT AND SELECTED CHARACTERISTICS OF TENNESSEE'S COUNTY 4-H EXTENSION PROGRAMS: Chu, Sho-hong and Carter, Cecil E., Jr. Tennessee Univ., Knoxville. October 1969. 26p. EDRS Order Number ED 038 565; price in microfiche \$0.25, in hard copy \$1.40.

This study was concerned with the problem of decreasing county junior 4-H enrollment in Tennessee. The major purposes were (1) to determine the relations between the total number of junior 4-H members per county and variables concerning 4-H leadership, organization, participation, enrollment, place of member residence, and number of extension staff members per county, and (2) to determine which of the six groups of county 4-H programs or independent variables (i.e. 4-H leadership, organization, participation, enrollment, place of residence, and number of extension staff per county) accounted for the largest variation in the number of junior 4-H members per county. Correlation analysis and multiple correlation analysis were applied to these variables, revealing positive correlation among such factors as number of members, number of leaders, and number of clubs within a county.

318. A STUDY OF THE GEORGIA DISTRICT AGENTS AND STATE 4-H STAFF'S ROLE EXPECTATIONS FOR EXTENSION AGENTS AND VOLUNTEER 4-H LEADERS. Lowry, Rhonwyn. North Carolina State University. Ed.D. Thesis. 1969. 152p. University Microfilms Order Number 70-7199; price in microfiche \$3.00. in xerography \$7.20.

A study was made of role expectations of the extension agent, the volunteer 4-H leader, and those of cooperative responsibility in relation to the 4-H program as perceived by the Georgia District agents and the State 4-H staff. A secondary purpose was to determine the degree of consensus among the agents and the State 4-H staff on the tasks of the extension agents, the volunteer 4-H leaders, and those of cooperative responsibility in relation to the 4-H program. The study revealed that the Q sort technique is useful for defining role expectation; that role

expectation can be studied, analyzed, and described in terms of tasks. Appropriate tasks for the District agents and State 4-H staff assumed an inverse relationship for extension agents and volunteer 4-H leaders. Tasks for extension agents consisted of planning and evaluation, those for volunteer 4-H leaders of execution tasks.

319. 4-H PROJECT LEADER ROLES: PERCEPTION OF EXTENSION AGENTS AND VOLUNTEER LEADERS IN FOURTEEN TENNESSEE COUNTIES. Lambert, Hubert E. Tennessee Univ., Knoxville. Agricultural Extension Service. Summary of M.S. Thesis. 1969. 15p. EDRS Order Number ED 039 401; price in microfiche \$0.25, in hard copy \$0.85.

To determine the tasks 4-H project leaders performed, to secure leaders' and agents' opinions concerning the tasks, and to determine the opinions of 4-H project leaders and extension agents concerning the qualifications of 4-H project leaders, questionnaires were mailed to 463 project leaders and 27 agents in Tennessee counties. Usable returns were received from 225 project leaders and 27 agents. The following were among the findings: the location of leaders in counties with a large or small number of project leaders did not significantly influence the number of tasks performed by the leaders; an average of 40% of the leaders were performing each of the 55 tasks; 71.6% of the leaders and 86.6% of the agents thought leaders should perform each of the tasks; an average of 57% of the leaders and 18.8% of the agents believed leaders were qualified to perform the tasks; and the agents thought leaders were best qualified to perform the planning tasks and least qualified to perform the teaching tasks of 4-H project work.

320. THE CHARACTERISTICS OF ADULTS WHO SAY THEY WILL SERVE AS VOLUNTEER YOUTH LEADERS. Freeman, Jim O. Missouri Univ., Columbia. Dec. 1968. 37p.

A study to examine the willingness of adults to serve as volunteer youth leaders was compared with another study made in Wisconsin. Questionnaires were sent to a random sample of adults in Lawrence County, Missouri, which was predominantly rural. A revised questionnaire was used to interview a stratified random sample of personal property owners. Of 100 people interviewed, 53% were willing to serve; 46% were not. The opposite was true of the Wisconsin study. As in the Wisconsin study, experience in youth leadership was significantly related to willingness to serve. The reasons for not serving were: lack of time, interest, and experience; and age or poor health; time was indicated most often (53%) as the main reason. In both studies more education, greater participation in formal organizations, and higher family income were associated with the desire to participate; the study showed no significant influence by the place of residence or sex, but revealed a slight relationship between gainfully employed women and willingness to serve. Housewives were less willing to serve. The main difference in the studies lay in the fact that the Missouri study found no significant differences which resulted from age; the Wisconsin study did.

321. A STUDY TO DETERMINE WHY MISSOURI EXTENSION YOUTH AGENTS RESIGN OR CHANGE TO ANOTHER POSITION WITHIN THE EXTENSION DIVISION. Henderson, Don. Missouri Univ., Columbia. Dept. of Ext. Educ. Apr. 1970. 50p. EDRS Order No. ED 039 497; price in microfiche \$0.25, in hard copy \$2.60.

A survey study to determine why Missouri Extension Youth Agents resigned or changed positions within the Extension Division revealed that while no single factor was responsible, there were a number of reasons why this occurred: (1) poor understanding of the duties of a youth agent at the time they were employed; (2) the youth position was a stepping stone to other extension positions; (3) dissatisfaction with (a) the leadership and program support received from the state youth staff, (b) the salary received, and (c) failure of formal education to provide the academic background needed for the job; (4) working in an area of the state in which they did not desire to live; (5) low prestige of the position; and (6) the feeling that their opinions had little or no affect on policy decisions by either the extension administration or the state youth department.

322. SOUTH DAKOTA 4-H MEMBERS' AND LEADERS' USE OF TWO TYPES OF 4-H MANUALS. Froke, Barbara Kaye. South Dakota State University. M.S. Thesis. 1970. 103p.

To compare 4-H members' and leaders' use of 4-H publications in South Dakota, the study involved a test of the readability of manuals and a survey of members and leaders use of the publications. A 20% sample of the member and leader populations was selected in each county. Questionnaires determined 4-H members' attitudes toward, and use of, the foods and nutrition, and the clothing members' manuals, and to obtain information about leaders' use of the two members' manuals as well as the two leaders' manuals. The publications were easy to read and understand; there was no difference between members' and leaders' use of their manuals; there was a difference between the leaders' use and the members' use of the two members' manuals.

See also: SECTION 6550 OCCUPATIONAL TRAINING - UNSKILLED, DISADVANTAGED; item 257 tv habits of New York City adolescents; 107, 373, 296, 297, 288, 281, 299 studies of 4-H and youth participants and leaders; 227 youth leadership training in church; 155 longitudinal study of migration of youth in rural areas; 289 leadership training in Girl Scouts; 213 Junior Leaders Schools in YMCA; 578 career decisions of Iowa young adults.

4630 Middle-Aged

323. MIDDLE AGE AND AGING; A READER IN SOCIAL PSYCHOLOGY. Neugarten, Bernice L., Ed. 1968 606p. University of Chicago Press, 5750 Ellis Avenue, Chicago, Illinois 60637.

Most of the selections (58) in this anthology discuss the problem of what social and psychological adaptations are required as individuals pass through later life. Major attention is paid to the importance of age status and age-sex roles; psychological changes in the life cycle; social psychological theories of aging; attitudes toward health; changing family roles; work, retirement, and leisure; dimensions of the immediate social environment as friendships, neighboring patterns, and living arrangements; differences in cultural settings; and perspectives of time and death. Empirical studies, and those in which research methods are clearly described, are presented wherever possible, together with theoretical and summary papers and a few investigations that present innovative methods and concepts. Various research methods are illustrated: questionnaires, surveys, interviews, projective tests, participant observation. The four appendixes in particular pose methodological problems in studying longitudinal change. Tables, figures, and an extensive bibliography also appear.

324. THE CHALLENGE OF CHANGE TO THE ADULT TRAINEE: A STUDY OF LABOUR TURNOVER DURING AND FOLLOWING TRAINING OF MIDDLE-AGED MEN AND WOMEN FOR NEW SKILLS. Newsham, D.B. Available from Her Majesty's Stationery Office, 49 High Holborn, London W.C.1, England (4s.6d) 1969 46p.

A survey in thirty organizations retraining workers over 35 as well as young workers for operations which required a training period of at least two weeks, aimed at determining how the proportion of older men and women who successfully completed training compared with that of the young, and how long they remained in the job for which they had been retrained compared with their younger colleagues. A higher proportion of older men leave during training and soon afterwards. Older men tend to succeed best in those jobs requiring training periods of 10-13 weeks. They tend to survive less well in those requiring longer training periods or very short training periods and least well in those requiring 6-8 weeks. Systematic methods of training, though they may reduce the length of time to learn a job, tend to relate to a lower long term survival rate for both age groups than does exposure training. The turnover among women trainees was greater than that of the men; however, the survival rate of the older women tended to be higher training to production as well as in the long run.

325. ADULT TRAINING; FORCING THE PACE. Belbin, E., Toye, M.H. In Gerontology; Apr. 1970. p33-37.

The emphasis by middle-aged workers on accuracy rather than speed presents problems when retraining adults. Slow working acquired in training persists into job performance, but pacing procedures during learning result in a considerable increase in speed accompanied by a loss of quality; however, the quality gradually improves as the operator gains experience. An automatic pacing machine was used with subjects aged over 40. Older people can learn to work at speed if they are paced out of their obsession for accuracy.

4635 Older Adults

326. EDUCATION FOR AGING: A REVIEW OF RECENT LITERATURE. Jacobs, H. Lee; and others. ERIC Clearinghouse on Adult Education; Adult Education Association of U.S.A., Washington, D.C. Jul. 1970. 118p. EDRS price MF \$0.50, HC \$6.00. Also available from Adult Education Association of the U.S.A., 1225 Nineteenth Street, N.W., Washington, D.C. 20036. \$3.50.

This literature review covers studies and reports on a wide range of behavior patterns relative to the aging process. While most of this work deals with education for aging in terms of adult problems and interests, attention is also given to early life experience and to attitudes which set the pattern for later life. Chapters focus on learning characteristics and abilities of older adults; existing opportunities and areas of need for education on aging; job retraining and other kinds of informal educational opportunities and factors germane to preparing for retirement. Annotated chapter bibliographies (a total of 237 items) also appear. Instructions for ERIC document ordering are furnished.

327. THEORY AND METHODS OF RESEARCH ON AGING. Schaie, K. Warner, Ed. West Virginia University, Morgantown, W.Va. 26506; 1968. 170p.

The document reports the proceedings of a conference on "Theory and Methods of Research on Aging." McFarland discusses perception and aging and includes sensory as well as perceptual processes. Kay restricts the field of learning largely to memory functions. Bayley attends primarily to the basic components of standard tests of complex measures of memory function. She bases her analysis on data and issues of the Berkeley growth studies. Chown discusses current work in personality and aging. She notes major trends: work on disengagement theory and life style; and isolated pursuits of age differences on a large variety of particular inventory type measures of personality.

328. FEASIBLE PLANNING FOR SOCIAL CHANGE IN THE FIELD OF AGING. Osterbind, Carter C., Ed. University of Florida Institute for Gerontology, Gainesville. Papers presented at the 18th Annual Southern Conference on Gerontology, University of Florida, Gainesville, Feb. 2-4, 1969. 181p. Available from University of Florida Press, Gainesville, Florida, 32601 (\$375; Vol. 18 of Gerontology series).

This volume of papers dealt primarily with demonstration projects in planning for social change among older Americans. Projects carried out under the Older Americans Act were examined to observe the particular features that contributed to their success or failure. Attention was given to the initial planning, the criteria used, the feasibility of goals, and the basis for project evaluation. Such efforts as Model Cities Program, the Regional Medical Program, and Medicare were also examined.

329. LIFETIME ALLOCATION OF WORK AND LEISURE. Kreps, Juanita M. United States Dept. of Health, Education and Welfare, Washington, D.C., Office of Research and Statistics. 1968. 50p. EDRS PRICE MF \$0.25. HC Available from Government Printing Office, Washington, D.C. (282-359-68-2, \$0.40).

This study draws comparisons between the work and leisure pattern in the United States, with its growing tendency toward retirement below age 65, and the patterns of certain western European nations (principally the United Kingdom, West Germany, Sweden, and Switzerland). There the author finds no comparable trend toward early retirement, and in some cases finds encouragement of workers to remain in the labor force beyond age 65. There may be advantages, both to the worker and the economy, in distributing (and therefore financing) added leisure within working life, through longer vacation periods, retaining programs, and shorter work weeks. The document includes a chart, 12 tables, and notes on census data for comparisons between and within countries over time with respect to labor force activity rates.

330. OLD PEOPLE IN THREE INDUSTRIAL SOCIETIES. Shanas, Ethel; And Others. 1968. 478p. Available from Atherton Press, 70 Fifth Avenue, New York, N.Y. 10011 (\$15.00).

The elderly populations of Denmark, Great Britain, and the United States in relation to their social and economic circumstances are outlined, using statistical data, interviews, and case studies. Aspects of the life of the elderly which receive extensive consideration include health; relationship with family; availability and use of medical and welfare services; emotional outlook, particularly isolation, loneliness, or desolation; and financial resources and the role of the government in supporting low income receivers. Although the elderly are more strongly integrated into industrial society than is generally assumed, there is also an uneasy separateness of the aged that might best be characterized as a potential or embryonic "class." The cross-national nature of the study is intended to provide new insights into the adequacy of government provision for the elderly.

331. CONSIDERATION OF HOW LEVELS OF ACHIEVEMENT AND ANXIETY TOWARD EDUCATION AFFECT OLDER PEOPLE'S PARTICIPATION IN ADULT EDUCATION PROGRAMS. Norton, Paul G. Paper presented at the Adult Education Research Conference, Minneapolis, Minnesota, February 27-28, 1970. 29p. EDRS PRICE MF \$0.25, HC \$1.10.

Using a sample of 250 adults aged 65 or over, this study investigated the relation of educational participation by older adults to socio-economic achievement and to anxiety as regards education. Achievement was based on levels of occupation, income, and education. A series of 17 questions covered peer relationships, determination of ability

to learn, critical incidents on one's education, and other aspects of anxiety. Achievement correlated positively, and anxiety negatively, with levels of participation. Anxiety toward continuing education stemmed, not from the aging process as such, but from previous educational experiences. Men were more anxious over competition than were women. Participants retained a relatively high self-image of learning ability and generalized their belief to the total elderly population, while nonparticipants were highly selective and unwilling to generalize.

332. ON-THE-JOB TRAINING AND THE OLDER WORKER. Taylor, Vienna Siders. Iowa State Univ. of Science and Technology, Amer. M.S. Thesis. 1968. 52p. EDRS PRICE MF \$0.25, HC \$2.70.

Based on information from the on-the-job-training program of the Iowa State Manpower Development Council, this study analyzed placement among 123 applicants aged 45-65. Questionnaire variables were race, sex, age, marital status, physical or social handicap, education, weeks unemployed, occupational level, financial support, and willingness to relocate. The typical applicant appeared to be a 52 year old married white male, unskilled (10.4 years of education), with two dependents, a social or physical handicap, and 5.3 weeks unemployment without unemployment compensation or other relief; he preferred local employment to relocation. Compared to unplaced workers, those placed were younger, more females and whites, a larger proportion married (21% more), higher educational attainment (by 4%), and 41% unmarried or divorced, socially handicapped and relatively undereducated, but willing to relocate.

333. LEISURE-TIME ACTIVITIES IN SELECTED NURSING HOMES. Tague, Jean Ruth. University of Southern California, Los Angeles. Ph.D. Thesis. 1968. 328p. Available from University Microfilms. (Order No. 68-10, 254, MF \$4.20, Xerography \$14.85).

This study sought to identify leisure interests and participation patterns of residents over 65 in nursing homes in Los Angeles County, together with general and professional beliefs of nursing home administrators and authorities on aging as to leisure activities for aged nursing home patients. Interviews were held with 107 patients selected from 17 nursing homes, the nursing home administrators, and six experts. These were among the findings: (1) few of the patients participated in or were interested in leisure activities, and passive activities were favored; (2) patients participated for social contact, and enjoyment, or did not participate because uninterested or were physically unable; (3) contrary to administrators' opinions, the majority of patients were physically and mentally able to participate in leisure activities; (4) it is important to offer aged patients a wide selection of programs; (5) active leisure activities are the ones most valuable to patients' well being. Recommendations were made for expanded leisure programs and for research on various factors in participation.

334. AGING, DISENGAGEMENT, AND OPINIONATION. Glenn, Norval D. In Public Opinion Quarterly; v33 n1 Spring, 1969. p17-33.
335. A STUDY OF THE EXPECTATIONS OF MEMBERS OF A RELIGIOUS COMMUNITY AND LAY PROFESSIONAL WOMEN ON RETIREMENT AS A BASIS FOR PLANNING A PRE-RETIREMENT EDUCATION PROGRAM. McCarthy, Sister Eugene Teresa. St. Louis Univ., Mo. Ph. D. Thesis. 1969. 334p. University Microfilms, (Order No. 70-1875, MF \$4.30, Xerography \$15.10).

The purpose of this study was to determine the need for planning a pre-retirement education program for the Sisters of Charity of Leavenworth and other never married women between 45 and 60 years who were engaged in professional work. Participants expressed a need for pre-retirement education programs; it was feasible to incorporate the expectations of professional women as a basis for a pre-retirement educational program; there were no differences between the expectations of the Sisters and the lay women of retirement age; there was no significant shift in interest and positive planning for retirement among the retirees closely approaching retirement age.

336. IDENTIFICATION OF EDUCATIONAL NEEDS OF OLDER ADULTS IN THREE CONGREGATE FACILITIES: A DIAGNOSTIC STUDY. King, Robert Henry. Indiana Univ. Ph. D. Thesis. Jul. 1969. 243p. University Microfilms, (Order No. 70-7468, MF \$3.00, Xerography \$11.05).

This study evaluated the educational needs of older adults in three congregate facilities as a basis for reshaping existing educational programs and designing new ones for residents. Residential and ambulatory occupants completed a questionnaire on demographic data, expressed feelings and opinions, educational and recreational activities, and educational needs and interests. Administrators of the homes also served as major information sources. Findings led to several conclusions: (1) the homes were caring for physical and medical needs but lacked adequate educational programs and facilities; (2) educational needs tended to be similar in all three homes; (3) residents' paramount educational need was to understand more fully the importance of education in helping them enjoy meaningful, satisfying lives in the congregate homes; (4) educational diagnosis proved adaptable to identifying the educational needs of these 166 older adults; (5) the educational needs uncovered have implications for programs in the three homes.

337. HYPEROXYGENATION EFFECT ON COGNITIVE FUNCTIONING IN THE AGED. Jacobs, Eleanor A.; And Others. Veterans Administration Hospital, Buffalo, N. Y. In Proceedings of the 77th Annual Convention of the American Psychological Association. 1969. v4 pt2 p721-722.

If deficit in cognitive functioning in the aged is determined by decreased oxygen delivery to the brain, increased oxygenation should

effect an improvement. 13 elderly male patients with measured deficit were treated with intermittent exposure to 100% O₂ at 2.5 atmospheres absolute in a hyperbaric chamber. Posttreatment performance on the Wechsler Memory Scale, the memory phase of the Bender-Gestalt, and Tien's Organic Integrity Test showed significant gains over pretreatment levels. Blood gas analysis showed marked increases in arterial partial pressure of oxygen (A PO₂). Control patients treated under identical conditions with a different breathing mixture showed no gain in performance or A PO₂s.

338. EFFECT OF SOCIAL VERSUS OBJECTIVE REWARD UPON VERBAL LEARNING IN A DISENGAGED AND AN ENGAGED POPULATION. Jackson, Moss A. In Proceedings of the 77th Annual Convention of the American Psychological Association. 1969. v4 pt2 p747-748.

Ss were 68 65-80 yr. old males. Results suggest that engaged Ss performed more quickly and efficiently than disengaged and tended to be more responsive to social rather than objective rewards. Of particular significance is that while both rewards resulted in improved performance for both groups they reduced the number of qualitative distortions in the performance of the disengaged Ss and directed their energies toward more task-appropriate behaviors. Results are discussed in terms of an arousal and feedback model.

339. UTILIZATION OF RETIRED PEOPLE AS MENTAL HEALTH AIDES WITH CHILDREN. Cowen, Emory L.; And Others. In American Journal of Orthopsychiatry. 1968. v38 n5 p900-909.

Describes the program for recruiting and training 6 retired people as mental health aides with primary-grade children and presents data indicating that they profited from their participation and that the youngsters benefited significantly from contact with them.

See also: SECTION 1120 MENTAL, PERCEPTUAL ABILITIES; item 262 radio programming for Kentucky older adults; 258 role of television in life of older adults.

4655 Education of Women

340. CONTINUING EDUCATION OF WOMEN. CURRENT INFORMATION SOURCES, NO.22. ERIC Clearinghouse on Adult Education. Dec. 1968. 80p. EDRS PRICE MF \$0.50, HC \$4.10.

Contains 143 abstracted entries arranged under the following headings; Sex Differences in Mental Ability and Achievement; Social Role Related Interests and Needs; Employment Related Interests and Needs; Programs and Participation; and Women's Education in Foreign Countries. Most of the documents are dated from 1965 to 1968.

341. A HISTORY OF CHANGING PATTERNS OF OBJECTIVES IN CATHOLIC HIGHER EDUCATION FOR WOMEN IN MICHIGAN. Henning, Gabrielle, Sister. Michigan State Univ., Ph.D. Thesis. 1969. 213p. University Microfilm. (Order No. 69-16, 143, MF \$3.00, Xerography \$9.70).

To trace the history of changing objectives in six Catholic Womens colleges in Michigan, hypotheses were generated and evaluated. All the hypotheses, except one, were supported by the data. The hypothesis, that Catholic colleges for women in Michigan have included the objective of training for leadership, could not be supported by the available evidence. The six colleges have followed "patterns" or "similarities of design" in their statements of objectives through the years. The following objectives: commitment to a Catholic philosophy of education, an intellectual objective, a moral objective, a service objective, a professional objective, and an institution's relationship and responsibility to the community and to humanity objective appeared in all statements of objectives in all the colleges.

342. DEVELOPING WOMAN'S POTENTIAL. Lewis, Edwin C. 1968. 389p. Available from Iowa State University Press, Ames, Iowa 50010.

A psychologist explains the role of women and examines the issues by means of scientific data and opinion. Contents of the book cover: the revolution in a man's world, the girl grows up, sex and abilities, the female personality, the homemaker, women in the labor force, the employed woman, the working wife and mother, the career woman, the education of the high school girl, the college girl, the use and abuse of higher education for women, and enlightened planning. The research studies on which this material is based are cited in the appendix and keyed to an extensive bibliography.

343. GRADIENTS OF URBAN INFLUENCE ON THE EDUCATIONAL, EMPLOYMENT AND FERTILITY PATTERNS OF WOMEN. Tarver, James D. In Rural Sociology; Sept. 1969. v34 n2 p256-267.

344. CHARACTERISTICS OF WOMEN OVER 30 ATTENDING JOLIET JUNIOR COLLEGE AND THEIR REACTIONS TO THE COLLEGE EXPERIENCE. Stewart, Lucille. Northern Illinois Univ., Summary of an independent study. 1968. 3p.

This study focused on 42 college women over 30 with respect to age, previous college experience, preregistration test scores, grade point averages for the recent term, personal adjustment, choice of curriculum, reasons for attending junior college, favorable and unfavorable reactions, and other variables. These were among the findings: (1) only 11 had previous college experience; (2) the women were consistently far better in language arts than in mathematics; (3) 47.6% had a B average, 28.6% had a C average, and 14.3% a straight A average; (4) 44.7% showed some lack of adjustment, largely in health and home matters; (5) Pre-Education, Liberal Arts and Science, and Pre-Nursing, and Business were the most popular curriculum choices; (6) 17 of 20 women interviewed gave vocational reasons for study; (7) over half the women questioned spoke enthusiastically about their teachers, and

reactions to the college experience as a whole ranged from "reasonable satisfaction": to "lyrical enthusiasm;" (8) 19 of the women interviewed have children, and nine have four or five children; (9) 13 women received much encouragement from husbands and children to attend college.

345. A STUDY OF THE WIFE OF THE ARMY OFFICER; HER ACADEMIC AND CAREER PREPARATION, HER CURRENT EMPLOYMENT AND VOLUNTEER SERVICES. Finlayson, Elizabeth Mason. Ed.D.Thesis. May 1969. 182p. Clearinghouse for Federal Scientific and Technical Information. (AD 697-185, MF \$0.65, HC \$3.00).

Using questionnaire responses from the wives of Army officers on duty in the United States, this study explored participation in the areas of education, volunteer services, and employment, and the premise that there are certain characteristics of the military environment which might influence and modify that participation. The Army officer's wife was generally well educated (80% had gone beyond high school, and 40% had a bachelor's degree), that there was high interest in further education, volunteer work, and employment, but that various aspects of Army life, most particularly transience, limited the opportunities to follow these interests.

346. 'THAT INFIDEL PLACE'. A SHORT HISTORY OF GIRTON COLLEGE 1869-1969. Bradbrook, M.C. 1969. 168p. Available from Chatto and Windus, London England (25/-).

The Mistress of Girton describes the founding of this pioneer community by Miss Emily Davies, a woman of outstanding gifts who was determined that women should receive university education at Cambridge. She saw this as part of the national movement for the reform of girls' education which made it essential that women should be able to gain university qualifications for teaching. The successful struggle to provide first the teaching and then access to examinations in the face of bitter anti-feminist objections, and at the same time to raise the finances to meet the cost of a large residential college is the measure of the achievement of Miss Davies.

347. VOCATIONAL DEVELOPMENT FOR GIFTED GIRLS--A COMPARISON OF MASLOVIAN NEEDS OF GIFTED MALES AND FEMALES BETWEEN THE AGES OF TEN AND SEVENTY YEARS: Groth, Norma Jean American Personnel and Guidance Assn., Washington, D.C.; Oxnard School Dist., Calif. Paper presented at the American Personnel and Guidance Convention, Las Vegas, Nevada, March 30-April 3, 1969. 8p. EDRS PRICE MF \$0.25 HC \$0.50.

Using Maslow's hierarchy of needs, this study was designed to formulate guidelines for the vocational counseling of gifted girls and women by ascertaining their developmental need levels. Need levels were compared with those of gifted boys and men. A cross-sectional study was used to determine the needs from 10 to 70 years. Data were collected from 361 gifted males and females. This data consisted of three wishes made by each subject. The wishes were used projectively to reflect the needs and valences of the individuals. Results are given in terms of valences:

maturity, fantasy, physiological, safety, love, self-esteem and self-actualization. Conclusions and implications are that the years 14 and 40 are apparently traumatic for gifted women. By 40, love needs have been satiated and the suppressed cognitive needs come to the surface. At 40, many women find resistance in fulfilling these goals due to age, fear, or other external factors. References and data tables are included.

348. ACHIEVEMENT MOTIVATION IN A COMPETITIVE SITUATION: A COMPARISON OF UNDERGRADUATES, YOUNGER GRADUATE STUDENTS AND OLDER FEMALE GRADUATE STUDENTS. Lubetkin, Barry S., Lubetkin, Arvin I. Apr. 1968. 19p. EDRS PRICE MF \$0.25 HC \$1.05.

This study investigated whether older female graduate students who have experienced an interruption in their formal academic education will display greater achievement motivation when competing against a male than will younger graduate females or undergraduate females. The measure of achievement motivation was the percentage of incompleting tasks recalled minus the percentage of completed recalled (Zelgarnik Effect). Previous research shows a high Zelgarnik score corresponding to a heightened achievement motive. When placed in a competitive situation with a male, older female graduate students showed significantly higher Zelgarnik scores than did the other groups in similar competition. Results were discussed with reference to a developing achievement oriented personal identity in the older Ss. An alternative social-acceptance explanation was also considered.

349. CAREER OR MARRIAGE?: A LONGITUDINAL STUDY OF ABLE YOUNG WOMEN. VOLUME 5, NUMBER 7. Watley, Donovan J. National Merit Scholarship Corp., Evanston, Ill. 1969. 21p. EDRS PRICE MF \$0.25 HC \$1.15.

Women who won National Merit Scholarships during the years 1956 through 1960 were followed up in 1965 to determine their marriage and/or career plans. Each of the 883 women was classified into one of five groups: (1) marriage only, (2) marriage with deferred career, (3) marriage with immediate career, (4) career only, and (5) uncertain. The educational and career field aspirations of these groups differed; and those seeking an immediate career scored higher on scholastic ability tests than those who either planned no career or who planned to delay entering them. The groups also differed in their willingness to express problems encountered in making and implementing their plans and problems experienced because of being a woman.

350. WOMEN IN MARRIAGE; A STUDY OF SOCIAL ROLES, MARRIAGES, AND SELF-ESTEEM AMONG UPPER-MIDDLE CLASS WOMEN. Mulligan, Linda Wagenhals Ohio State Univ. Ph.D Thesis. 1969. 163p. University Microfilms (Order No. 69-22, 184 MF \$3.00, Xerography \$7.60).

This study investigated the association between social role generated variables, the nature of marital relationships, and self-esteem in a sample of 457 upper middle class married women drawn from professional auxiliaries, civic groups, and other organizations in greater Columbus, Ohio. Research instruments measured role priority, role behavior,

role pressure (discrepancies between existing and best possible role performance), role strain (attitudinal statements concerning roles), and "Intrinsic" versus "Utilitarian" marital relationships, and self-esteem (on Maslow's Social Personality Inventory). These were among the major findings: (1) for women without children, the "Intrinsic" relationship and role performance outside the home were positively related to self-esteem; (2) for women with at least one child at home, self-esteem was positively linked to outside role performance, and negatively to house role performance.

351. ORIGINS OF THE ARGUMENT FOR IMPROVED FEMALE EDUCATION. Riley, Glenda. In History of Education Quarterly; Win. 1969. v9 n4 p455-470.

One significant area of social change in the 1830's and 40's in America was the reformulation of woman's status and capabilities. The employment of women as teachers was a major step toward the organized women's rights movement of later years.

352. CREATIVITY AND MENTAL HEALTH OF SELF-RENEWING WOMEN. McGowan, Barbara; Liu, Phyllis Y.H. California Univ., Los Angeles. 1969. 22p. EDRS PRICE MF \$0.25 HC \$1.20.

One hundred sixty-eight women, most of them mothers of about age 40, were tested on the 16 PF Questionnaire as part of a group counseling class to help them find new life goals. Scores revealed them to be highly intelligent and highly creative as compared to the standard for adult women. Factor direction suggests that self-renewing women as a group might be described as "self-sufficient extroverts." This contrasts with Cattell's findings which caused him to describe creative people as "self-sufficient introverts." Mental health scores were average in relation to the general population and above average in relation to other comparison groups of this report, therefore, it was concluded that self-renewing women function within a productive range of psychological health.

353. A STUDY OF MARRIAGE ROLE EXPECTATIONS OF WOMEN LIVING IN MISSOURI DELTA COUNTIES AS RELATED TO SELECTED CHARACTERISTICS. Hill, Katherine K. Missouri Univ., A Special Problem, Extension Education 400. 1968. 44p. Available from Department of Extension Education, University of Missouri, Columbia (Xerography \$1.32, HC \$9.00).

It was the purpose of this study to inquire into the concepts women have of desirable roles to be assumed by women and men in the marriage relationship. An inventory was used. Sampling which was non-random was limited to groups that were available and willing. Consequently, the number of completed inventories was not large or varied enough to be representative of the total population of women. Compilations indicated that higher income levels did not mean more equalitarian attitudes about the roles of men and women in marriage. Women from the lowest income category were not included to be more traditional. Generally, the amount of formal education had a positive relationship to equalitarian concepts. Women with elementary or less education

were not traditional. It was difficult to relate incomes to marriage role expectations. The college educated segment involved in the study were generally not in the upper income bracket. The pattern of inherited productive land wealth contributed to higher incomes without the usual relationship with education.

354. MOTIVATIONAL TENDENCIES OF WOMEN PARTICIPANTS IN CONTINUING EDUCATION. Marple, Dorothy Jane. Columbia Univ. Ed. D. Thesis. 1969. 148p. University Microfilms (Order No. 69-16,791, MF \$3.00, Xerography \$7.00).

Six hypotheses were generated to study the motivation of women participants and non-participants in continuing education, and to examine the relationship of motivation to satisfaction and other variables. Four groups of randomly selected women (165) represented different stages in the adoption process as postulated by Rogers. Data on personal, social, educational, psychological, and life characteristics of the women were collected through a questionnaire. The variables--major satisfactions for participation in continuing education, type of program undertaken, scores on the Buhler Life Goals Inventory, socio-economic status, level of verbal ability, and level of formal education--were used. Women who did not participate in continuing education scored higher on two of the three factors related to the self-limiting adaptation motivational tendency. No significant differences occurred in the factors comprising the creative expansion, upholding the internal order, and need-satisfaction motivational tendencies.

355. WOMEN RETURNING TO THE LABOUR FORCE: A FIRST REPORT, WOMEN'S BUREAU CAREERS CENTRE. Bell, Linda. Ontario Department of Labour, Women's Bureau. 74 Victoria Street, Toronto, Ontario. 1969. 26p.
356. FOLLOW-UP OF 812 GIRLS 10 YEARS AFTER HIGH SCHOOL DROPOUT. Hathaway, Starks R.; And Others. In Journal of Consulting and Clinical Psychology. Aug. 1969. v33 n4 p383-390.
357. THE DUAL-CAREER FAMILY: A VARIANT PATTERN AND SOCIAL CHANGE. Rapoport, Rhone; Rapoport, R.N. In Human Relations. 1969. v22 n1 p3-30.

The study is based on 13 functioning dual-career families (with children) chosen to represent a range of occupations for women. Couples were interviewed by a pair of interviewers (one male, one female). The five areas of stress indicated and discussed were: (1) overload dilemmas; (2) dilemmas arising from the discrepancy between personal norms and social norms; (3) dilemmas of identity stemming from the sociocultural definitions of work and family as intrinsically masculine and feminine responsibilities; (4) dilemmas arising from lack of time for involvement with family and friends; and (5) conflicts between the occupational roles of husband and wife and their family roles.

See also: SECTION 7000 HOME, FAMILY, PARENT EDUCATION; item 637 older

women attempting to enter white collar labor force; 446 life styles of Appalachian homemakers; 377 role of Canadian Indian women in social change; 488 indigenous mothers in housing project playschool; 404 reading programs in Job Corps Center for women; 237 modifying behavior of female smokers; 671 health training of women in urban ghetto; 289 training Girl Scout leaders; 335 pre-retirement education for professional women and members of church order; 38 learning rigidity in adult women 324 persistence of older women in skill training program; 100 educational interests of Iowa homemakers.

4700 Aptitude Groups

358. APTITUDE LEVEL AND THE ACQUISITION OF SKILLS AND KNOWLEDGES IN A VARIETY OF MILITARY TRAINING TASKS. Fox, Wayne L.; And Others. George Washington Univ., Clearinghouse for Federal Scientific and Technical Information. May 1969. 57p. (AD-688-263, MF \$0.65, HC \$3.00).

To assess the effects of wide differences in aptitude on the acquisition of military knowledges and skills, a sample of 183 Army recruits was divided into three maximally distant aptitude groups on the basis of their APQT scores. Each recruit was trained to a performance criterion in differing combinations of a battery of eight tasks representative of Army training. A variety of supplementary psychometric, scholastic achievement and BCT attainment data were analyzed. The results were consistent in demonstrating large differences related to aptitude.

359. BIOGRAPHICAL DIFFERENCES BETWEEN NAVY RECRUITS GROUPED BY MENTAL LEVEL, RACIAL IDENTIFICATION AND CAREER INTENTION. Cory, Charles H. Naval Personnel Research Activity, San Diego, Calif. Clearinghouse for Federal Scientific and Technical Information. Feb. 1970. 45p. (AD-701-697, MF \$0.65 HC \$3.00).

The report describes a biographical information form for predicting effectiveness of Mental Level 4 men. Correlations between mental level and biographical question responses were significant for 163 questions, but were generally low. Intelligence was most associated with academic experiences; attitudes, and aptitudes; and least associated with areas involving job tasks or social activities. Negro respondents and respondents wishing to re-enlist differed significantly from the total group.

360. DEVELOPMENT AND EVALUATION OF AN EXPERIMENTAL COURSE IN APPLIED MATHEMATICS FOR GROUP IV PERSONNEL. Main, Ray E. Naval Personnel and Training Research Lab., San Diego, Calif. Clearinghouse for Federal Scientific and Technical Information. Sept. 1969. 29p. (AD-698-288, MF \$0.65, HC \$3.00).

Preliminary investigation of training in mathematics showed that Group IV men need to improve most basic arithmetic skills and that they vary widely in their ability to acquire such skills. To be effective for these personnel, course contents and methods must be adaptable to individual needs. Group IV students were found capable of working effectively with an experimental, self study course presented both with and without supplementary flash card materials, especially when class motivation was held at a high level.

361. THE ADAPTATION OF NAVAL ENLISTEES SCORING IN MENTAL GROUP 4 ON THE ARMED FORCES QUALIFICATION TEST. Plag, John A., And Others. Navy Medical Neuropsychiatric Research Unit, San Diego, Calif. Sept. 1967. 16p. Clearinghouse for Federal Scientific and Technical Information (AD-699-504, MF \$0.65, HC \$3.00).

This report presents findings from a study evaluating differences in the adaptation of "average" and mentally marginal sailors during four years of military service. Sailors with Armed Forces Qualification Test (AFQT) scores of 50 are significantly superior to Category 4 enlistees on military performance measures which stress cognitive abilities. While Group 4 sailors have much lower rates of overall effectiveness, they do not differ significantly from average enlistees on illness or disciplinary rates. Years of school completed, number of school expulsions, number of arrests, and AFQT score proved valid for predicting four year effectiveness for Category 4 personnel. An actuarial table was constructed as a guide to recruiting officers in making decisions on the enlistment of mentally marginal personnel.

362. A METHOD OF DETERMINING JOB TYPES FOR LOW APTITUDE AIRMEN. Mayo, Clyde C. Lifson Wilson Ferguson and Winick Inc., Dallas, Texas. Nov. 1969. 19p. Clearinghouse for Federal Scientific and Technical Information (AD-700-747, MF \$0.65, HC \$3.00).

An opinion survey for identifying low aptitude job types was used in a study of 11 air force career ladders. Lists of low aptitude tasks were defined by technical advisers. These tasks were then rated on nine factors by air force instructors who also described low aptitude job types and gave their opinion concerning the possibilities for advancement and training of low aptitude personnel. In an evaluation of the research methodology, strengths and weaknesses of the opinion survey were delineated. The relative ease with which the tasks lists were constructed lent support to the utility of the method. A limitation on the method was the inability to control for systematic rater bias.

363. PROGRESS REPORT ON WORK UNIT UTILITY. Vineberg, Robert; And Others. Human Resources Research Organization. 300 North Washington St., Alexandria, Va. 22314. Professional Paper 6-70. Mar. 1970. 31p.

This paper summarizes the early findings of HumRRO research to determine how soldiers in Mental Category IV and in other mental categories on the Armed Forces Qualification Test compare in the performance of jobs.

Tests are described and results shown with data gathered from five selected Management Operating Systems--Armor Crewman, General Vehicle Repairman, Unit and Organizational Supply Specialist, Cook, and Medical Corpsman.

364. THE DEVELOPMENT AND EVALUATION OF TRAINING METHODS FOR GROUP 4 PERSONNEL. II. TRAINING GROUP 4 PERSONNEL IN THE ELECTRONIC MULTIMETER AN/PSM-4. Steadman, Joseph C., And Others. Naval Personnel Research Activity, San Diego, Calif. Mar. 1969. 17p. Clearinghouse for Federal Scientific and Technical Information, (AD-686-386, MF \$0.65, HC \$3.00).

This study investigated the feasibility of teaching Group 4 personnel in the operation of an electronic measuring device and the effectiveness of two instructional methods. Half of each class was taught by an instructor; the other half learned from a programmed text. Achievement under both modes was measured by quizzes and a performance test. In general, the text course did not prove practical for the Group 4 personnel. The instructor method was initially the more effective, but a suitably revised programmed text indicated that a programmed approach may be made comparably effective.

365. A PERFORMANCE-ORIENTED ELECTRONICS TECHNICIAN TRAINING PROGRAM V. Van Matre, Nicholas H.; and Harrigan, Robert J. Navy Research Lab., San Diego, California. Oct. 1969. 27p. Clearinghouse for Federal Scientific and Technical Information (AD-698-795, MF \$0.65, HC \$3.00).

An innovative training course incorporating job oriented training philosophy, methods, and objectives was successful in training marginally qualified personnel to perform at an acceptable level of competence. It was noted that some performance criteria, such as shipboard assignments, rate of advancement, and supervisory evaluations may be influenced by the unintentional bias of fleet personnel toward the theoretical, verbal, and mathematical capabilities more characteristic of the conventionally trained ET.

366. ACQUISITION, RETENTION, AND RETRAINING: TRAINING CATEGORY IV PERSONNEL WITH LOW FIDELITY DEVICES. Grimsley, Douglas L. George Washington University. June 1969. 34p. Human Resources Research Organization, 300 N. Washington St., Alexandria, Va. 22314.

Low aptitude subjects with no previous experience were trained individually to operate a Nike-Hercules guided missile control panel. Subjects were tested immediately after training, four and six weeks later, and then retrained to the original level of proficiency. The higher aptitude subjects required significantly less training time than the low aptitude subjects. For all treatment groups there were no practical differences in training time, initial performance level, amount remembered after four and six weeks, or retraining time between groups trained on high and low fidelity devices for this procedural task. Thus training device selection should be based on a careful review of the tasks to be taught in order to employ inexpensive devices where possible.

367. COMPARATIVE PERFORMANCE OF LOW-ABILITY AIRMEN. Grunzke, Melvin E., And Others. Air Force Human Resources Lab., Lackland AFB, Tex., Personnel Research Division. Jan. 1970. 30p. Clearinghouse for Federal Scientific and Technical Information (AD-705-575, MF, \$0.65, HC \$3.00).

The military accessions program "Project 100,000," established in 1966, has as one of its goals the yearly enlistment of a minimum of 100,000 men who have previously been declared ineligible for military service. To evaluate the progress of marginal ability personnel who enlisted in the United States Air Force, data were collected on their performance in training and during assignment to jobs throughout the Air Force. Their job performance and adaptability to the Air Force were lower than for control subjects.

368. FLEET FOLLOWUP ON GROUP IV GRADUATES OF A SCHOOLS. Anderson, Adolph V., And Others. Naval Personnel and Training Research Lab., San Diego, Calif. Oct. 1969. 38p. Clearinghouse for Federal Scientific and Technical Information (AD-697-934, MF \$0.65, HC \$3.00).

Several small units of Group IV men were assigned to six regular Class A Schools to determine whether they could successfully complete training in essentially unmodified courses. A 19-item questionnaire was mailed to duty stations of the Group IV men and also for a matched sample of non-group IV men who had attended the same Schools. On 13, differences were large enough to be quite improbable on the basis of chance alone. Highly significant differences occurred on such items as length of time to learn job, quality of work, and supervision needed. Smallest differences occurred for items dealing with on-the-job accident rate and how well the man got along with his shipmates. It is recommended that Group IV men not be assigned to ratings that have high reading and/or computational requirements.

369. SECOND STUDY OF EQUIPMENT OPERATOR CLASS "A" SCHOOL TRAINING FOR GROUP 4 PERSONNEL. Standlee, Lloyd S., Saylor, John C. Naval Personnel Research Activity, San Diego, Calif. Jan. 1969. 22p. Federal Scientific and Technical Information (AD-684-784, MF \$0.65, HC \$3.00).

The performance of six Group 4 (marginal) Navy personnel was compared with that of regular recruits at the Equipment Operator School. Two of the Group 4 trainees were set back for motivational and academic reasons. None of the Group 4 personnel failed to pass the course, though their course achievement test scores were lower than those of the regular trainees, especially on written tests. The curriculum area causing the most difficulty was mathematics. When only Group 4 personnel were considered, Armed Forces Qualifying Examination scores were not predictive of course achievement. It appears fairly well substantiated that no major changes are required to enable Group 4 personnel to complete the curriculum of the Equipment Operator Class "A" School.

See also: SECTION 1120 MENTAL, PERCEPTUAL ABILITY 5320 ADULT BASIC EDUCATION; 6550 OCCUPATIONAL TRAINING UNSKILLED, DISADVANTAGED; item 179 relation of aptitude to learning through compressed speech; 619 storekeeper training for Navy low aptitude recruits; 620 performance of low aptitude recruits who received Navy structural mechanics training.

4730 High Aptitude

See: 1120 MENTAL, PERCEPTUAL ABILITY; item 349 career study of able young women; 36 research review on aptitudes of high-level personnel.

4750 Disadvantaged Groups

370. LEARNING ABILITIES OF DISADVANTAGED ADULTS. Sticht, Thomas G. George Washington Univ. Mar. 1969. 16p. Clearinghouse for Federal Scientific and Technical Information (AD-688-811, MF \$0.65, HC \$3.00).

A summary of literature concerned with the learning abilities of disadvantaged adults showed no definitive evidence to suggest that they have any less ability to learn than other adults. A paucity of research relating to this problem is noted. Recommendations for future research include the development of long-term, extended training studies to explore learning in situations oriented toward life in the community.

371. REVIEW OF RESEARCH 1965 TO 1969. Grotberg, Edith H. U.S. Office of Economic Opportunity, Washington, D.C. Jun. 1969. 58p. EDRS PRICE MF \$0.50 HC \$3.00.

Since the first research and demonstration funding during the summer of 1965, the categories of research and demonstration have tended to become the following: (1) Sub-population Characteristics; (a) Language, (b) Cognitive, Intellectual, and Achievement Behavior, (c) Social-emotional Behavior and Self-Concept; (2) Demonstration Programs; (3) Teacher Characteristics; (4) Parent Participation; (5) Head Start and the Community; and (6) Follow-up.

372. THE FUTURE OF AMERICAN POVERTY; SOME BASIC ISSUES IN EVALUATING ALTERNATIVE ANTI-POVERTY MEASURES. Berry, Paul C.; And Others. Hudson Inst., Croton-on-Hudson, N.Y. Apr. 1968. 390p. Clearinghouse for Federal Scientific and Technical Information (PB-178-225, MF \$0.65, HC \$3.00).

This document contains a context and summary for studying orientations toward poverty, kinds of poor, and other basic issues of poverty; equality of economic opportunity and other criteria for evaluating

poverty programs; general solutions to poverty; characteristics of transfer payment systems, birth control, and other antipoverty measures; the economic history of poverty in the United States; political dynamics of poverty; and projected trends (1950-2000) in the demographic and political dimensions of poverty.

373. PROGRAMMING FOR DISADVANTAGED YOUTH. Word, U.G., Jr. Arkansas Univ., Fayetteville. Dec. 1968. 72p. Agricultural Extension Service. EDRS PRICE MF \$0.50 HC \$3.70. Also available from Extension Executive Assistant, P.O. Box 391, Little Rock, Arkansas 72203 (MP 106).

Findings are presented of a four-year study on reaching rural disadvantaged youth through an informal education program called the Arkansas Special Youth Project. The information provides a framework for expanding 4-H. Specific methods and techniques used in working with the disadvantaged are outlined and evaluated in terms of the resultant behavioral change of the participants and in terms of project utilization of resources.

374. AN EXPERIMENTAL INVESTIGATION OF THE RELATIONSHIP BETWEEN SELF-ESTEEM AND ACADEMIC ACHIEVEMENT IN A POPULATION OF DISADVANTAGED ADULTS. Renberger, Ray Nisch. Michigan State Univ., Ph.D. Thesis. 1969. 186p. University Microfilms (Order No. 69-20, 919, MF \$3.00, Xerography \$8.60).

This study investigated whether the self-esteem of disadvantaged adult students can be influenced by group guidance experiences; and to what degree, and how, academic achievement is influenced by changes in self-esteem. Subjects (59 Negro women in a clerical training program in Detroit) were divided into two experimental and two control groups. A ten week group guidance experience was provided for experimental subjects. Pretest and posttest measures were obtained using the Tennessee Self-Concept Scale and a specially designed self-esteem inventory. Academic achievement was measured by the language arts and arithmetic achievement subtests of the Iowa Test of Basic Skills. Findings included the following: (1) group guidance appeared to exert a negative but insignificant influence on self-esteem; (2) improved self-esteem was positively related to improved academic achievement; (3) control group dropouts showed slightly lower self-esteem, and significantly lower language achievement, than persisters; (4) the disadvantaged adults did not score lower on self-esteem than a normal population.

See also: SECTION 5230 ADULT BASIC EDUCATION; 6550 OCCUPATIONAL TRAINING-UNSKILLED, DISADVANTAGED; item 451, 743, 152, 679, 447, 453, 444, 449, 445 studies of various community action and development programs for the poor; 153 characteristics of Kentucky families in poverty; 149 indigenous leaders in poverty programs; 100 interests of disadvantaged and non-disadvantaged Iowa household heads; 356 follow-up of high school dropout girls; 676 involvement of poor in family planning

programs; 741 library service to Buffalo poor.

4710 Low Aptitude

4760 General

4800 Negro

See: SECTION 5230 ADULT BASIC EDUCATION; 6550 OCCUPATIONAL TRAINING-UNSKILLED, DISADVANTAGED: item 668 CORE program in Black Identity; 67 Negro and white lower class men compared on GATB and MMPI; 68 racial differences in WBII; 257 TV habits of white and black New York City adolescents; 84 Negro subjects in test of aptitude for learning social motives; 621 reinforcement in improving performance of Negro working class high school age; 91 Negro and white retrospective life histories.

4850 American Indians

See: SECTION 5230 ADULT BASIC EDUCATION; item 627 evaluation of basic and on-the-job training for Mexican-American; 380 Texas labor mobility; 626 relocating retrained Mexican-Americans; 419 Initial Teaching Alphabet in English as second language for Spanish speaking.

375. THE AMERICAN INDIAN HIGH SCHOOL GRADUATE IN THE SOUTHWEST. Bass, Willard P. Southwestern Cooperative Educational Lab., Albuquerque, N. Mex. July 1969. 106p. EDRS PRICE MF \$0.50 HC \$5.40.

This study presents the post high school achievements of a representative group of Indian high school graduates in the Southwest in terms of post high school training and employment.

376. A STUDY OF THE CHARACTERISTICS OF SUCCESSFUL AND UNSUCCESSFUL STUDENTS ENROLLED IN THE ADULT INDIAN TRAINING PROGRAM CONDUCTED BY THE ADULT EDUCATION CENTER OF THE UNIVERSITY OF MONTANA. Allen, Ronald Lorraine. Montana Univ., Ed. D. Thesis. 1968. 138p. University Microfilms (Order No. 69-2265, MF \$3.00, Xerography \$6.60).

To determine characteristics of successful and unsuccessful students of adult Indian basic, prevocational, and family life education, subjects were 127 Indians from seven Montana reservations. They were divided into three groups; those who successfully completed the program; unsuccessful students who withdrew voluntarily; and unsuccessful students who were terminated for disciplinary reasons. Other variables were home reservation, age, marital status, amount of Indian blood,

type of school attended, highest grade completed, and results on the California Achievement Test (CAT), Nelson Reading Test, and General Aptitude Test Battery (GATB). Older enrollees (Over 27), and those from the Blackfeet and Crow reservations, were more successful, respectively, than younger enrollees and those from other reservations. Enrollees who had attended Indian schools were less successful than those from mission schools or public schools. Performance on the CAT, the GATB, and the Nelson Reading Test apparently was not related to success.

377. THE ROLE OF NORTHERN CANADIAN INDIAN WOMEN IN SOCIAL CHANGE. Cruikshank, Julia M. Toronto Univ., Ontario. M.A. Thesis. April 1969. 139p.

A study of the changing role of Indian women in northern Canadian communities and particularly in the Yukon Territory in the general area of Whitehorse, suggests that the woman's role is potentially very important in determining the direction of change within Indian communities.

378. NEW NORTHERN TOWNSMEN IN INUVIK. Ervin, A.M. Canada. Dept. of Indian Affairs and Northern Development, Ottawa (Ontario). May 1968. 30p. EDRS PRICE MF \$0.25 HC \$1.60.

A study was conducted in planned settlement in the Northwest Territories in Canada, to study the factors which work against adaptation among the Indians, Eskimos, and Metis to the "urban milieu" of Inuvik.

See also: SECTION 5230 ADULT BASIC EDUCATION: item 611 on-the-job training of Indians in Oklahoma.

4870 Migrant Workers

379. CHANGES IN ATTITUDINAL CHARACTERISTICS OF MIGRANT AND EX-MIGRANT WORKERS INVOLVED IN ADULT EDUCATION. FINAL REPORT. New Mexico Univ. Oct. 1969. 20p. EDRS PRICE MF \$0.25 HC \$1.10.

To ascertain the changes in social and attitudinal characteristics among migrant and ex-migrant workers because of participation in adult education programs, a sample of 208 subjects were randomly selected from the Southwest. The selection was made from 3 program groups-- adult basic, vocational, and pre-vocational education. Each subject was administered a pre- and post-test on the California Test of Personality, Muncy's Scale of Acculturation, Winslow's Scale of Alienation, the MSU Work Beliefs Checklist, and Haller's Occupational Aspiration Scale. The complete analysis produced several significant results both in change within each group and differences in change between groups. The study suggests that adult education projects should anticipate and try to enhance the observed attitudinal changes as measured by the California Test of Personality. Changes in attitudes as observed in this study should result in the student being more capable of functioning in the

Anglo middle class culture and this should be one of the aims of any adult education program.

380. TEXAS LABOR MOBILITY; EXPERIMENTAL AND DEMONSTRATION PROJECT. FINAL REPORT. Texas Employment Commission, Austin. Apr. 1969. 191p. EDRS PRICE MF \$0.75 HC not available from EDRS.

The Project's purpose was to demonstrate the effectiveness of using financial assistance to create stability in migrant workers and to reduce unemployment.

See also: iter 644 bibliography in agricultural labor; 605 educational deficiencies of migrants.

5000 Mental Disability

381. THE CHARACTERISTIC ADULT EDUCATION PROBLEMS AND NEEDS OF SEVEN INDIANA STATE MENTAL HOSPITALS: A DIAGNOSTIC STUDY. Grubb, Allen William. Indiana Univ., Jun. 1969. 294p. University Microfilms (Order No. 70-7953, MF \$3.80, Xerography \$13.30).

This study examined characteristic adult educational problems and needs concerning employee employer, employee patient, and employee public relationships as perceived by key personnel in seven state hospitals for adult psychiatric patients. A special three part rating schedule was administered to 11 key personnel in each hospital. Data from Parts 1 and 2 were used to test hypotheses relating perceived problems and needs to occupational differences. Responses to items in Part 3 were used diagnostically to translate perceptions into real educational needs on which to base planning for continuing education. Major findings were that employees of six of the seven hospitals saw at least one problem area or deficient hospital condition; that no significant differences existed between occupational groups in their view of the severity of problems or educational needs; and that there were significant differences between hospitals as to problems, perceived, but not on perceived educational needs.

5050 Behavioral Disability

382. EDUCATION AND TRAINING IN CORRECTIONAL INSTITUTIONS. Wisconsin Univ. Proceedings of a conference. 1968. 120p. Available from Publications Office, Center for Studies in Vocational and Technical Education, Social Science Bldg., University of Wisconsin, Madison, Wis. 353706. (\$3.00).

These papers evaluate experimental programs of correctional education. While the chief criteria are successful employment and reduced recidivism, the extent of change in inmate attitudes and outlook is also stressed. Specific topics are: lessons learned from vocational training programs

sponsored in prisons under the Manpower Development and Training Act of 1962; the management of transition from jail to community; dimensions and sociological implications of the employment problems faced by released prisoners; and the problem of assessing changes produced by correctional education. The papers are discussed and enlarged upon by researchers and other experts. Included is a report by the Wisconsin State Director of Corrections.

383. FINAL REPORT ON THE DEVELOPMENT OF A MODEL EDUCATION AND TRAINING SYSTEM FOR INMATES IN FEDERAL CORRECTIONAL INSTITUTIONS, TO FEDERAL PRISON INDUSTRIES, INCORPORATED, U.S. DEPARTMENT OF JUSTICE. Hitt, William D.; Agostino, Norman R. Battelle Memorial Institute, Columbus, Ohio. Apr. 1968. 64p. Columbus Laboratories EDRS PRICE MF \$0.50 HC \$3.30.

This study to develop an education and training (E&T) system for inmates in Federal correctional institutions described and evaluated existing E&T systems and needs at Milan, Michigan, and Terre Haute, Indiana; formulated an E&T model; and made specific recommendations for implementation of each point in the model. A systems analysis approach was used throughout the study.

384. PROJECTIONS FOR CORRECTIONAL PROGRAMS IN EDUCATION FOR ARIZ. DEPT OF CORRECTIONS. Glenn, John. Apr. 11, 1969. 65p. Arizona Research Coordinating Unit, 1333 West Camelback, Phoenix, Arizona 85103

This study focused on the status of general and vocational education programs in Arizona correctional institutions, and on the potential of each institution and its inmates for additional offerings. Data were obtained on inmates' perceptions of the quality of correctional education compared to their previous formal education; factors, other than ability, seen by inmates as potential obstacles to job entrance and advancement; needs and functional barriers to extending and improving correctional education; and inmates' greatest perceived educational needs. Many program deficiencies were found, as well as low participation rates coupled with high demand. A majority of the inmates appeared to need upgrading beyond the Grade 8 level. Age, length of sentence, and possible job seeking handicaps were expected to have little or no detrimental effect on the efforts of a well-organized educational program.

385. EFFECT OF INTERNAL-EXTERNAL CONTROL ON LEARNING AND PARTICIPATION IN OCCUPATIONAL EDUCATION. CENTER RESEARCH MONOGRAPH NO. 1. Peters, John M. North Carolina Univ., Raleigh. 1968. 137p. State Univ. Center for Occupational Education. EDRS PRICE MF \$0.75 HC \$6.95.

The purpose of this study was: (1) to determine the effect of internal-external control on retention of control-relevant versus non-control relevant information and (2) to investigate differences among internal and external prison inmates in their participation in occupational education programs. The sample of 216 inmates, ranging in age from 18 to 65 years, were from a correctional institution in North Carolina.

The treatment consisted of manipulating the perceived relevancy of parole information to the prison inmate's chances of achieving parole. The data are presented in three parts, by test of (1) the retention hypotheses, (2) hypotheses concerning participation in occupational education, and (3) reliability of the instruments used in the study. It was concluded that a person can be described as possessing a generalized expectancy of control or lack of control over his environment, and that this characteristic can affect his willingness to learn information or engage in activities that could reasonably be expected to increase his chances of control over his environment, such as participation for employability.

386. THE EFFECTS OF SHORT-TERM TASKS AND FINANCIAL INCENTIVES ON THE EDUCATIONAL ACHIEVEMENT OF YOUNG PRISON INMATES. Mauk, Warren Stewart. Florida State University. Ph.D. Thesis. Dec. 1969. 166p. University Microfilms (Order No. 69-592, MF \$4.50, Xerography \$15.10).

To investigate the effects of short term or extended tasks and financial incentives on the educational activity and achievement of the young prison inmates, the sample consisted of inmates from the Federal Correctional Institution (FCI), Tallahassee, Florida, who had completed high school and were functionally literate. Inmates were assigned to two classes--the control group and the experimental group--on the basis of their work schedule. Instructional materials used in the two classes were the same. Classroom procedures for the FCI adult program included individualized instruction. Inmates set their own pace and teachers gave help only when needed. Money rewards were doled out according to the achievement of the inmates. Two experiments were conducted--with and without incentive. Financial incentive was found to be associated with increased educational activity and achievement, and educational activity to be positively correlated with changes in achievement. In general, data from the two experiments provided mixed findings.

See also: item 537 supervisory training about alcoholics; 406 comic strips in adult basic education in prison.

5200 PROGRAM AREAS

5230 Adult Basic Education

387. ADULT BASIC EDUCATION; CURRENT INFORMATION SOURCES, 27. Mar. 1970. 89p. ERIC Clearinghouse on Adult Education, EDRS PRICE MF \$0.50, HC \$4.55. Also available from the Adult Education Association of the U.S.A.

Devoted largely to documents since 1965, this annotated bibliography on adult basic education contains 261 entries.

388. ADULT BASIC EDUCATION PROGRAM STATISTICS: STUDENTS AND STAFF DATA JULY 1, 1967 - JUNE 30, 1968. June 1969. 45p. U.S. Office of Education, Washington, D.C. EDRS PRICE MF \$0.25, Hardcopy available from U.S. Government Printing Office. (\$0.50).

A compilation of statistical tables on adult basic education in the United States includes data on the following, broken down by region and state: number of students; number of students by grade level; number of students completing programs; number of students by sex, ethnic group, race and age; selected hours membership statistics; hours of instruction required to complete programs; number of classes housed, by type of facility; student attendance; students separated from programs, by reason; staff, by occupational function; number of workshops and personnel in preservice of inservice training; number of programmed instruction classes; and selected financial statistics.

389. PROGRESS REPORT ON HUMRRO RESEARCH ON PROJECT 100,000. McFann, Howard H. George Washington Univ. Jul. 1969. 22p. Clearinghouse for Federal Scientific and Technical Information (AD-691-633, MF \$0.65, HC \$3.00).

Preliminary findings are described, including certain background information on Project 100,000 personnel (low ability enlisted men). Training factors, learning ability, literacy requirements, and on the job performance are covered. Three general conclusions are: the training system should be modified to cope better with individual differences; the first priority modification should be to develop procedures for better training of low ability men; and a significant disparity exists between readability of publications and capability of many job incumbents to use them.

390. INVENTORY OF FEDERAL SUPPORTED ADULT EDUCATION PROGRAMS; REPORT TO THE PRESIDENT'S NATIONAL ADVISORY COMMITTEE ON ADULT BASIC EDUCATION. Jan. 1968. 150p. Greenleigh Associates Inc., New York, N.Y. EDRS PRICE MF \$0.75, HC \$7.60.

Descriptions of the program title, its administering agency, legislative authorization, main purpose, target population, funding, stipends, programs and facilities, administration and coordination, enrollee characteristics, course and teacher characteristics, course outcome, program measurement and recommendations (if any) for improvement are given for each of 34 Federal programs concerned with adult basic education (ABE). There are also brief descriptions of ABE programs in relation to other training programs in 13 cities and states.

391. PARTICIPANTS IN THE FIELD TEST OF FOUR ADULT BASIC EDUCATION SYSTEMS; A FOLLOW-UP STUDY. Jan. 1968. 124p. Greenleigh Associates, New York, N.Y. EDRS PRICE MF \$0.50 HC \$6.30.

This followup study of the field test and evaluation of selected adult basic education systems focused on the impact which the field

test and other education and/or training programs had on the participants in terms of educational gain and retention, social awareness and functioning, and economic improvement. Testing and retesting six and 12 months after the field test provided data on over 1,600 persons. Findings on academic achievement, employment, income, welfare grants, interagency cooperation, and attitudes toward involvement in the programs reinforced the results of the original field test with respect to the need for education and training for the functionally illiterate, and the necessity to upgrade and improve all aspects of adult basic education, including curriculums, teacher training, materials, and supportive services.

392. EDUCATIONAL GOALS AND MOTIVATIONAL DETERMINANTS INHERENT IN PARTICIPANTS IN VOLUNTEER LITERACY EDUCATION. Buttz, John Raymond. Indiana Univ. Ed. D. Thesis. 1968. 146p. University Microfilms (Order No. 68-17,258, MF \$3.00, Xerography \$7.00).

To determine educational goals and motives of adults in Indiana adult literacy programs and explore procedures for improving programs, participants were interviewed concerning their personal characteristics, expressed educational and economic goals, reasons given for inability to read, and the length of time already spent in a given program. These were some of the conclusions: (1) respondents varied widely in age, sex, educational achievement, annual income, and marital status; (2) economic and educational goals may be more important to married than to single persons; (3) respondents may not necessarily be receiving incomes commensurate with their educational backgrounds; (4) achievement of a high school diploma is only one of the motivational factors in volunteer literacy education; (5) those who have completed the sixth grade or above may have different motives for learning to read than those with less schooling.

393. MISSOURI ADULT VOCATIONAL-LITERACY MATERIALS DEVELOPMENT PROJECT. FINAL REPORT. Heding, Howard W.; And Others. Missouri Univ. Aug. 1967. 327p. EDRS PRICE MF \$1.25 HC \$16.45.

In the Missouri Adult Vocational Literacy Materials Development Project, materials were devised for teaching adults to read, write, and spell at the functional (sixth grade) level. In the research phase, the needs, characteristics, literacy level, occupations, and interests of the illiterate adult were studied and teaching materials and methods were examined. Students and teachers were interviewed and there was a national survey of literacy program directors. In the materials development phase three levels of basic and intermediate educational materials with teachers guides and supplementary occupational booklets were created. A vocational theme characterized the series. The initial teaching alphabet (I.T.A.) was used with traditional orthography printed on the facing page. During the evaluation phase, sample classes of illiterate adults used the materials in 100-hour instructional programs. These trials indicated that the materials were effective in teaching adults word and paragraph meaning, word-

study skills, and spelling. The materials should be used by teachers trained in the use of I.T.A. and in teaching reading to adults.

394. THE FUNCTIONALLY ILLITERATE ADULT; SOME ELEMENTS OF AN INSTRUCTIONAL PROGRAM TO MEET HIS NEEDS. Berry, Mabel Vivian. British Columbia Univ., Vancouver. M.S. Thesis. Aug. 1968. 124p.

This study described functionally illiterate adults and program elements conducive to meeting their needs. Learning abilities of under-educated adults were influenced by social and psychological characteristics which develop out of a restricted environment. Careful selection of teachers who understand student needs and background was emphasized. Eleven reading systems were reviewed, with attention to approach, content, format, and evaluation. The content appeared similar in most of these reading systems. A need exists for more content related to student interest and motivation. Most materials lacked the elements of drama and humor which appeal to students. Where published materials are unavailable or inadequate, a creative teacher can produce materials based on local needs and interests.

395. A PRELIMINARY REPORT ON THE PILOT STUDY: "THE EFFECT OF ADULT BASIC EDUCATION ON THE OCCUPATIONAL ADJUSTMENT AND ACCULTURATION OF THE LOW LITERATE ADULT." Shearon, Ronald W.; Puder, William H. Paper presented at the Adult Education Research Conference, Minneapolis, Minnesota, February 27-28, 1970. 33p. EDRS PRICE MF \$0.25, HC \$1.75.

To evaluate data-gathering instruments to measure sociopsychological variables on levels of, and potentials for, adjustment; to describe participants and nonparticipants by these measures and assess changes over time; and to examine changes in potentials for adjustment and certain teacher variables, the population studied included 360 ABE participants and 34 teachers in North Carolina community colleges and technical institutes, and 30 nonparticipants. Before, and after about 60 hours of instruction, participants and controls were tested for educational achievement and for changes in internal-external control, anomia, work beliefs, and attitudes toward education, law and economic conservatism. Data showed gains and loss in achievement by both groups, positive and negative changes in self-concept, decrease in anomia, improved attitudes toward education and work, and improvement in internal-external control. Testing instruments were not sufficiently precise for accurate measurement. It was concluded that a longitudinal study would be feasible if the inadequacies of current instrumentation can be corrected.

396. THE DEVELOPMENT OF INFORMAL TESTS OF READING AND THE ANALYSIS OF THE READING PERFORMANCE OF ADULTS ATTENDING BASIC EDUCATION CLASSES. Leibert, Robert E. Final report. U.S. Office of Education (DHEW). Sep. 1969. 67p. EDRS PRICE MF \$0.50 HC \$3.45.

This project developed an informal reading test from adult basic education teaching materials and investigated reading performance at six levels among adults attending basic education classes. Graded

word lists, readiness oral reading passages, and graded oral reading passages were administered to 37 adults. The six most discriminating word lists were identified, along with six pairs of adult interest reading passages having similar readability levels and producing similar error scores. The work identification test, the warm-up passage, and a form of the informal oral reading test were then given to 56 adults. Substitutions, examiner help, and added or omitted word endings were the most prevalent errors. Poor readers required more words pronounced than better readers. Reading speeds of better readers began to decline by the seventh level while error rates and comprehension remained steady. Comprehension remained fairly consistent for all levels of readers. The average adult answered three out of five factual questions correctly.

397. EXPERIMENT IN MOTIVATING FUNCTIONAL ILLITERATES TO LEARN. Tuskegee Institute, Ala., School of Applied Sciences. Final Report. Aug. 1969. 155p. EDRS PRICE MF \$0.75, HC \$7.85.

This research investigated whether low income rural functional illiterates could be motivated to learn by a prorated stipend given on the basis of academic performance. Fifty control subjects received a flat \$15 weekly; 50 experimental subjects received the \$15 plus stipends. Performance was measured by 14 teacher designed tests and performance in mathematics, grammar, vocabulary, reading comprehension, and current events. Individuals were admitted to the program by age (18-45), sex (both), educational level (Grade 12 or under), annual income (\$2000 or under), and reading level (Grade 9 or less). A money management questionnaire and a student course evaluation checklist were administered. Group discussion and role playing were included for counseling purposes. Major findings were that differences in intelligence (Revised Beta Test), reading and arithmetic (Wide Range Achievement Test), and General Educational Development Test performance significantly favored experimental subjects.

398. THE EFFECT OF ADULT BASIC EDUCATION ON SELECTED NON-COGNITIVE ATTRIBUTES. Boyce, V. And Others. Paper presented at the Adult Education Research Conference, Minneapolis, Minnesota, February 27-28, 1970. 36p. EDRS PRICE MF \$0.25, HC \$1.90.

The primary purpose of this study was to investigate the influence of participation in adult basic education on changes in selected non-cognitive attributes: anomia, self-concept, and internal-external control of environment. Two subsidiary problems were to examine the differences in levels of anomia, self-concept, and internal-external control of adult basic education participants and non-participants at the time of the pretest and at the time of the post-test; and to examine the relationship of levels of anomia, self-concept, and internal-external control to gain made in academic achievement. Functionally illiterate persons were given the pre- and post-tests, and 180 subjects served as the experimental group and 45 as a control group. Participants showed positive changes in levels of anomia and self-concept; data relating to internal-external control and to level

of achievement were too inconsistent for hypotheses testing. Differences between communities are a major source of variation.

399. THE USE OF MODERN EDUCATIONAL TECHNOLOGY FOR INSTRUCTION OF UNDER-EDUCATED ADULTS: RESEARCH POSSIBILITIES. Sherron Ronald H. North Carolina State Univ. Research Report of the NCSU Adult Learning Resources Project, June 1969, No.1. 36p. EDRS PRICE MF \$0.25 HC \$1.90.

Emphasis has been placed on determining the role of computer assisted instruction, programmed instruction, and other self-instructional media in teaching adults. The purposes of this paper are to generate discussion in regard to the research opportunities and possibilities; to review current related research; to suggest research problem areas; and to delineate desired methodological procedures.

400. TEACHING ADULTS TO READ; RESEARCH AND DEMONSTRATION IN A PROGRAM OF VOLUNTEER COMMUNITY ACTION. Massachusetts Council for Public Schools Inc., Boston. Report on the Project for Adult Literacy. Mar. 1969. 328p. EDRS PRICE MF \$1.25 HC \$16.50.

This Project focused on adult illiteracy and its mitigation in Boston. It was undertaken to teach reading; assess the use of volunteers in adult literacy education; evaluate two reading methods for use with adult literates; and gather basic knowledge on illiteracy, adult illiterates and program organization. Much attention was given to analyzing statistical data on student and volunteer tutor backgrounds, student attendance, reactions to training, results of reading and related tests, reading progress at three stages, and factors assumed to have inhibited prior development of learning skills. Reading in High Gear and the approach of the Massachusetts Council for Public Schools (MCPS) had similar shortcomings, but that the varied materials of the MCPS system permitted greater flexibility for experimentation.

401. A STUDY OF SELECTED COMMON SENSE CORRELATES OF EFFECTIVE ADULT BASIC EDUCATION TEACHERS. Kohler, Emmett T.; Maxson, Robert C. In Adult Education; Spr. 1970. v20 n3 p168-178.

This investigation analyzed variation in ABE student retention rates among teachers. The median hours of student attendance were used to separate high and low retention teachers. A comparison between high and low retention teachers by total number of years of teaching experience, number of years of experience teaching adults, educational level, and certification level revealed an insignificant relationship. There was a trend for teachers that had taken an ABE course to have a higher retention rate; and for teachers that had participated in ABE teacher training institutes to have a higher retention rate.

402. A SURVEY ANALYSIS OF THE CLIENTELE OF AN ADULT BASIC EDUCATION PROGRAM FOR WELFARE RECIPIENTS. Jack, Robert Lee. Indiana Univ. Ed. D. Thesis. Sep. 1969. 135p. University Microfilms (Order No. 70-11,721, MF \$3.00, Xerography \$6.40).

Using a sample of 50 completers and 50 program dropouts, all Negro women, this study investigated personal and participant characteristics of 1,307 Chicago welfare recipients (largely women). Data were gathered on age, sex, marital and family status (including legitimate and illegitimate children), birthplace, residence, employment history, educational level, reasons for leaving public school, length of time on public assistance, interests and hobbies, placement test scores, health and child care problems, and program attitudes. Principal findings were: completers and dropouts differed significantly on placement test scores, health and child care problems, and perception of program purposes, but not on aspirations for their children's education; completers showed greater program satisfaction than dropouts; completers and dropouts did not differ significantly in attitudes toward themselves and fellow students (generally good), or toward teachers, school and public aid counselors, and caseworkers, but did differ somewhat on perceived reasons why they were referred to the program.

403. SURVEY OF ADULT BASIC EDUCATION IN NEW HAMPSHIRE. 1969. 86p. National Association for Public School Adult Education, Washington, D.C. EDRS PRICE MF \$0.50 HC \$4.40.

This survey of adult basic education (ABE) in New Hampshire collected data, provided an innovative survey approach, and developed program expansion for adults with less than an eighth grade education. Interviews were held, and 21 ABE classes visited in nine communities; 18 ABE personnel furnished self-evaluation during course in Manchester; and briefings were held for ABE teachers and directors. ABE directors, teachers, counselors, and students were surveyed by questionnaire, and responses from 57 community leaders were also tabulated. Such program aspects as patterns of cooperation, program objectives, effectiveness of classroom techniques, teacher characteristics, student background and aspirations, selection of textbooks, scheduling, and testing were investigated. It was concluded that the program is beginning to meet the needs of its clientele. Needs in leadership training, curriculum, methods, publicity, and cooperative planning were suggested, together with steps for back home implementation.

404. A STUDY OF REMEDIAL READING PROGRAMS IN THE OMAHA AND MARQUETTE JOB CORPS CENTERS FOR WOMEN. Jones, Bert; And Others, Northern Michigan Univ. 1969. 43p. EDRS PRICE MF \$0.25, HC \$2.25. Burroughs Corp., Detroit, Mich.

A major objective was to provide job Corps norms for the Gates-MacGinitie Reading Test, Survey E, forms 1M and 2M. Each center designated control and experimental groups. The experimental groups' 80 subjects received 40 class hours of reading instruction. The control group's 37, received no formalized reading instruction. The Wilcoxon Matched-Pairs, Signed-Ranks Test was used for within groups data analysis; the Mann-Whitney U Test and the Moses Test of Extreme Reaction were used for between groups analyses. Significant differences were found between the experimental and the control groups and between pretesting and post-testing on the comprehension subtest for those subjects rated at a fourth grade, ninth month and below reading level at time of entry into the program.

This led to the conclusion that these remedial reading programs were best able to help the lower-level reader.

405. EVALUATION OF LEARNING 100: ABC CENTER, WHITE PLAINS, N.Y., JANUARY-JUNE 1968. Scheier, Elaine; Senter, Donald R. EDL Research and Information Bulletin, 11. Oct. 1969. 23p. Educational Developmental Laboratories, Inc., 284 Pulaski Rd., Huntington, New York 11744.

Learning 100 is a multimedia, multimodal, multilevel communication skills system; heavy stress is placed on filmstrips, tapes, and recordings; many of the materials are selfpacing; and a readiness stage and six graded levels of instruction have been developed. Learning 100 was used with a group of 64 functionally illiterate adults whose reading levels ranged from readiness to fourth grade. Teachers were provided special instruction in how to use materials and equipment. At the end of the 23-week program, reading gains, as shown on the Stanford Achievement Test, were significant; the greater variability on post-test scores indicated that the system encouraged individual development. The administrator felt that the system was manageable by teachers when they had special training; he saw a relationship between student achievement and teacher experience. Teachers were pleased with the structured systematic approach, high interest levels maintained, adult-oriented materials, varied modes of instruction, and positive motivational changes in the students. The students developed independent work habits, increased self-assurance, and saw improvement in their own educational growth.

406. ADULT LITERARY RESPONSES TO COMIC STRIP NARRATIVES AMONG INMATES OF A CORRECTIONAL INSTITUTION. Higgins, Mildred M. Florida State Univ. Ph. D. Thesis. Dec. 1969. 133p. University Microfilms.

A sample of 93 inmates (all male, 26 Negro, 67 white) at Sumter Correctional Institution was asked to verbalize their reactions to four comic strips and to write their responses at the end of each segment of a fifth strip. Six personal characteristics; race, age, IQ, reading grade level, last enrolled grade, and the person's marital status were associated to one or more of the literary responses. Adults respond much more freely and meaningfully when they can verbalize orally.

407. REVIEW. Cohen, S. Alan. In Journal of Counseling Psychology. 1969. v16 n3 p281-282.

Designed to help "teachers analyze specific behavioral deficiencies, Tests of Adult Basic Education may be useful as a pre-post measurement for groups." The validity, reliability, and norms of the test were compared with those of the California Achievement Test battery.

408. AN EVALUATION OF THE MCDOWELL COUNTY COMMUNITY ACTION AGENCY. ADULT

EDUCATION PROGRAM. Vargas, Ernest A.; Wotkiewicz, Helen. West Virginia University. Dec. 1, 1968. 175p. Clearinghouse for Federal Scientific and Technical Information (PB-189-960, MF \$0.65, HC \$3.00).

This report is a general model to guide evaluation on adult basic and high school equivalency education. This model places enrollment, attendance, diplomas received, student characteristics, and other educational data in a framework of more general significance.

409. COMPARISONS OF THE PERFORMANCE OF EDUCATIONALLY DISADVANTAGED ADULTS AND ELEMENTARY CHILDREN ON SELECTED MEASURES OF READING PERFORMANCE. Knight, David; Alcorn, John D. Paper presented at the National Reading Conference, Atlanta, Ga., Dec. 4-6, 1969. 13p. Available in Nineteenth Yearbook of the National Reading Conference, Inc., Marquette Univ., 1217 W. Wisconsin Ave., Milwaukee, Wis. 53233.

The performance on reading achievement and intelligence of 24 educationally disadvantaged adults and two groups of elementary children was compared. The first group of children was drawn from a low socioeconomic level, and the second, from a high socioeconomic level. There was a stronger correlation between the intelligence and reading scores of the children than between these two adult scores; although the adults scored considerably lower on the IQ test, they did as well as one elementary group and better than the other on the reading test. Cloze tests and the Adult Basic Learning Examination appeared to measure the intellectual abilities associated more effectively for adults than did the IPAT Culture-fair Test of Intelligence. The adults scored highest on the cloze test and the high socioeconomic group scored higher than the low socioeconomic group. The format and content of instruments to be used with adults are important factors. Disadvantaged adults are able to use the limited reading skills they do possess to a greater extent than might be indicated with standardized tests.

410. A STUDY OF THE RELATIONSHIP OF TEACHER AND STUDENT VALUES, ATTITUDES, AND PERCEPTIONS OF STUDENTS' PROBLEMS TO ACHIEVEMENT AMONG ADULT BASIC EDUCATION STUDENTS. Newman, Marjorie. Florida State Univ. M.S. Thesis. Jun. 1969. 102p. EDRS PRICE MF \$0.50 HC \$5.20.

This study examined factors contributing to achievement among adult basic education students, with emphasis on the student-teacher relationship as determined by differences between the two groups in values, attitudes, and perceptions of student problems. Subjects were 120 students and 12 teachers in an adult basic education program in the Mississippi Delta region. Student achievement was measured by grade level scores on pretests and posttests using the Adult Basic Learning Examination; values, attitudes, and perceptions were assessed by the special Attitude-Problem Questionnaire. Findings included the following: (1) although teachers were lower middle to middle class in values and attitudes and most students (87.5%) were of a lower class than the teachers, student responses did not conform to the stereotyped values and attitudes of the disadvantaged;

(2) teachers were less alike in their assessment of student's than in their own attitudes and values; (3) no significant relationship could be found between the achievement of students and their similarity or dissimilarity to their teachers in the indicated areas.

411. THE RELATIONSHIP BETWEEN ACHIEVEMENT OF ADULT STUDENTS AND VARIOUS STRUCTURED CLASSROOM SITUATIONS. Varnado, Jewel G. Florida State Univ. Ph. D. Thesis. 1968. 105p. University Microfilms (Order No. 68-11, 687, MF \$3.00, Xerography \$5.20).

This study investigated the relative effectiveness of selected methods and materials in adult basic education classes. Materials were regular child centered public school textbooks, recent publications designed for elementary class instruction which had been considered reasonably appropriate for adult classes, and materials written especially for undereducated adults. Participants were Negroes, largely women, covering a wide age span. Teacher dominated, restricted procedures, and pupil initiated, class cooperative procedures were compared. One hour classes were held five nights a week for eight weeks near the students' homes. The study revealed no significant differences between subgroups as to distribution of pretest grade level scores. However, there was a significant gain within classes in which the new instructional materials were used, regardless of the instructional method. The greatest improvement was made in the pupil centered classroom in which new materials were used.

412. RELATIONSHIP BETWEEN EDUCATION AND ACHIEVEMENT FOR DISADVANTAGED PERSONS IN LITERACY TRAINING. Test Research Report, No. 24. U.S. Employment Service, Washington, D.C. Dec. 1968. 54p.

This study investigated the effect of biographical variables on the relationship between tested achievement and reported years of education for a sample of 578 disadvantaged persons in 16 states participating in training projects involving literacy training. The correlation between tested achievement and years of education for the total sample was .34, but statistical treatment involving the total sample and 18 subsamples defined with reference to one or more biographical variables (region, education level, age, minority group status, and sex) showed that biographical variables, especially age, moderate the relationship between tested achievement and education.

413. EVALUATION OF AN ADULT BASIC EDUCATION PROGRAM IN A SOUTHERN RURAL COMMUNITY. Aker, George F., And Others. Florida State Univ. Mar. 1968. 104p. EDRS PRICE MF \$0.50 HC \$5.30.

A study was made of adult basic education in a Southern rural community to determine characteristics of students and instructional staff; grade level progression, rate of dropout, student satisfaction, and appraisals of instructional staff; and the relationship between program success and characteristics of students and instructional staff. Data were collected via questionnaires, standardized tests, and interview schedules from a 1/3 random sample of students (305 persisters and 116 dropouts) and 77 teachers and teacher aides.

Student gains in grade level scores were significant; nearly 3/4 stayed in the program; they were satisfied with the program; and staff were generally satisfied with student progress. Factors which seemed to favor achievement were being middle aged, having had no prior school experience, and being of rural residence. Dropouts were likely to be young, with no family responsibilities, and not too committed to a particular line of work. Staff characteristics differences between "high" and "low" achieving centers were slight but it seemed that a disproportionate share of "high" center teachers expressed concern for the problem of individualization.

414. A STUDY OF LITERACY VOTER TESTS. Cortright, Richard W. A paper prepared for the Workshop to Increase and to Improve University Teacher Training Programs in Adult Basic Education. March 9-18, 1969. 16p. (1968). EDRS PRICE MF \$0.25 HC \$0.90.

A review of the political controversy surrounding the constitutionality of literacy tests and fairness of judging literacy at a sixth grade level resulted in analysis of literacy voter tests in several states, and Louisiana and Alabama in particular. Both states required citizenship, age of 21, and ability to read and write any article of the United States Constitution, with Alabama requiring the English language be used. The Dale-Chall Readability Formula was applied to the Louisiana test and revealed a ninth grade reading level. The Flesch Formula was applied to the Alabama test, in addition; and the Dale-Chall reading level revealed a grade of thirteen to fifteen; while a third formula by Gunning revealed an eighth grade score. It was concluded that the tests were not based upon a sixth grade reading level, and either this grade should be changed to an eighth grade level or above, or a different test not requiring reading of the Constitution should be used.

415. ADULT BASIC EDUCATION: A STUDY OF THE BACKGROUNDS, CHARACTERISTICS, ASPIRATIONS, AND ATTITUDES OF UNDERGRADUATE ADULTS IN WEST VIRGINIA. Divita, Charles, Jr. 1969. 100p. West Virginia Research Coordinating Unit for Vocational Education, Huntington, EDRS PRICE MF \$0.50 HC \$5.10.

A survey was made of 4,912 students in the Adult Basic Education program in West Virginia to determine their backgrounds, characteristics, aspirations, and attitudes. They were found to be in sociological and economic patterns similar to those of their parents; both groups were school dropouts from rural areas and both were undereducated, economically depressed persons with large families. The great majority had a minimum of 20 to 30 potentially productive years before retirement age. Presently they were employed in public assistance type programs; most had been either unwilling or unable to relocate in other areas. They were participating in the program to get a job or a better job, to obtain a high school equivalency diploma, or to learn to read and write better. Most had no problems in attendance, such as lack of time or transportation, or domestic problems; and most were pleased with course. It was recommended that more centers and programs be established, more persons recruited,

guest speakers and resource persons be used, transportation be provided when necessary, night high schools or summer high schools be initiated, vocational training programs also be provided, and counselors, social workers, and placement personnel be added.

416. SECOND LANGUAGE LEARNING BY ADULT AND ADOLESCENT IMMIGRANTS. Dockrell, W.B.; Goldenson, Karen. Ontario Institute for Studies in Education, Toronto. Jun. 1969. 15p.

A study was undertaken of second language learning of English by adult and adolescent male immigrants to Canada. The basis of the study was work by W.E. Lambert and his associates, which has shown that there is another important factor in second language learning in addition to aptitude and intelligence. This factor is comprised of "... indices of motivation, type of orientation towards language, and social attitudes towards... the second language group." It was therefore hypothesized that reinforcement of language classes by shared social and athletic activities with a Canadian peer would positively influence language learning. Numerous difficulties hampered the compilation of results (mainly the unreliability of both tutors and students), but the findings generally disproved the hypothesis: namely, there were no significant differences in the degree of language improvement between those students who simply took the course, those who had a Canadian peer as a tutor, and those who also engaged in social and athletic activities with their Canadian peer. Study of attitude toward Canadians of participants of different national origins also led to no significant conclusions.

417. AN OPINION SURVEY OF TEACHERS USING AN EASY-TO- READ NEWSPAPER IN THE CLASSROOM FOR NEW LITERATES. Hayes, Larry Wayne. Syracuse Univ. M.A.J. Thesis. Jan. 1970. 238p. EDRS PRICE MF \$1.00.

An opinion survey of teachers using an easy-to-read newspaper for new literates analyzed the content of the paper; to trace its history and philosophy; and the following questions: Who are the readers? What do teachers like and dislike about "News for You"? How can the newspaper be improved?

418. LEARNING BY LISTENING IN RELATION TO APTITUDE, READING, AND RATE-CONTROLLED SPEECH. Sticht, Thomas G. Dec. 1969. 50p. EDRS PRICE MF \$0.25 HC \$2.60.

Studies were performed on substituting listening for reading requirements, with special reference to marginally literate Category IV personnel. Time-compressed speech was evaluated as a means of producing listening rates comparable to silent reading rates. For both average and low aptitude men, listening was as effective as reading for gaining factual information from test passages of varying difficulty. Both high and low aptitude men learned more efficiently with moderate (36%) amounts of time compression than with no compression of the listening selections. Additional evaluations of time-compressed speech were made, and educational and training implications were discussed.

419. USE OF THE INITIAL TEACHING ALPHABET IN ENGLISH AS A SECOND LANGUAGE CLASSES FOR SPANISH SPEAKING ADULTS. Robinson, Byrl Elmer. California Univ., Los Angeles. Ed. D. Thesis. 1969. 138p. University Microfilms (Order No. 69-19, 506 MF \$3.00, Xerography \$6.60).

To determine whether the initial teaching alphabet (ITA) would have a beneficial effect upon English language learning when used with adult Spanish speaking students, the study consisted of five randomly selected English as a Second Language classes in Los Angeles divided into two groups: one receiving instruction in traditional orthography (TO), and the other in ITA. Some of the results obtained indicated that: (a) the groups made statistically significant gains in the mean raw scores, but showed no significant differences on the final reading section raw scores of the California Achievement Tests, Upper Primary; (b) teachers were willing to continue the use of ITA in ESL classes but reacted pro and con about the value of the study. The use of ITA symbols in ESL classes for teaching selected vowels was strongly supported by the study.

420. DEVELOPING A PLACEMENT TEST FOR ADULTS IN ENGLISH-SECOND-LANGUAGE PROGRAMS IN CALIFORNIA. Ilyin, Donna. Paper presented at the Adult Education Research Conference, Minneapolis, Minnesota, February 27-28, 1970. 30p. EDRS PRICE MF \$0.25 HC \$1.60.

This paper describes the development of the English-Second-Language Placement Test (EPT) 100-200-300, which places adult students into the first three levels of ESL classes and discusses work done on EPT 400-500-600, an experimental test to place students in the last three levels of classes.

421. ZUR FRAGE DER MODELLIERUNG EINES RATIONALISIERTEN FREMDSPRACHENUN - TERRICHTS FUR ERWACHSENE. ON THE PROBLEM OF PRODUCING A MORE EFFICIENT MODEL OF LANGUAGE INSTRUCTION FOR ADULTS. Spaleny, Eugen. In International Review of Applied Linguistics in Language Teaching, Aug. 1969. v7 n3 p185-200.

5280 Literacy Education - Foreign

422. SUGGESTIONS FOR RESEARCH IN ADULT LITERACY MEETING OF EXPERTS ON RESEARCH IN LITERACY, (UNESCO HOUSE, 8-12 July, 1968). 12p. United Nations Educational, Scientific, and Cultural Organization, Paris (France). EDRS PRICE MF \$0.25 HC not available.

The Experts on Research in Literacy felt that, because of the relative novelty of functional literacy, research was needed as part of training programs, and on specific topics. Research projects were suggested; those of highest priority were: investment in schools or adult education; minimum level of literacy necessary for industrial development; illiteracy as a bottleneck to economic development; way of life of target groups; language of instruction; second language

learning; analysis of a promotional campaign; motivation in different cultural settings; the community; course content and cost; comparative linguistic studies; effect of active participation on dropout rate; exposure to mass media to create interest; and effects of functional literacy on adult participation in the economic life of the community.

423. TOWARD AN EVALUATION OF ADULT EDUCATION IN A DEVELOPING COUNTRY. Simmons, John L. Nov. 1969. 81p.

This exploratory study undertaken in Tunisia suggested a methodology for evaluating literacy and other adult education courses; it also tested hypotheses relating to the cost effectiveness of adult education, effectiveness of adult education, effects of literacy education on attitudes and individual productivity, and factors in success or failure in adult programs.

424. FROM ILLITERACY TO LITERACY. Grebelsky, Ora. The Hebrew University of Jerusalem (Israel), Adult Education Centre. 1970. 115p. Hebrew University of Jerusalem, Department of Extra-Mural Studies, Adult Education Centre, Jerusalem, Israel. Text in Hebrew; summary in English.

This book concentrates on Israeli activities in the cultural and educational advancement of immigrants from developing countries, elementary education for other educationally deprived adults, volunteer services, and the training of adult educators. Results are summarized of a study on the educational motives and expectations of under-educated Israeli adults. Comparable literacy efforts and problems are examined in other developing nations. The document also includes 100 references, a literature review, case studies, a program proposal, and a description of the literacy school at the Hebrew University of Jerusalem.

425. DEVELOPMENT AND TESTING OF A LOW-COST PERIODICAL FOR USE IN DEVELOPING AREAS OF THE WORLD. Smith, David Kendall. Oregon Univ. Ph. D. Thesis. June 1969. 169p. University Microfilms (Order No. 70-2541, MF \$3.00 Xerography \$7.80).

To develop a periodical that would encourage reading nations where illiteracy exceeds 40%, so-called Flexible Format was tested among the literate Sindebele population of Rhodesia, to see if it would prove acceptable. Lower price, relevant content, ease of production, readability, and other characteristics were assumed to make the Flexible Format an appropriate educational tool for developing areas. The Flexible Format outsold the standard format by almost 100 to one.

See also: SECTION 5550 COMMUNITY DEVELOPMENT PROGRAMS - FOREIGN

5300 Adult Secondary Education

426. WHY A HIGH SCHOOL FOR ADULTS. Kettering, Marvin E. Milwaukee

Vocational, Technical, and Adult Schools, Wis., Counseling Center. 1970. 9p.

To determine whether the Milwaukee Adult High School (MAHS) was meeting the varied interests of its students, a study was made of why students attended, how many graduated, dropped out, or failed, where they had attended school previously, what academic ability they had, and what characteristics were related to success. Of 487 MAHS enrollees from the 1960-61 academic year, 106 were admitted as graduates, taking courses mainly to fulfill college entrance requirements, while 381 fell into other categories. The typical MAHS graduate from the 1960-61 enrollment was single, 24 year old male who had dropped out of a local public high school in his junior year. He had average intellectual ability, and entered the MAHS with a tenth grade reading level and an eighth grade mathematics background. However, 271 nondiploma enrollees (70%), about half of whom were getting acceptable grades, became second time dropouts. This may have been mainly because many found the college preparatory curriculum irrelevant to their vocational goals.

427. GENERAL EDUCATION DEVELOPMENT (GED) EQUIVALENCY CERTIFICATES. 1968 REPORT. Colorado Department of Education, Denver. Jan. 1969. 16p.

Analysis of statistics on high school equivalency certificates issued by the Colorado Department of Education reveals that there has been a steady increase since 1962 in the number of certificates issued, and that close to three quarters of those who have taken the tests have passed them. Passes and failures are broken down by sex and by institution at which the tests were given.

428. A FOLLOW-UP STUDY OF THE ONE HUNDRED GRADUATES, CLASS OF 1969, OF THE JACKSON COUNTY ADULT EVENING HIGH SCHOOL. Gran, James R. 1970. 96p. EDRS PRICE MF \$0.50, HC \$4.90.

This followup study dealt with graduating class of the Jackson County (Iowa) Adult Evening High School Completion Program. Background data were gathered on age, sex, employment status, family and marital status, occupation when enrolled, and present occupation and employment. There were 58 tuition and 42 nontuition students. Outcomes were analyzed for job changes or promotions (35 positive changes); increased income (for 18 of the above 35); other tangible and intangible benefits (perceived by 56); persons (26) planning to continue their education or training; those desiring additional high school subjects (37); desired subjects and training; and city and school to be attended. All graduates but two would recommend the program to others.

429. STUDENT PERFORMANCE REQUIREMENTS; MILITARY SITUATIONS. CONTINUATION EDUCATION SYSTEM DEVELOPMENT PROJECT. La Puente Union High School District, Calif. TR-1.2. Dec. 1968. 218p. EDRS PRICE MF \$1.00 HC \$11.00.

The continuation education project investigated (1) attitudes of former students concerning the success of the school in preparing them

for entry into military service, (2) the minimal skills and knowledge required by each of the armed forces, (3) academic skills and social behavior required for eligibility for the draft, and (4) requisites for successful performance on military screening examinations. These were among the major findings and conclusions: (1) the Armed Forces Qualifying Test, consisting of subtests in vocabulary, arithmetic, patterns and figures, and tool recognition, is the most important examination for entry into the armed forces; (2) entry requirements are higher for females than for males, for enlistees than for draftees, and for high school nongraduates than for graduates; (3) general prerequisites for both sexes include good physical health, good moral character (honesty and trustworthiness), aptitude for training and instruction, and ability to accept authority, reason, live with others, and be motivated; (4) despite the views of military recruiters, respondents lacking diplomas reported no adverse effect on military experience.

See also: SECTION 5230 ADULT BASIC EDUCATION; item 189 characteristics of high school correspondence students in Oregon; 734 persistence in North Carolina fundamental learning laboratories.

5400 Higher Education - Academic Programs

430. A RATIONALE AND ROLE FOR INDEPENDENT STUDY IN HIGHER EDUCATION. Driscoll, William Joseph. Indiana Univ. Ed.D. Thesis. 1970. 162p. University Microfilms (Order No. 70-11,719 MF \$3.00, Xerography \$7.60).

To learn if restrictive limitations exist in degree programs, information was obtained from the bulletin of the institution in each state which enrolled the largest number of part time students. A review was also made of past institutional response to the needs of part time students through extension and evening divisions. Next came an examination of innovative programs for part time students in the United States and in the Soviet Union, South Africa, and Great Britain. Finally, a three point rationale using the economic, philosophical, and educational bases of an independent study degree program was constructed, and a program outline was suggested. It was recommended that institutions eliminate administrative and academic restrictions that discriminate against part time students (1/3 of the total student population), and that independent study programs be created for students who either cannot be accommodated in existing degree programs or cannot commit themselves to full time study.

431. A STUDY OF ADULT DEGREE PROGRAMS IN SELECTED AMERICAN COLLEGES AND UNIVERSITIES. Traver, Jimmy Lee. Utah Univ. Ph. D. Thesis. 1969. 303p. University Microfilms (Order No. 69-18,632, MF \$3.90, Xerography \$13.75).

This study investigated the needs of adults in the Salt Lake City

area for adult degree programs were concerned, and analyzed adult degree programs in operation in American colleges and universities. The degree programs of 17 institutions were placed in three categories; traditional degree programs administratively modified; adult degree programs in circular transition; and programs designed especially for an elite population. A model graphically depicting each program was designed. A questionnaire was used for the final study which included 3,153 adults selected from the Salt Lake City and Suburban directories. Usable questionnaires were received from 603 respondents. There is considerable demand for an adult degree program. Extrapolation of returns on the basis of a total population (252,946) reveals that there are 16,694 randomly selected persons interested in such a program. Characteristics of these persons are given.

432. A STUDY TO DETERMINE THE INTEREST AND NEED FOR A SPECIAL ADULT DEGREE PROGRAM IN LIBERAL STUDIES AT THE BRIGHAM YOUNG UNIVERSITY. Nebeker, W. Denton. Brigham Young Univ. Ed. D. Thesis. 220p. University Microfilms (Order No. 69-3523, MF \$3.00, Xerography \$9.90).

The purpose of this study was to determine the feasibility of implementing a special adult degree program in liberal studies at the Brigham Young University, similar to the Bachelor of Liberal Studies degree offered at the University of Oklahoma. The research involved two separate nationwide surveys to determine the need, interest level, and probable success potential of the university clientele for this type of an adult degree program, and to determine the current status, acceptance, and characteristics of similar programs on college and university campuses.

433. A DIPLOMA PROGRAM IN LIBERAL STUDIES; REPORT ON A PRELIMINARY INVESTIGATION. OCCASIONAL PAPERS IN CONTINUING EDUCATION, 1. Waterton, Patricia; Blaney, John P. Jun. 1968. 42p. British Columbia Univ., Vancouver, Department of University Extension, Vancouver 8, B.C., Canada (1.00).

To examine the potential role of a liberal studies diploma program at the University of British Columbia (UBC) and the extent of interest, data were obtained from 870 questionnaires (a 32% response) concerning educational level and degrees, age, sex, income, occupation, marital and family status, enrollment in noncredit and extrasessional credit courses, preferences as to times and days of the week for part-time study, and feelings as to hours a week to be devoted to class attendance and home study. A liberal studies diploma program would attract the types of adults from higher educational and occupational levels who already enroll in UBC extension programs.

434. A DESCRIPTIVE STUDY OF THE ADULT DEGREE PROGRAM OF GODDARD COLLEGE. Bunnell, Edgar Maurice. Ohio State Univ. Master's Thesis. 1969. 80p.

Two hypotheses basic to the degree program--(1) if students are led to discover their own educational needs they will be stimulated to work diligently and effectively to meet them; and (2) students deeply involved in planning their educational programs will tend to become

self educating adults--were considered and tested in the study. Face to face interviews were employed. Most students expressed desire to go on to graduate school. All had plans for continuing their education formally or informally. The hypotheses were adequately supported by the evidence gathered.

435. DIFFERENTIATING AND PREDICTOR VARIABLES FOR MATURE NON-MATRICULANT STUDENTS AT THE UNIVERSITY OF CALGARY. Conklin, R.C. Calgary Univ. Alberta, Dept. of Educational Psychology. Apr. 1970. 70p.

A biographical inventory, an ability test, and three reading tests were given to 699 "Mature nonmatriculants" (MNs) at the University of Calgary. Three groups were eventually compared: those who wrote the tests but did not enroll in any courses; postenrollment dropouts; and those who successfully completed one or more courses. Differences on verbal ability and reading and on various biographical variables emerged between pre-enrollment dropouts and completers. In a second study, successful MNs were given tests of personality, values, study habits, need achievement, and other characteristics. All data were correlated with grade point averages. Students are more likely to succeed if they excel in reading ability, verbal aptitude, and study habits. Results of both studies seemed to imply a need for reading and study skills classes for mature students, as well as use of these variables in student selection.

436. 1968 REVIEW OF RESEARCH ON COLLEGE-ADULT READING. Bliesmer, Emery P. Paper presented at National Reading Conference, Los Angeles, Dec. 5-8, 1968. In National Reading Conference 1968 Yearbook. 1968. 48p.

One hundred seventy-nine research reports on college and adult reading are reviewed under five major headings: (1) programs; (2) reading, study, and related habits, traits and skills; (3) influence of reading, study, and related habits and skills; (4) factors influencing reading and other study habits and skills; and (5) testing, readability, newspapers, materials, and other areas.

437. COLLEGE-ADULT READING--PAST, PRESENT AND FUTURE. Spache, George D. National Reading Conference 1968 Yearbook. 1968. 12p.

College-adult reading research trends are discussed.

438. DOCTORAL DISSERTATIONS IN COLLEGE AND ADULT READING INSTRUCTION. Summers, Edward G. In Journal of Reading; Oct. 1969. v13 n1 p9-14.

439. RECENT DOCTORAL DISSERTATION RESEARCH IN READING. SUPPLEMENT 1. ERIC/CRIER READING REVIEW SERIES, VOLUME 2; BIBLIOGRAPHY 14. Indiana Univ. Mar. 1969. 178p. ERIC Clearinghouse on Reading. EDRS PRICE MF \$0.75 HC \$9.00.

A listing of 344 dissertations completed in colleges and universities since 1966 in the areas of preschool, elementary, secondary, college, and adult reading is reported.

440. RECENT DOCTORAL DISSERTATION RESEARCH IN READING, SUPPLEMENT 2. ERIC/CRIER READING REVIEW SERIES, BIBLIOGRAPHY 24. Longstreet, Wilma, Comp.; Summers, Edward G., Comp. Mar. 1970. 103p. EDRS PRICE MF \$0.50 HC \$5.25.

Citations and abstracts for 192 theses the research for which was in the areas of preschool, elementary, secondary, college and adult reading are included.

See also: SECTION 5700-6125 CONTINUING EDUCATION IN THE PROFESSIONS: 7510 COLLEGES AND UNIVERSITIES; 7700 JUNIOR COLLEGES; item 130 views of faculty members and industrial personnel on how many courses they felt they could take while employed full time, 533 admission tests and adult part-time student in business; 104 economic demand analysis in marketing off-campus degree programs.

5500 Community Services and Programs

441. REPORT OF THE TASK FORCE ON COMMUNITY RESOURCE DEVELOPMENT. New York State Cooperative Extension, Ithaca, N.Y., Task Force on Community Resource Development. Apr. 1968. 39p.

The Task Force reported their recommendations for program development, organization and staff changes, staffing and funding needs, relations with other agencies, and broadening of their target clientele. The study included analysis of changing population distribution in the state and discussion of changing the distribution and orientation of the Cooperative Extension staff to meet the needs of growing city-centered regions.

442. TITLE I OF THE HIGHER EDUCATION ACT OF 1965: A STUDY OF PROGRAM COMPLIANCE WITH CONGRESSIONAL INTENT. Senecal, Robert Joseph. Iowa Univ. Ph. D. Thesis. 1969. 171p. University Microfilms (Order No. 69-21,730 MF \$3.00, Xerography \$8.00).

The study examined the compliance of programs funded under Title I of the Higher Education Act of 1965 with Congressional intent, and explored the nature of the relationships between the measures of compliance and selected organizational characteristics of participating colleges and universities. Eighty-two programs, funded during the fiscal year 1965-66 in six states, were appraised.

443. AN ANALYSIS OF THE PROGRESS OF THE TITLE I (FHEA 1965) PROGRAM IN NEW YORK STATE DURING THE FIRST TWO YEARS OF THE ACT'S OPERATION. Williams, Robert E. New York State Educ. Dept., Albany, Bur. of Special College Programs. Apr. 1967. 23p.

Title I programs in New York State were analyzed as follows: proposals submitted and proposals funded; Federal aid requested and received; problem areas, educational methods, and program length for funded

proposals; numbers of participants and instructional staff; kinds of participants; program scope (new programs, Title I continuations, expansions of existing programs); funded proposals for public and private institutions (two year colleges, four year colleges, universities); and numbers of funded and unfunded proposals from institutions in different regions of the state.

444. AN EXPLORATORY ASSESSMENT OF CAP EVALUATION ACTIVITIES. VOLUME 1. Bond, Emil; And Others. American Institutes for Research, Pittsburgh, Pa. Nov. 1969. 118p. Final report. Clearinghouse for Federal Scientific and Technical Information. (PB-188-579, MF \$0.65 HC \$3.00).

Objectives of this project were to identify and catalog all existing reports on contracted evaluation studies by the Community Action Program (CAP) evaluation branch and the various program offices; to analyze a sample of contracted evaluation studies in terms of their adequacy as research projects; to assess a sample of CAP inhouse evaluations; to examine the relationship between the on-site monitorings and other CAP evaluation activities; and to consider some of the major issues associated with the utilization of evaluation findings.

445. AN EXPLORATORY ASSESSMENT OF CAP EVALUATION ACTIVITIES. VOLUME 2. CATALOG OF ABSTRACTS OF EVALUATION STUDIES. Trocki, Karen F.; And Others. American Institutes for Research, Pittsburgh, Pa. Nov. 1969. 267p. Clearinghouse for Federal Scientific and Technical Information (PB-189-027, MF \$0.65 HC \$3.00).

Studies listed in this 550 item annotated bibliography on the Community Action Program are classified by 16 population groups (including unemployed, professional and paraprofessional, rural and urban, out of school youth, aged, minority groups, migrants, preschool and school children, welfare recipients, and staff members of the Office of Economic Opportunity and other agencies); and in terms of manpower training, economic development, housing, civil disorders, and ten other concepts or program categories.

446. COMMUNITY ACTION IN APPALACHIA. UNIT 7. MODERNIZATION OF LIFE STYLES. Donohew, Lewis; Singh, B. Krishna Univ. of Kentucky. Aug. 1968. 175p. Clearinghouse for Federal Scientific and Technical Information (PB-180-102 MF \$0.65 HC \$3.00).

Studies of communication and change in underdeveloped countries were drawn upon to design a study of modernization of individuals-- including adoption of new ideas and practices--in six neighborhoods in Knox County. The study approaches the individual as an interactive behavioral system whose components are variables defining his "style of life." Data were gathered at two points in time on 57 aspects of life style of heads of households and homemakers in these six neighborhoods. These included nine practices whose adoption was sought by the OEO-CAP or other change agents.

447. COMMUNITY ACTION IN APPALACHIA. UNITS 6,7,8, and 9. Kentucky Univ., Lexington. Aug. 1968. 185p.; 175p.; 307p.; 43p. Clearinghouse for Federal Scientific and Technical Information (PB-180-101, PB-180-102, PB-180-103, PB-180-104, each at MF \$0.65 HC \$3.00).

Unit 6--reports on participation of Knox County youth, their empathy and alienation levels, attitudes toward school and education, attitudes toward leaving home for employment, and knowledge of health and sanitary practices. Unit 7--contains data on 57 aspects of life style of heads of households. Unit 8--gives evidence on the domination of leadership by a small group of influential persons, who, however, show some change in attitude toward low income persons, and on the presence, in lower levels of county leadership, of more low income persons. Unit 9--describes a survey of heads of households which showed that the "image" they held of the purposes and progress of the program was rather hazy.

448. COMMUNITY ACTION IN APPALACHIA. UNIT 9. THE "IMAGE" OF THE KNOX COUNTY COMMUNITY ACTION PROGRAMS. Murphy, Ottis; Street, Paul. Kentucky Univ. Aug. 1968. 43p. Clearinghouse for Federal Scientific and Technical Information (PB-180-104 MF \$0.65 HC \$3.00). OEO-693.

A random sampling of 398 heads of households was selected from eight community center areas out of a total of 1,136. Three hundred eighty-four of this group were interviewed. Two hundred fifty-seven of those interviewed claimed to be acquainted with the CAP, and 127 claimed not to be, while 14 refused to be interviewed. Findings indicate that the "image" held by heads of households regarding the purposes of CAP were not very clear. Some one-fourth of those interviewed and identified as being acquainted with CAP had no opinion regarding purposes. Similarly, the "image" held of the progress being made by the program was also revealed as rather hazy.

449. A COMPREHENSIVE EVALUATION OF THE COMMUNITY ACTION PROGRAM IN AUSTIN AND TRAVIS COUNTY, TEXAS. TRACOR, Inc., Austin, Texas. 4v. Final report. Dec. 1969. 767p. Clearinghouse for Federal Scientific and Technical Information (PB-188-328 through PB-188-331, each priced at MF \$0.65 HC \$3.00).
450. ECONOMIC DEVELOPMENT PROGRAMS, ST. LOUIS. VOLUME 2. AN ECONOMIC PROFILE OF A ST. LOUIS POVERTY AREA. Management and Economics Research, Inc., Palo Alto, Calif. Jul. 1968. 182p. Clearinghouse for Federal Scientific and Technical Information (PB-183-818 MF \$0.65 HC \$3.00).
451. A RELEVANT WAR AGAINST POVERTY. A STUDY OF COMMUNITY ACTION PROGRAMS AND OBSERVABLE SOCIAL CHANGE. Clark, Kenneth B.; Hopkins, Jeannette Metropolitan Applied Research Center., Inc., New York, N.Y. 1969. 294p. Available from Harper & Row, Inc., 49 East 33rd Street, New York, N.Y. 10016 (\$6.95).

Twelve urban community action programs were examined in depth to determine how each of them operationally defined community action

and to evaluate their performance.

452. OPERATION BOOTSTRAP; A CASE STUDY IN IDEOLOGY AND THE INSTITUTIONALIZATION OF PROTEST. Ellis, William Russell, Jr. California Univ., Los Angeles. Ph. D. Thesis. 1969. 450p. University Microfilms (Order No. 69-16,903 MF \$5.75, Xerography \$20.25).

Field work in the black community of Los Angeles was done to investigate certain ideological and organizational developments after the riot of August 1965. The study focused on "Operation Bootstrap," a small self-help job training organization, which was a relatively direct outgrowth of previously existing protest organizations at the local and national levels.

453. A COMPREHENSIVE AND SYSTEMATIC EVALUATION OF THE COMMUNITY ACTION PROGRAM AND RELATED PROGRAMS OPERATING IN ATLANTA, GEORGIA. VOLUME I. Crawford, Fred R. Emory Univ. Technical reports, May 1, 1966-30 June, 1969. 230p. Clearinghouse for Federal Scientific and Technical Information (PB-185-939 MF \$0.65 HC \$3.00).
454. CIVIL DEFENSE: AN ANALYSIS OF ATTITUDES AND KNOWLEDGE. Marko, George Franklin. Indiana Univ. Bloomington. Aug. 1962. 60p. EDRS PRICE MF \$0.50 HC \$3.10. M.S. Thesis.

They study aimed at constructing, validating, and testing two instruments, one which measured attitude change toward Civil Defense adult education, and one which measured level of knowledge about Civil Defense practices; and evaluating the effectiveness of the Personal and Family Survival (PFS) Course in terms of attitude change and knowledge gained on the part of selected participants.

455. A STUDY OF CERTAIN CHARACTERISTICS OF CDAE TEACHERS; A STUDY OF SELECTED TEACHER CHARACTERISTICS AND THEIR RELATIONSHIP TO ADULT TEACHING. Davis, George; Wright, Rex. 1969. 6p. EDRS PRICE MF \$0.25 HC \$0.40.

This study of selected characteristics of local teachers who were trained to teach in the Florida Civil Defense Adult Education (CDAE) program examined sex, field of certification, and previous experience in teaching adults. These characteristics were then analyzed to determine which of the trained teachers taught local classes; which teachers delayed before conducting CDAE classes; how many CDAE classes each teacher completed; and from which classes most students dropped out.

456. SEEDS OF CHANGE; A REPORT AND EVALUATION OF A FOUR-YEAR ADULT EDUCATION PROJECT IN THE VIGO COUNTY PUBLIC LIBRARY. Warren, E. Theodore. Vigo County Public Library, Terre Haute, Ind. 1969. 100p. EDRS PRICE MF \$0.50 HC \$5.10.

The Adult Education Project, conducted for four years at what is now the Vigo County Public Library, Terre Haute, Indiana, was an attempt

to discover what could be done to improve a community's informal adult education programs by adding a doctorate-level adult educator to the staff of the public library and by making his services available to the public.

See also: SECTION 2210 COMMUNITY EDUCATION AND DEVELOPMENT; items 726 community services in junior colleges; 474 role of community college in narcotics program; 502 follow-up of VISTA trainees; 328 demonstration programs for social change among older adults; 152 economic development activities in rural community action; 508 characteristics of VISTA volunteers; 371 review of OEO research, 1965-1969; 733 community service in Colby College.

5550 Community Development Programs - Foreign

457. AGRICULTURAL EDUCATION BY THE METHODIST CHURCH: A STRATEGIC RESPONSE TO THE PROBLEM OF HUNGER AND DEVELOPMENT. Freudenberger, Carlton Dean. Boston Univ. Ph. D. Thesis. 1969. 299p. University Microfilms (Order No. 69-18,425, MF \$3.85, Xerography \$13.50).

The study is focused on the role of agriculture in development. The problem was to describe major factors that compose agricultural development so that strategic action on the part of the Methodist Church in areas of rapid social and economic change could be developed. Library research was the source for descriptive materials theories of agricultural development, normative concepts of Christian social responsibility, and criteria and procedures for evaluating institutional tasks of churches. Comparative and synoptic method was used to bring into coherent relationship the variety of materials from ethics, agriculture, and strategy. Normative reconstruction (critical and prescriptive) was used to evaluate and suggest guidelines. The churches have accepted responsibility for development, but there is an apparent discrepancy between firm policy commitments and actual project involvement. Agricultural education by the Methodist Church can be a strategic response to the problem of hunger and development, but this depends upon further knowledge and the use of the guidelines considered in the study.

458. AN ANALYSIS OF CONCEPTS AND TECHNIQUES BASIC TO A PROPOSED EXPERIMENTAL PROGRAM OF ADULT RURAL EDUCATION IN IRAQ. Al-Nassrawi, Mihsin O. Ohio State Univ. 1969. 217p. University Microfilms (Order No. 70-6712, MF \$3.00, Xerography \$10.35). Ph.D. Thesis.

This study proposes a comprehensive long-term program of adult education in rural Iraq to meet the need for extensive rural improvement. The program is designed to meet a need for democratic leadership, and to decrease illiteracy, provide practical farm training, and teach villagers to help themselves. A basis for the program design is Taiwan's successful rural development program. The central feature of the first part of the proposed program is a system of Model Villages.

459. THE IMPACT OF COMMUNICATION ON RURAL DEVELOPMENT; AN INVESTIGATION IN COSTA RICA AND INDIA. Roy, Prodipto; and Others. United Nations Educational Scientific and Cultural Organization; Paris (France); National Institute of Community Development, Hyderabad, (India). Mar. 1969. 175p.

A comparative study was made (jointly by Costa Rica, India, UNESCO, and several educational institutions) in two differing cultures of the way in which different means of communication could bring about better knowledge and adoption of desirable innovations in rural areas. Baseline studies were carried out in India and Costa Rica. Then followed the phase of various treatments (literacy, radio forums, animation training of community leaders) after which a second survey was undertaken to determine what changes had occurred to learn how far these changes could be attributed to the operational part of the project.

460. PLANNED CHANGE IN AGRARIAN COUNTRIES. Niehoff, Arthur H. Human Resources Research Organization, Alexandria, Va. 1969. 157p. Clearinghouse for Federal Scientific and Technical Information (AD-701-167, MF \$0.65 HC \$3.00).

The report provides guidelines for persons planning development projects in agrarian countries. A framework for describing or evaluating the conduct of development projects is proposed, and applied to the results of an analysis of 203 case studies of past projects.

461. MEMBERS OF THE PHILIPPINE BUREAUCRACY AS CHANGE AGENTS. Tadena Romualdo Battad. Cornell Univ. Ph. D. Thesis. 1969. 318p. University Microfilms (Order No. 69-10,470, MF \$4.10, Xerography \$14.40).

The reactions of the Philippine community development workers to their role as liaison between the bureaucracy and the villagers were studied.

462. PLANNED CULTURAL BORROWING FOR NATIONAL DEVELOPMENT OF THE EGYPTIAN EXPERIENCE AND A THEORETICAL BASIS FOR ACTION. Gohar, Salah El-Din A. Michigan State Univ. Ph. D. Thesis. 1969. 312p. University Microfilms (Order No. 69-20,863, MF \$3.90, Xerography \$13.75).

The study proposed to answer, for Egypt as an example of contemporary developing nations, the major question of "how to facilitate a rational, diversified, and effective multi-source cultural borrowing by a developing country."

See also: SECTION 5280 LITERACY EDUCATION - FOREIGN: 7150 CROSS CULTURAL TRAINING; item 144 conceptual analysis of the role of adult education in nation building; 141 community development abstracts; 265 radio education in Nepal.

5700 PROFESSIONAL, TECHNICAL CONTINUING EDUCATION

5750 Engineering

463. AN APPRAISAL OF THE STATUS AND FUTURE OF THE CONTINUING EDUCATION (NON-CREDIT) FOR ENGINEERS IN THE UNITED STATES. Frasher, Richard Dempsey. Ohio State Univ., Columbus. M.A. Thesis. 1969. 82p. EDRS PRICE MF \$0.50 HC \$4.20.

The current status of noncredit continuing engineering education is described and criticized to facilitate the planning of future activity in this field.

464. KNOWLEDGE OBSOLESCENCE AMONG PROFESSIONALS: A STUDY OF CAREER, PERSONAL, AND ORGANIZATIONAL FACTORS RELATED TO TECHNICAL OBSOLESCENCE AMONG ENGINEERS. Rothman, Robert Albert. Purdue Univ. Ph. D. Thesis. 1969. 177p. University Microfilms (Order No. 67-17,248, MF \$3.00, Xerography \$8.20).

This study examines a set of hypotheses relating obsolescence to career patterns, professional activities, and certain aspects of the organizational climate in an attempt to discern the dynamics of obsolescence among graduate engineers in the United States. Based on a sample, two measures of technical obsolescence were used. One involved the reported deterioration of knowledge in basic engineering areas of the respondent's training. The other measured the acquisition of "new" knowledge of emerging subdisciplines within engineering. The study demonstrated: (a) inverse relationship between obsolescence and level of education; (b) direct relationship between obsolescence and years of professional experience; (c) support for the hypotheses which predicted an inverse relationship between obsolescence and both responsibility and involvement; (d) direct relationship between obsolescence and administrative responsibility; (e) inverse association of individualized attributes (such as achievement, orientation) with knowledge obsolescence. The study indicated that technical obsolescence is not simply an individual problem, but an intricate process which influences and is influenced by alternative career lines, by certain professional attributes and activities, and by some aspects of the organizational milieu.

465. EDUCATION AND THE EMPLOYMENT OPPORTUNITIES OF ENGINEERS. Pym, D. In British Journal of Industrial Relations; v7 n1 p42-51. Mar. 1969.

Data are presented on the relationships between the formal education received by the professional engineer and his subsequent work achievement and experience.

See also: item 245 video-tape graduate course for engineers in remote locations.

5850 Medicine and Health

466. CORRESPONDENCE EDUCATION AND THE HOSPITAL. Hospital research and Educational Trust, Chicago, Ill. Summary report of a study conducted at Pennsylvania State University. 1969. 55p. Available from Hospital Research and Educational Trust, 840 North Lake Shore Drive, Chicago, Illinois 60611 (\$2.00).

Based on responses from 423 hospitals in the United States, this study dealt with noncredit correspondence courses designed to upgrade hospital personnel job skills and raise job performance and/or job level.

467. THE CONTINUING EDUCATION OF PHYSICIANS IN THE COMMUNITY GENERAL HOSPITAL. Wenrich, John William. Michigan Univ., Ann Arbor, Ph D. Thesis. 162p. University Microfilms (Order No. 69-2405, MF \$3.00, Xerography \$7.60).

A pilot study was made of the continuing education of physicians on the staff of a private, medium-sized, general hospital in the Midwest. Among the steps involved were analysis of hospital records, observation of meetings and educational programs, a questionnaire survey, and interviews with physicians as well as selected administrators and related hospital personnel. Internal educational inputs, defined as information transmitted through formal education in the hospital or informal educational contacts between doctors, were evaluated in terms of use, value, and accessibility. Findings included the following: (1) doctors spent an average of 39 hours a month in continuing education; (2) reading was the leading method in use, value, and accessibility; (3) the educational influentials were younger specialists who spent more time in continuing education, relied more on written sources of information, participated more in hospital meetings, and attended more formal postgraduate programs sponsored by national medical organizations.

468. THE PERCEPTIONS OF KEY HOSPITAL LEADERS AS TO THE COMPETENCIES REQUIRED FOR HOSPITAL ADMINISTRATION AND THEIR IMPLICATIONS FOR PROFESSIONAL EDUCATION. Austin, Theodore A. Boston Univ., Mass. School of Education. 1968. 228p. University Microfilms (Order No. 69-7841, MF \$3.00, Xerography \$10.35). Ed. D. Thesis.

To define competencies hospital executives need to perform their role effectively, semi-projective questionnaire was distributed to administrators, presidents of the boards of trustees, presidents of the medical staffs, directors of nursing, and comptrollers of one hundred hospitals. A return of 51% of the questionnaires was obtained. Conclusions were: (1) Practicing hospital leaders tend to place less emphasis on competencies having to do with interpersonal relations and organizational change than do contemporary management theorists as reflected in the literature; and (2) A curriculum for the preparation of hospital administrators

should seek to develop both those competencies perceived to be required by current hospital leaders and those projected as required in the future by management theorists. A model of such a curriculum is proposed, based on concepts of adult education.

469. A FORGOTTEN SECTOR; THE TRAINING OF ANCILLARY STAFF IN HOPITALS. Smith, Duncan N. 1969. 178p. Available from Pergamon Press, Inc., 44-01 21st St., Long Island City, N.Y. 11101.

A study was made, in England and Wales, of training needs of hospital ancillary staff.

470. EVALUATION OF THE BASIC HOSPITAL CORPS SCHOOL. Judisch, James M.; And Others. HRB-Singer, Inc., State College, Pa. Jul. 1968. 112p. Clearinghouse for Federal Scientific and Technical Information (AD-675-492, MF \$0.65 HC \$3.00).

Two major areas were investigated: (1) the nature of the present curricula at the two Hospital Corps schools; and (2) the nature of the job requirements expected of newly graduated corpsmen at their first duty station.

471. CONTINUING EDUCATION FOR PSYCHIATRISTS. Wilson, Paul T. In American Journal of Psychiatry; Jun. 1969. v125 n12 p1729-1732.

Of 1847 institutions (sample of 2727) responding to a survey, 51 sponsored courses met the questionnaire's criteria--that the courses had to be (1) planned primarily for psychiatrists who have completed their residency training, (2) based on a definite curriculum that covers a specific aspect of psychiatry or related discipline, and (3) scheduled to meet at a definite time.

472. THE ORGANIZATION AND CONTINUING EDUCATION; A STUDY OF AGENCY FACTORS RELATING TO ATTENDANCE AND SUPPORT OF CONTINUING EDUCATION IN PUBLIC HEALTH IN CALIFORNIA. A SUMMARY REPORT. Carlaw, Raymond W.; And Others. May 1969. 34p. EDRS PRICE MF \$0.25 HC \$1.80.

A survey of continuing education of health personnel in Southern and Northern California was made to determine if there were differences in attendance, expressed interests, attitudes of health agency directors, recognition of employee participation, presentation of courses, or in financial support.

473. AIR FORCE NURSES' PARTICIPATION IN PROGRAMS OF CONTINUING EDUCATION AS RELATED TO SELECTED CRITERIA. Bennett, Leland R. Boston Univ. Ed.D. Thesis. 1968. 216p. University Microfilms (Order No. 69-7843, MF \$3.00, Xerography \$9.90).

This study investigated relationships among the extent of continuing education participation by Air Force Nurses, means used to reflect officer effectiveness, selected demographic and military characteristics and orientations toward learning. These were among the findings: (1)

participation was significantly related to educational levels but not to the nurses' effectiveness as officers; (2) age, rank, marital status, and years of service did not correlate significantly with participation; (3) nurses did not feel that participation in continuing education helps with promotions or effectiveness; (4) although goal orientation was related to participation, the nurses' major learning orientation was need fulfillment; (5) major barriers to participation were the nurses' own attitudes, perceptions of supervisor attitudes, and lack of counseling.

474. STUDY OF ARTICULATION PROGRAM BETWEEN NASSUA COMMUNITY COLLEGE AND TOPIC HOUSE. Morgenstein, Melvin; Strongin, Harriet. N.Y. State Univ. Final report. Jul. 1969. 74p. EDRS PRICE MF \$0.50 HC \$3.80.

Background characteristics and the vocational and educational needs and desires of former narcotics addicts in a residential therapeutic community were investigated; the potential role of Nassau Community College in meeting these needs and desires was assessed; and a determination was made of what Topic House residents and administrators might do to develop a joint college and rehabilitation program.

475. TRAINING PUBLIC HEALTH ASSISTANTS. Quinlan, Paul; And Others. Social Development Corporation, Washington, D.C. Feb. 1970. 24p. EDRS PRICE MF \$0.25 HC \$1.30.

This training project sought to meet employment needs of disadvantaged high school graduates, the shortage of health professionals, and the need to improve professional public health services. It combined a half-time, remunerated field training sequence with a half-time academic curriculum leading to an Associate of Science degree from Holyoke Community College. The project was administered by a trained nurse with a bachelor's degree and several years of public health experience. The academic sequence included several required courses and two public health courses; field training itself was in such areas as child hygiene, health education, environmental sanitation, air pollution, and welfare. Counseling proved to be the chief factor in retaining trainees. Of the original 20 trainees, 16 completed the program. Fourteen received their degree; the other two were still **trying** to complete their course work. Despite success in training and placement, a serious problem persists in regard to advancement and career development.

476. AN INSTITUTE AS AN EDUCATIONAL EXPERIENCE IN THE CONTINUING EDUCATION OF A SELECTED POPULATION OF NURSES. Buckland, Jean Kirscone. British Columbia Univ., Vancouver, M.A. Thesis. 1969. 155p. EDRS PRICE MF \$0.75 HC \$7.85.

This study evaluated a two day institute as a means of continuing education for nurses, analyzed a method of evaluation, and examined the relationship of education and experience to subsequent learning.

The greatest change was perceived by those who were younger, married, had less education (academic and post basic nursing), less nursing experience, and were employed in the larger agencies. Little or no change was noted by those who had more education and experience and were employed with smaller agencies. Learning correlated slightly with age, basic academic education, post basic nursing education, nursing experience, and size of employing agency.

477. ATTITUDE CHANGE AS A FUNCTION OF FIELD MEDICAL SERVICE SCHOOL. Pishel, Robert Gordon. Oklahoma Univ. Ph. D. Thesis. 1969. 88p. University Microfilms (Order No. 70-2331 Microfilm \$3.00, Xerography \$4.60).

Using a test retest design, this study investigated effects of Marine oriented Field Medical Service School training on the attitudes of 337 Navy corpmen.

478. DIMENSIONS OF ACCEPTANCE; CLIENT PERCEPTIONS OF PUBLIC HEALTH NURSE HOME VISIT SERVICE. Bambino, Charlotte Fidora. California Univ., Berkeley. Ph. D. Thesis. 1969. 161p. University Microfilms (Order No. 69-18,879 MF \$3.00, Xerography \$7.60).

An exploratory study focused on how, when, and under what conditions clients with long term illness and their families view the Public Health Nurse Home Visit Service (PHNHVS) as assisting them in family health care. Situational influences were the home setting, medical regime, source of control, (public or private), and the nurse's behavior. Acceptance of the PHNHVS by clients was based on the source of medical care. The service was not perceived as one which clients would voluntarily request or use for help in family health care. It was seen as helpful for learning technical skills or clarifying medical conflict when the condition of long term illness was acute or newly diagnosed. Over a period of time, nurse visits were continued mainly on the basis of nurse behavior. However, the service was seen as one of public control and community protection. Implications were derived for adult education and for public health nurse service and practice.

479. COMPARISON OF FOUR TECHNIQUES: PROGRAMMED TEXT, TEXTBOOK, LECTURE-DEMONSTRATION, AND LECTURE-WORKSHOP. Abrahamson, Stephen; Dennis, Donald A. In Journal of Medical Education; 1968. v43 n3 p405-411.

Tested and compared 4 standard methods employed in preparing physicians to: (1) acquire facts; (2) better understand principles, generalizations, and concepts; and (3) learn the most effective and efficient procedures. The study focused on "the plotting of mean cardiac vectors in the horizontal and frontal plane from the standard 12-lead" EKG. 3 faculty members and 148 physicians served as Ss. Analysis of variance and covariance revealed no significant difference in learning ability by any particular method. However, the difficulty of the subject studied, and amount of time allotted were considered inadequate to yield valid results in such an experiment.

480. REPORT ON RESEARCH INTO THE EFFECTIVENESS OF MEDICAL TELEVISION PROGRAMMES, FEBRUARY 1966 - JULY 1967. London Univ. (England). Assn. for the Study of Medical Education. Feb. 1968. 53p. EDRS PRICE MF \$0.25 HC \$2.75.

To assess the effectiveness of broadcast television in the education of practicing doctors in Britain, programs were broadcast to promote continuing education of general practitioners working away from centers of medical sciences. Studies using mailed questionnaires and interviews to assess the breadth and reaction of the viewing audience revealed that a remarkably low number of doctors (77 to 217) tuned in the programs. The overall conclusion is that the programs were not having a serious educational impact.

See also: SECTION 6950 HEALTH, MENTAL HEALTH EDUCATION; item 677 indigenous health aides in nutrition education for parents; 454 survival training in civil defense; 232 leadership styles in medical teams in Central American villages; 507 workshop on use of social workers in mental hospitals; 339 retired persons as mental health aides with children.

5900 Education

481. A CRITICAL EVALUATION OF IN-SERVICE TRAINING FOR CLASSIFIED EMPLOYEES IN SELECTED EDUCATIONAL ORGANIZATIONS IN THE UNITED STATES. Sorsabal, Donald K. Southern California Univ., Los Angeles. Ed.D. Thesis. 1969. 244p. University Microfilms (Order No. 69-13,084 MF \$3.15, Xerography \$11.05).

This study examined inservice training for classified school personnel in 150 selected organizations, and determined critical training requirements.

482. IN-SERVICE EDUCATION: A STUDY OF THE PARTICIPATION PATTERNS OF A SELECTED GROUP OF ELEMENTARY SCHOOL TEACHERS. Schankerman, Maurice Indiana Univ. Ed.D. Thesis. 1968. 242p. University Microfilms (Order No. 69-6772 MF \$3.15, Xerography \$11.05).

A study was made of inservice education activities for a selected group of public elementary school teachers in Indianapolis, with emphasis on patterns of participation, activities offered to, and desired by, teachers, teacher evaluation of activities, opinions on administration of the program, and recommended improvements.

483. A STUDY OF SOCIOLOGICAL AND CULTURAL BACKGROUND FACTORS OF PUBLIC ELEMENTARY SCHOOL PRINCIPALS IN ST. LOUIS AND THE IMPLICATIONS FOR ADMINISTRATIVE TRAINING PROGRAMS. Morris, John Lloyd-George. St. Louis Univ., Mo. Ph. D. Thesis. 1969. 255p. University Microfilms (Order No. 69-16,038 MF \$3.00, Xerography \$11.50).

This study investigated certain background characteristics of public elementary school principals in greater St. Louis, patterns in career development, comparisons between elementary and secondary school administrators, and implications for administrator training and development.

484. AN EXPLORATION OF COUNSELOR-POTENTIAL PERSONALITY ATTRIBUTES AS FOUND IN FOUR SELECTED ADULT POPULATIONS. Canty, W. Allan. Michigan Univ. Ph. D. Thesis. 1968. 246p. University Microfilms (Order No. 69-12,064 MF \$3.20, Xerography \$11.25).

Conducted during 1967-68 at four high schools in a large Midwestern city, this study sought to locate teachers with counselor potential and to generalize as to their personality attributes.

485. THE DEVELOPMENT OF SIMULATION MATERIALS; MEDIA FOR TRAINING SPECIAL EDUCATION ADMINISTRATORS. Hudson, Floyd Gene. Kansas Univ. Ed.D. Thesis. 1968. 297p. University Microfilms (Order No. 69-11,270 MF \$3.85, Xerography \$13.50).

To develop materials for training special education administrators, simulation was used as an instructional approach allowing interaction similar to that of the "real world" administrative setting.

486. ASSESSMENT OF THE LONG-RANGE IMPACT OF THE CERLI TRAINING PROGRAM (SCE), SPECIALIST IN CONTINUING EDUCATION. (CHARLESTON, ILLINOIS, JULY 1-AUGUST 9, 1968). Cooperative Educational Research Lab., Inc., Northfield, Ill. Jul. 1969. 37p. EDRS PRICE MF \$0.25 HC \$1.95.

To determine the long-run impact of the Cerli training program, the trainees abilities to function as specialists in continuing education were to be measured and assessed.

487. ASSESSMENT OF THE CERLI TRAINING PROGRAM, SPECIALIST IN CONTINUING EDUCATION (SCE), (CHARLESTON, ILLINOIS, JULY 1-AUGUST 9, 1968). Cooperative Educational Research Lab., Inc., Northfield, Ill. Feb. 1969. 113p. EDRS PRICE MF \$0.50 HC \$5.75.

To determine the effectiveness of the Cerli program for training a specialist in continuing education, an attempt was made to determine whether the program had effected behavioral changes enabling the participants to function in this new role.

488. DESCRIPTION AND EVALUATION OF THE PLAYROOM 81 PROJECT. MacVicar, Joan A. Harvard Univ. 1968. 147p. EDRS PRICE MF \$0.75 HC \$7.45.

Playground 81 was a recreational program available to children in the Mission Hill Extension Housing Development in Roxbury, Massachusetts. It was operated by 10 mothers, both black and white, indigenous to the project. The Harvard Team wanted to leave decision making up to

to the community mothers in a democratic fashion; however, this became inimical and detrimental to the program, since chaos and lack of organization resulted. An evaluation of the program showed that participants and community people felt that there should be more organization and structure and a clearer delineation of roles if it were to be effective.

489. LES ETUDIANTS A L'ECOUTE; ETUDE VISANT A CERNER CERTAINES DIMENSIONS DE LA SITUATION DES ETUDNANTS A LA LICENCE D'ENSEIGNEMENT SECONDAIRE, LISTE EXTERNE, 1967-68 (STUDENTS BY RADIO; A STUDY ENCOMPASSING CERTAIN ASPECTS OF THE SITUATION OF EXTENSION STUDENTS FOR THE DEGREE IN SECONDARY SCHOOL TEACHING). Saint-Victor, Henri De. May 1969. 122p. Service d'Education Permanente, Universite de Montreal, Montreal, Quebec. Text in French.

A survey was made of 161 teachers taking University of Montreal extension courses by radio to earn degrees as secondary school teachers. Information was sought as to special needs of students receiving this kind of instruction. The study focused on social and occupational characteristics, conditions and motives for study, student response and reactions to instruction (their performance and their perception of several aspects of the instructional situation). Results indicate relative dissatisfaction with extension teaching by radio, mostly because of the lack of interaction between professor and students and among students. (The document includes the questionnaire, preliminary working paper, correspondence, variables and statistical data, and a bibliography).

See also: SECTION 3900 TRAINING OF ADULT EDUCATION PERSONNEL; item 199 experiment in changing attitudes of elementary teachers toward adult education; 712 evening and off-campus population served by Temple University School of Education; 106 performance of non-matriculated students in Faculty of Education, University of Calgary; 217 human relations program for Tennessee educators; 210 two approaches to human relations training of elementary teachers; 674 training low income mothers to teach their children; 205 T-group and video tape in human relations training of counseling students at Indiana University.

5930 Librarianship

490. ON-THE-JOB TRAINING OF LIBRARY PERSONNEL. (INTERIM REPORT). Wallace, Everett M. And Others. System Development Corp. May 31 1968. 37p. Clearinghouse for Federal Scientific and Technical Information (AD-680-778, MF \$0.65 HC \$3.00).

5950 Law

491. A STUDY OF CONTINUING LEGAL EDUCATION OF ALLEGHENY COUNTY BAR ASSOCIATION MEMBERS. Davis, Benjamin George. Syracuse Univ., N.Y. Ed.D. Thesis. 1968. 128p. University Microfilms (Order No. 69-7732 MF \$3.00, Xerography \$6.20).

Legal education needs and preferences of lawyers in the Allegheny County, Pennsylvania, Bar Association were surveyed, with attention to such factors as motivation and lawyer characteristics. A pretested 40-item questionnaire was sent to all 2,218 members. Findings included the following: (1) felt needs pertained to trial work, real property law, probate and trust law, corporation law, law office management, Federal taxation, negligence, estate planning, patent, trademark, and copyright, and antitrust law; (2) trial work, negligence, patent, trademark, and copyright, corporation law, law office management, and labor law were generally preferred by younger lawyers, while probate and trust, antitrust, and real property law were preferred by older lawyers; (3) over half the lawyers attend a legal continuing education program each year, with subjects within the scope of their practice and learning about changes in the law as the chief motives; (4) younger lawyers were more subject matter oriented and preferred lecture programs, and older lawyers were more interested in changes in the law and preferred seminar or panel presentations; and (5) lawyers tended to prefer programs late in the week.

6000 Religion

492. ADULT EDUCATION PROGRAMS WITH CHURCH LEADERS. Stacy, W.H.; Tait, John L. Iowa State Univ. Dec. 1968. 125p. EDRS PRICE MF \$0.50 HC \$6.35.

This document is a historical resume of adult education programs with church leaders sponsored by the Cooperative Extension Service of Iowa State University since the early 20th century.

493. THE INDIVIDUAL AS A CHANGE AGENT. Peatling, John H. Feb. 1969. 80p. EDRS PRICE MF \$0.50 HC \$4.10.

Development of an evaluation instrument for the church sponsored Community Change Training Institute (CCTI) resulted in a pre-post test instrument involving measures of meaning, vocabulary, involvement in community action, and personality. Fisher's technique computed the pre-post scores of 108 persons in CCTI groups in Missouri, Ohio, and Hawaii. Data from Missouri and Ohio reveal several generalizations: a more homogeneous staff-participant group in Ohio than in Missouri; the Missouri Institute planned and participated in by Episcopalians, while Ohio Episcopalians only planned; and Ohio participants and staff sharing planning and execution of local change experiences more equally than in Missouri. The California Psychological Inventory revealed that both CCTI's had similar staffs,

but Ohio participants differed from their staff; Missouri participants showed lower scores on sense of well being, responsibility, tolerance and intellectual efficiency. The CCTI was effective in changing self perception of abilities, sharpening specialized analytical vocabulary and increasing aspects of the Semantic Differential Concept.

6050 Public Administration

494. STUDIES AND REPORTS RELATING TO TRAINING AND EDUCATION, FY 1968. United States Civil Service Commission, Washington, D.C., Bureau of Training. Feb. 1969. 111p. EDRS PRICE MF \$0.50 HC \$5.65.

Federal agencies report completed and in-progress studies and include such agencies as Agriculture, Civil Service Commission, Defense, District of Columbia, Health, Education and Welfare, Interior, Justice, Post Office, Transportation, Treasury, and Veterans Administration. The studies were designed to determine needs for training; develop training programs for effective manpower utilization; and to evaluate specific training programs and particular training methods. Each of the 95 studies includes a brief descriptor, performing organization and author, contact for further information, or availability of publication information.

495. EMPLOYEE TRAINING IN THE FEDERAL SERVICE, FISCAL YEAR 1968. U.S. Civil Service Commission, Washington, D.C. Bur. of Training. Feb. 1969. 68p. EDRS PRICE MF \$0.50 HC Available from Government Printing Office. (1969, 0-331-198, \$0.65).

A Fiscal Year 1968 report is made on employee training in the Federal service. The first section describes purposes of training (staff utilization, improved public service, occupational flexibility, and others) and resulting benefits. Part II summarizes the extent of participation in specific agencies, sources of training (internal, interagency, and nongovernmental), types of training, participation from trades and labor, general schedule, and other pay systems, the number and proportion of men and women trained, and numbers and total annual salaries of full time and part time training personnel. Part III covers such special interest areas as planned staffing and development in personnel management (including projections of needs, the sources and duration of formal programs, and types and method of training); describes agency programs to equip employees to work with state and local government; and describes companion volumes to this publication. Appendixes list interagency courses and subject areas, interagency programs proposed for 1969, and long-term nongovernment facilities.

496. STATISTICAL ANNEX TO EMPLOYEE TRAINING IN THE FEDERAL SERVICE, FISCAL YEAR 1968. U.S. Civil Service Commission, Washington, D.C., Bur. of Training. Feb. 1969. 153p. HC Available from U.S. Government Printing Office (1969,0-329-271, \$2.75). EDRS PRICE MF \$0.75.

The first table summarizes all training activity and expenditures for the year, with data arranged by occupational levels (GS01-04 through GS 16-18), training categories (professional and scientific, technical, supervisory and management, others), male and female participants, and other headings. The next group cover various aspects in greater detail: training categories; participation from each agency; general schedule and wage board participants for each type of source (internal, interagency, long term and short term nongovernmental); expenditures by types of sources; and kinds of expenditures (fees and tuition, transportation, per diem). Sections I, J, and K cite training manpower and salaries for each agency. The last section gives full data on participation and expenditures as reported by the Department of Defense, the Department of State (including the Agency for International Development), and 52 other agencies.

497. NEW CAREERS IN LOCAL GOVERNMENT. White, Leslie R. Institute for Local Self Government, Berkeley, Calif. 1969. 132p.

This manual discusses not only Federal New Career programs, but those that can be considered municipal or county do-it-yourself activities, with reference to systems within the framework of rules and regulations applicable to most local governments. In recruiting and selecting the disadvantaged, functional or actual job performance requirements are stressed rather than conventional employer or hiring standards. Steps for developing adaptive, functional, and specific content skills are set forth. Based on data from greater San Francisco and other western cities, problems in job development and other areas are assessed. Finally, a model is presented for increased employment and career opportunities for the disadvantaged in the New Jersey State Civil Service. Also included are a bibliography, worksheets on personnel systems and job analysis, a systems model and a diagram of development and evaluation for health aides training, California State Personnel Board specifications, and a basic curriculum for New Careers employees, in local governments, as well as career ladders, job descriptions, and community college course titles for sub-professionals in municipal government.

498. TRAINING IN OREGON STATE GOVERNMENT: A REPORT TO THE GOVERNOR AND THE 55TH LEGISLATIVE ASSEMBLY. Oregon State Civil Service Commission, Salem. 1968. 65p. EDRS PRICE MF \$0.50.

Oregon State Government's system of training is examined to determine what the operating agencies and the Civil Service Commission are doing, how educational institutions are used as resources, and how training needs are identified and training is planned. The examination revealed that (1) the lack of clear, definitive statewide policies and standards for training and development in state government contributes to disparities among operating agencies; (2) lack of authority by the Civil Service Commission to set standards for training impedes the Commission's progress in stimulating plans and programs to meet servicewide needs; (3) there is imbalance in the state's planning and programming efforts with insufficient attention being

given to long range plans to meet future staff requirements; (4) educational institutions are utilized more effectively for pre-entry than for post-entry training; (5) a higher degree of inter-governmental cooperation must be anticipated. Recommendations include suggestions for legislation to support long range and continuous learning of state officers and employees. (Included are: a training systems inventory, and a list of interagency training programs and the number of courses held.)

499. A LONGITUDINAL STUDY OF CONTINUING EDUCATION OF MUNICIPAL OFFICIALS IN EAST CENTRAL FLORIDA 1965-1968. Long, Huey B. In Research Reports on Social Science; Feb. 1970. v13 n1 p9-24.

Using a population of about 330 elected and 330 appointed officials in east central Florida, this study examined municipal officials' continuing education attitudes and participation, and efforts at independently developed study among the officials. Questionnaire respondents consisted of 71 of 177 randomly chosen subjects (1966) 61 of original 77 (1967), and 37 of the 61 (1968). Findings pertained to attitudes and perceptions, areas of unrecognized educational need, motives for engaging in continuing education, rates of participation (by topic and type of sponsoring body), length and cost of study, reading and other information sources, knowledge levels and related concerns. Two major conclusions are that the officials' favorable attitudes toward, and perception of, educational activities do not carry over to participation because the officials feel adequately prepared through previous education and experience; and that these officials have serious unrecognized educational needs in terms of both **content** and study methods. (Six tables are included).

500. RECRUITMENT AND TRAINING IN THE MOROCCAN CIVIL SERVICE. Shuster, James Robert. Princeton Univ. Ph. D. Thesis. 1969. 328p. University Microfilms (Order No. 69-14, 433 MF \$4.20, Xerography \$14.85).

The study traces the structural and organizational changes involved in the process of "Moroccanization". Free access to all civil services ranks and cadres became available to Moroccans only after independence in 1956. Moroccanization involved (a) the replacement of foreign employees by Moroccans, and (b) the emergence of new administrative structures to fulfill government functions, and of the necessary educational infrastructure. Training was accomplished by inservice training expansion of the Moroccan School of Administration, and by academic and technical training given in French universities and professional schools. Educational levels were lowered for access to given civil service positions. Moroccanization differed within the three groups of Ministries, i.e. the Socialization, the Instrumental, and the Control Ministries. Salient characteristics of the Moroccanization program were the absence of a general and coherent plan, and continuity with past administrative practices. The attributes of the Moroccan bureaucracy were continuity, control, comprehensiveness, and a structure compatible with both modernism and tradition.

See also: SECTION 8300 SPONSORING AGENCIES - STATE, LOCAL GOVERNMENT; 8500 SPONSORING AGENCIES - NATIONAL GOVERNMENT: item 136 California State Training Division as model of institution building; 76 dogmatism in a government agency; 219 sensitivity training for employment security personnel.

6100 Military

501. GROUP PERFORMANCE UNDER EXPERIENCED AND INEXPERIENCED LEADERS; A VALIDATION EXPERIMENT. Fiedler, Fred E.; Chemers, Martin M. Illinois Univ. Dec. 1968. 19p. Clearinghouse for Federal Scientific and Technical Information (AD-684-091 MF \$0.65 HC \$3.00).

This study investigated the effect of experience and training on the performance of Belgian naval officers in an experimental leadership situation. As in a previous study conducted with Belgian naval personnel, group performance under trained and experienced officers was not significantly better than performance under untrained recruits. Moreover, length of leadership experience as an officer was not correlated with performance on any of the five different tasks or with group member satisfaction.

See also: SECTION 8000 SPONSORING AGENCIES - ARMED FORCES; item 246 films in Army leadership training.

6125 Social Work

502. STATE IN-SERVICE TRAINING FOR CORRECTIONAL PERSONNEL. FINAL REPORT. VOLUME I. Kiefer, George W. Southern Illinois Univ. Oct. 1969. 69p. MF \$0.50 HC \$3.55.

This is an overall narrative account of a correctional staff training project in Illinois. The rationale of the project, methods and activities involved, findings, and evaluations are summarized and synthesized. Initial objectives were to survey training practices and needs; determine resources available for present and future staff training; design programs of training in terms of individual and agency needs; and stimulate conditions conducive to correctional staff training. A literature review, a questionnaire survey of correctional personnel, and solicitation of information from resource persons and agencies, were among the procedures used.

503. STATE IN-SERVICE TRAINING FOR CORRECTIONAL PERSONNEL. FINAL REPORT. VOLUME II. Kiefer, George W. Southern Illinois Univ. Sep. 1968. 276p. EDRS PRICE MF \$1.25 HC \$13.90.

Most of this volume is an overview of existing staff training for line personnel and parole agents; an assessment of unmet training needs; group discussion and other demonstration projects in staff

training; an annotated list of 130 training films; and an analysis of questionnaire responses from 1,292 employees at six penal institutions under the Illinois Department of Public Safety.

504. TREATMENT IDEOLOGY AND CORRECTIONAL BUREAUCRACY: A STUDY OF ORGANIZATIONAL CHANGE. Martinson, Robert Magnus. California Univ., Berkeley. 1968. 259p. University Microfilms (Order No. 69-14, 498 MF \$3.00, Xerography \$11.70). Ph. D Thesis.

A study was made of organizational change induced by a staff training project in six correctional institutions for youth in the California system, which is currently engaged in introducing "therapeutic community" into correctional facilities. Part I described and evaluated a federally financed training project. The "resource model" of training was introduced as a guiding orientation. Decisions concerning curriculum and program planning were shared through an administrative seminar. Administrative strategies were ranked to permit a comparative analysis of organizational change. Part II described the three administrative strategies that failed to overcome or further reinforce staff resistance to change; and Part III compared the two strategies which overcame resistance and induced substantial change. It was concluded that conditions leading to facility change included departmental commitment, career motivation, training of the staff at the middle management level and appropriate management strategy.

505. THE EFFECTS OF FACILITATION TRAINING PROVIDED CORRECTIONAL OFFICERS STATIONED AT THE ATLANTA FEDERAL PENITENTIARY. Megathlin, William Latimer. Georgia University. Ed.D. Thesis. 1969. 116p. University Microfilms (Order No. 70-1186 MF \$3.00, Xerography \$5.80).

The purpose of the study was to examine the effect of 80 hours of facilitation training on the communication of empathy, respect, and genuineness; the dimension of authoritarianism; the interpersonal areas of inclusion, control, and affection; attitude ratings; and the personality factors of anxiety, alert poise, extraversion, and independence of a random sample of federal correctional officers.

506. TRAINING PROGRAM FOR LOUISIANA CORRECTIONAL, PROBATION AND PAROLE PERSONNEL; A STUDY OF PRESENT AND FUTURE NEEDS. FINAL REPORT. Louisiana State Department of Corrections. Jan. 1969. 102p. EDRS PRICE MF \$0.50 HC \$5.20.

Training needs of probation and parole officers and personnel in penal institutions of Louisiana were determined by surveys of personnel background, education, age, experience, and expressed needs, in order to determine subject matter and potential enrollment of inservice classes. Questionnaires collected information from 53 probation and parole officers which resulted in a one week school involving 27 officers. The curriculum included human behavior and personality disorders, investigations, interviewing, counseling, case analysis, techniques of arrest, interagency cooperation and community resources, leadership, court relationship, narcotics, and

out of state problems. The survey of penal institutions resulted in a one week pilot school for 26 correctional officers and supervisors in studies of personnel management, principles of supervision, communications, theories of crime, legal issues, drugs, counseling and management, human relations, public relations, personality disorders, and the custodial process.

507. SOCIAL WORK MANPOWER UTILIZATION IN MENTAL HEALTH PROGRAMS; PROCEEDINGS OF A WORKSHOP. Carlsen, Thomas, Ed. Syracuse Univ., N.Y. Manpower Monograph, No. 2. 1969. 46p. EDRS PRICE MF \$0.25 HC \$2.40.

This workshop was planned to review the findings of a study on manpower utilization of professional (M.S.W. degree) and non-professional social work personnel in mental hospitals and to determine their application to the demands of a changing mental health program.

508. VISTA -- A SOURCE OF RECRUITMENT FOR THE HELPING PROFESSIONS? Cantor, Marjorie H. Columbia Univ. VISTA Research Project, Report II. Jun. 1969. 40p. EDRS PRICE MF \$0.25 HC \$2.10.

This research project studies a group of VISTA Volunteers who worked among the urban poor from 1966 to 1968, analyzing aspects of their adjustment to agency, job, and life in the neighborhood with the poor. This report discusses the impact of VISTA service on career choices. The findings indicate that one year of VISTA service acts to clarify goals, narrow vocational choices, and transform a generalized interest in service into specific commitment to the human service professions, particularly social work and education.

509. SOME CORRELATES OF SUCCESS AND SATISFACTION IN URBAN VISTA. Cantor, Marjorie H. Columbia Univ. VISTA Research Project, Report IV. Jul. 1968. 159p. EDRS PRICE MF \$0.75 HC \$8.05.

A study of volunteer success and satisfaction among a group of urban VISTA volunteers who trained at Columbia School of Social Work attempted to determine what enables a VISTA volunteer to perform effectively in his field assignment, and to define the roots of volunteer satisfaction with the VISTA experience. Factors studied are grouped into five main areas of consideration: the demographic characteristics of volunteers and their social and political attitudes; the VISTA job (type of assignment and relevant job attributes); supervisor and supervision (the importance of, the mode, and the relationships established); the sponsoring agency (structure, attitudes towards the poor, and the use of volunteers); and living in the neighborhood (impact and involvement).

510. SOCIAL SERVICE AIDE PROJECT FOR THE EDUCATION AND TRAINING OF PARAPROFESSIONALS. FINAL REPORT. Soong, Robert K.; And Others. YMCA of Metropolitan Chicago. Sept. 30, 1969. 149p. EDRS PRICE MF \$0.75 HC \$7.55.

This project has made it possible for four community colleges and the Metropolitan YMCA to jointly explore the feasibility of vocational training and exemplary education of paraprofessionals for new and perhaps unprecedented career entry in the field of social service. This project was able to conduct functional task analysis of jobs in 16 human service agencies. From 217 interviews and extended observations, the project task force has recorded over 2,000 tasks, which upon restructuring, produces new job descriptions for career ladders in 7 related functions: community organization, health service, group work, social service administration, case work, child care, and mental health. The findings to date indicate the feasibility of utilizing the existing resources of the community colleges for a correspondingly restructured core curriculum to facilitate the widest possible choice of career entry.

6150 Technical Training

511. MANPOWER PROJECTIONS, RECRUITMENT NEEDS AND TRAINING REQUIREMENTS FOR COMMERCIAL AIRLINE PILOTS IN THE UNITED STATES 1968-1979. Simons, Robert Marchand. Univ. of Southern California, Los Angeles. D.B.A. Thesis. 1969. 280p. University Microfilms (Order No. 69-16, 565 MF \$3.60 , Xerography \$12.60).

This study evaluated the reported airline pilot shortage in relation to certified air carriers; recruitment needs for qualified applicants; training requirements as recommended by air carriers, airline captains, and flight officers; and airline pilot supply and demand during 1968-79.

512. CIVILIAN PILOT TRAINING SKILLS, CURRICULA, AND COSTS; DEFENSE AND COMMERCIAL PILOT PROCUREMENT, TRAINING AND CAREER SYSTEMS. INTERIM REPORT. VOLUME I AND VOLUME II, MARCH 1968. Logistics Management Institute, Washington, D.C. Mar. 1968. 254p. Clearing-house for Federal Scientific and Technical Information. (AD-830-166, MF \$0.65 HC \$3.00; AD-830-167, MF \$0.65 HC \$3.00).

Through its regulations and testing procedures, the FAA sets minimum criteria for course content and skill acquisition. Since few training organizations have the economic resources required to do original research in training methods and techniques, the curriculums used and skills imparted in civilian flight training schools may be discovered by study of the appropriate FAA regulations. The FAA certificates and ratings and the types of training given by various schools and organizations are discussed in this report. Information on each includes the knowledge required, the demonstrable skills needed, and the approximate average cost or price.

513. EDUCATIONAL BACKGROUND INFORMATION VERSUS APTITUDE MEASURES IN THE SELECTION AND CLASSIFICATION OF AIRMEN. Judy, Chester J. In Proceedings of the 77th Annual Convention of the American Psychological Association; 1969. v4 pt2 p705-706.

A comparison was made between aptitude information of the kind used in Air Force selection and classification operations, and information on the preservice educational background, and record, as recalled and given by men entering basic training. The comparison was made in terms of validity for predicting performance in Air Force technical training. It is concluded that the educational background information, for the purpose indicated, may serve as well or better than scores from aptitude tests of the kind now employed.

514. THE RELATIONSHIP OF THE OBJECTIVELY SCOREABLE APPERCEPTION TEST (OAT) TO SUCCESS IN NAVAL AVIATION TRAINING. Bale, Ronald M.; Waldeisen, Lewis E. U.S. Naval Aerospace Medical Inst., Pensacola, Fla. Jun. 1969. 11p. Clearinghouse for Federal Scientific and Technical Information. (AD-692-364 MF \$0.65 HC \$3.00).

The Objectively Scoreable Apperception Test (OAT) was administered to 725 naval aviation officer candidates to examine the potential of the test as a supplement to the primary selection system.

515. OPERATIONAL TASKS ORIENTED FLYING TRAINING PROGRAM FOR PILOT TRAINING; THE SYSTEMS APPROACH. Sample, Clarence A.; Majesty, Melvin S. Jan. 1969. 52p. Federal Scientific and Technical Information. (AD-685-776 MF \$0.65 HC \$3.00).

A systems methodology was devised for determining knowledge and skills common to piloting tasks required by differing aircraft missions to form a data base for developing a task oriented flight training program. The general approach was to identify and classify specific tasks performed by Air Force pilots, with the required level of proficiency for each, in current and projected assignments in operational units using present and projected aircraft.

516. C-130 PHASE I PILOT TRAINING PROGRAM (CCTS). Shaw, Jack B.; And Others. Apr. 1969. 172p. Clearinghouse for Federal Scientific and Technical Information. (AD-700-987 MF \$0.65 HC \$3.00).

This is a detailed study of the C-130 Phase I pilot training program at Stewart Air Force Base, Tennessee. The purpose of the study was to determine the most effective training program that will continue to produce highly qualified pilots at the least cost.

517. COMPARISONS OF TRAINING TECHNIQUES FOR COMPLEX SOUND IDENTIFICATION. Corcoran, D.W.; And Others. Applied Psychology Research Unit, Cambridge (England). In Journal of the Acoustical Society of America; v44 n1 p157-167. 1968.

Synthetic engine sounds were mixed with 5 different synthetic cavitation sounds at realistically difficult signal-to-noise ratios. 81 Royal Navy ratings, divided into 8 training groups, were asked to identify the 14 engine sounds. Training procedures were varied among groups to answer some questions pertinent for programing a teaching machine.

518. RETENTION OF ELECTRONIC FUNDAMENTALS; DIFFERENCES AMONG TOPICS. Johnson, Kirk A. Naval Personnel Research Activity, San Diego, Calif. : Aug. 1969. 32p. Clearinghouse for Federal Scientific and Technical Information (AD-699-156, MF \$0.65 HC \$3.00).

To explore the benefits and problems associated with the use of criterion referenced tests in an operational training situation, the study was based on the material being taught in the first phase of an avionics (aviation electronics) fundamentals course.

519. THE RELATIVE EFFICIENCY OF PRETESTING AND TWO TYPES OF PROGRAMMED INSTRUCTION FOR SOLVING MANEUVERING BOARD PROBLEMS. FINAL REPORT. Meyer, John K. U.S. Naval Personnel Research Activity, San Diego, Calif. Mar. 1969. 19p. Clearinghouse for Federal Scientific and Technical Information (AD-689-104 MF \$0.65 HC \$3.00).

Study time for a large frame and a small frame type of programmed explanation in maneuvering solutions was compared using two equated, pretested groups of enlisted men in a basic CIC techniques course, and two equated groups assigned to basic electricity and electronics training. It was found that by using pretesting as many as 60 percent of the CIC techniques students could save study time by entering the learning program at an advanced level, and that as much as 42 percent of study time could be saved by using a few large rather than many small frames.

520. EVALUATION OF THE ET GRADUATES OF THE SET SIX-YEAR OBLIGOR TRAINING PROGRAM. Steinemann, John H.; And Others. Naval Personnel and Training Lab., San Diego, Calif. Oct. 1969. 34p. Clearinghouse for Federal Scientific and Technical Information. (AD-699-926 MF \$0.65 HC \$3.00). Final report.

A followup assessment of graduates of selective electronics training for electronics technicians was conducted to evaluate job capabilities and shipboard utilization of six-year hitch personnel in the fleet.

521. LEARNER-CENTERED INSTRUCTION (LCI). VOLUME 5. DESCRIPTION OF THE JOB PERFORMANCE TEST. Pieper, William J.; And Others. Applied Science Associates, Inc. Jun. 1969. 22p. Clearinghouse for Federal Scientific and Technical Information (AD-692-125 MF \$0.65 HC \$3.00).

An account is presented of the development of a job performance test for the Learner Centered Instruction weapon control systems mechanic/technician Air Force course.

522. EXPERIMENTAL MODIFICATION OF CLASS "C" WELDING SCHOOL CURRICULA: TASK INVENTORY AND TRAINING MATERIALS. Caviness, James A. Naval Personnel Research Activity, San Diego, Calif. Jul. 1968. 121p. Clearinghouse for Federal Scientific and Technical Information. (AD-675-030 MF \$0.65 HC \$3.00).

Two major areas were investigated: the nature of the present curricula at two welding schools and of the job requirements expected of newly graduated Corpsmen at their first duty station. Individual corps school curricula were analyzed topic by topic and the major discrepancies summarized. A retention instrument was used to test comprehension; a survey was made to determine where student and graduate corpsmen gained retention item information.

523. BENEFIT-COST ANALYSIS OF TAT PHASE I WORKER TRAINING. TRAINING AND TECHNOLOGY PROJECT. SPECIAL REPORT. Kirby, Frederick C.; Castagna, Paul A. Atomic Energy Commission, Oak Ridge, Tenn. Jul. 1969. 34p. EDRS PRICE MF \$0.25 HC \$1.80.

The purpose of this study is to estimate costs and benefits and to compute alternative benefit-cost ratios for both the individuals and the Federal Government as a result of investing time and resources in the Training and Technology Project. TAT is a continuing experimental program in training skilled workers for private industry. The five occupational areas included in the study are mechanical drafting, welding, machining, industrial electronics, and physical testing-quality control.

See also: SECTION 6500-6850 OCCUPATIONAL TRAINING; item 63, 125, 118, 633, 278, 173 various aspects of pilot and flight training.

6200 MANAGEMENT AND SUPERVISORY DEVELOPMENT

524. MANAGEMENT DEVELOPMENT AND SUPERVISORY TRAINING. CURRENT INFORMATION SOURCES, NO. 26. Nov. 1969. 77p. ERIC Clearinghouse on Adult Education. EDRS PRICE MF \$0.50 HC \$3.95.

Management development and supervisory training are covered in this 210-item annotated bibliography.

525. A SURVEY OF COMPANY DEVELOPMENT PROGRAMS FOR NEWLY-HIRED COLLEGE GRADUATES. Pyron, H. Charles; Flanagan, Kathi. In Training and Development Journal; Feb. 1970. v24 n2 p45-48.

Provisions in 35 firms for college graduate managerial and technical trainee development are covered, with attention to program length, training costs, program content and design, and performance evaluation. Three typical program designs are described.

526. MEASURING MANAGER ATTITUDES TOWARD CONTINUING EDUCATION PROGRAMS. Dorn, Gerald; Dubin, Samuel S. Paper presented at the Adult

Education Research Conference, Minneapolis, Minnesota, February 27-28, 1970. 9p. EDRS PRICE MF \$0.25 HC \$0.55.

The attitudes of managers toward continuing education management development programs were analyzed, using the Fishbein technique; by this approach, the beliefs people have and their evaluation of these beliefs are measured separately. The evaluation of a belief is multiplied by its strength to get the direction of the attitude.

527. AN ANALYSIS OF SMALL BUSINESS ADMINISTRATION MANAGEMENT TRAINING PROGRAM. Galbraith, Oliver. California Univ., Los Angeles. Ph. D. Thesis. 1968. 250p. University Microfilms (Order No. 69-11,883 MF \$3.25, Xerography \$11.25).

This study examined the impact of the Small Business Administration (SBA) Management Training Program at San Diego State College on its participants, and investigated certain characteristics of small businessmen that might relate to acceptance or rejection of concepts presented in the program.

528. A SYSTEM DESIGN MANAGEMENT FOR THE STRUCTURING AND SIMULATION OF SELECTED TRAINING INSTITUTIONS. Thompson, Paul Donovan. The Catholic University of America, Washington, D.C. Ph. D. Thesis. 1969. 244p. University Microfilms (Order No. 69-19,014 MF \$3.15, Xerography \$11.05).

To define elements of a systems approach for training administrators; to develop a model for educational and training planners; and to provide a set of criteria for the optimum utilization of resources, the literature was reviewed, specific graphic and mathematical analysis in education and training analyzed, and a new synthesis devised for modeling and evaluation.

529. A COMPARATIVE ANALYSIS OF UNIVERSITY EXECUTIVE DEVELOPMENT PROGRAMS CONDUCTED IN 1958 AND IN 1968. West, Jude P. Iowa Univ., Iowa City. Ph. D. Thesis. Jun. 1969. 177p. University Microfilms (Order No. 69-21,741 MF \$3.00, Xerography \$8.20).

This study examined all American universities offering executive development programs (EDP). Criteria were six program features and six institutional characteristics. Information came from conference brochures and standard statistical sources, interviews with program directors and researchers, and questionnaires sent to program directors. These were among the findings: (1) ten universities had discontinued their institutes by 1968, while two others had reduced their seminars from two to one; (2) during 1958-68, 11 universities added 13 new programs; (3) schools conducting EDP tended to have been established relatively early; (4) 81% of EDP schools were authorized to offer graduate degrees; (5) broadening participants' vision and enhancing decision making ability were the leading EDP objectives in 1968; (6) the major changes in program

content and methods have been toward more sessions on the business environment, and from case study techniques alone toward a more diversified approach; (7) most programs ran from two to seven weeks, and 55% of conferences were held in the summer.

530. A SYSTEMS APPROACH TO THE PLANNING AND FORMULATION OF TECHNOLOGY AUGMENTED PROGRAMS FOR MANAGEMENT EDUCATION. Burke, Thomas Edward. Texas Univ. Ph. D. Thesis. May 1969. 203p. University Microfilms (Order No. 69-21,790 MF \$3.00, Xerography \$9.25).

A management education planning approach called Computer-Assisted Subject Area (CASA) has been conceptualized as a framework for viewing, evaluating, and recording efforts to improve the effectiveness of a subject area to be integrated within an overall curriculum. CASA is a generalized set of models which feature a hierarchy of activities in developing a subject area; an organizational library structure, or information repository, for noting and updating findings and working criteria for use in curriculum planning; and a network of cybernetic representation to highlight dynamic interrelationships between various human and machine elements germane to a professor's subject area.

531. MANAGEMENT TRAINING PROGRAM IN A DISCOUNT STORE. Sethi, Manmohan Singh. Atlanta Univ. M.B.A. Thesis. Aug. 1968. 53p. EDRS PRICE MF \$0.25 HC \$2.75.

This study inquired into the objectives of management training programs in two chains of discount stores, and whether those who complete training believe that program objectives have been met. These were among the conclusions reached: (1) although training programs stressed the need for a broad view of the company and of human relations and interaction, trainees felt that such objectives were not being realized; (2) managers and trainees need a closer interrelationship to achieve overall program objectives; (3) as far as the managers are concerned, the programs have met most of their objectives.

532. RELATIONSHIP BETWEEN MEMBERS SATISFACTION WITH SERVICE CLUB MANAGEMENT PROCESSES AND PERCEPTION OF CLUB MANAGEMENT SYSTEM. Dawson, Frances Trigg. North Carolina State Univ. Ed. D. Thesis. 1969. 142p. University Microfilms (Order No. 70-9179 MF \$3.00 Xerography \$7.20).

A study was made to determine the relationships between (1) satisfaction of members with service club management processes and member's perception of management systems, (2) perception of service club management system to selected independent variables, and (3) satisfaction to perception of service club management systems with independent variables controlled.

533. THE ADMISSION TEST FOR GRADUATE STUDY IN BUSINESS AND THE ADULT PART-TIME STUDENT. Waters, Elzberry, Jr. George Washington Univ. Aug. 1968. 31p. EDRS PRICE MF \$0.25 HC \$1.65.

This study tested for the dependence of the graduate quality point index on total scores of the Admission Test for Graduate Study in Business (an aptitude test), undergraduate quality point index, and length of time since receiving the bachelor's degree. Subjects were 104 adult part-time graduate students admitted to the Master's program administered by the College of General Studies. Despite limitations, it was concluded that success in the Graduate Business School is independent of all three major variables. However, academic workload and other factors may also be influential.

534. THE ANALYSIS OF FACTORS AFFECTING THE ACHIEVEMENT OF ADULTS WHO PARTICIPATE IN SHORT CONCENTRATED MANAGEMENT COURSES. McAreavy, John Francis. Iowa University. Ph. D. Thesis. 1969. 209p. University Microfilms (Order No. 69-13,163 MF \$3.00, Xerography \$9.45).

To identify factors involved in adult student achievement and behavior in short concentrated management courses and to test hypotheses regarding these factors, adults divided in four classes participated in a one week course. Two classes were informed that their grade would wholly depend on the end-of-course score. The other two were informed that their grades depended on factors other than the end-of-course test score. A fifty-item multiple choice end-of-course test indicated that all participants performed at the same level of achievement. Extent of educational background, experience, reason for attending the course, time devoted to outside-of-class study, performance on take home exercises, and the level pattern of subject's course related interaction, did not affect the subject's level of achievement. Age, extent of outside of-class discussion and the manner the subjects reacted to tests were found to affect the level of achievement.

535. UNANTICIPATED RETURNS OF TRAINING. Belasco, James A.; Trice, Harrison M. In Training and Development Journal; Jul. 1969. v23 n7.

A training program for the supervisory staff of a large organization was rigorously evaluated to find what changes were associated with the training and how the probability of successful results could be improved. The Solomin four group evaluation design showed changes associated with training alone were small. Training served many unintended ceremonial functions such as the therapeutic value of sharing problems and realizing that the organization cared about the supervisor's problems. Questionnaires administered prior to training made the supervisors more receptive to training material; thus testing is a potent change agent independent of training. Trainees approached the learning situation with certain predispositions to change and those more prone to anxiety were more likely to change favorably. Selection of individuals for training on the basis of the match between their predispositions and demands of training can improve the probability of change associated with training.

536. LEADERSHIP STYLES OF STRUCTURE AND CONSIDERATION AND MANAGERIAL EFFECTIVENESS. Greenwood, John M.; McNamara, Walter J. In Personnel Psychology; Summer 1969. v22 n2 p141-152.

An assessment program studied 593 individuals from seven divisional programs of a business concern, and indicated that the two divisions of Structure and Consideration measured by the Leadership Opinion Questionnaire are uncorrelated with various behavioral measures of supervisory performance, attitudes, or abilities; not significantly different for two moderator variables, namely managerial level and functional position; and unrelated to several measures of supervisory effectiveness or potential obtained in situational exercises.

537. SUPERVISORY TRAINING ABOUT ALCOHOLICS AND OTHER PROBLEM EMPLOYEES. Trice, Harrison M.; Belasco, James A. In Quarterly Journal of Studies on Alcohol; Jun. 1968. v29 n2 p382-398.

538. MANAGEMENT DEVELOPMENT TRAINING; MULTIPLE MEASUREMENT OF ITS EFFECT WHEN USED TO INCREASE THE IMPACT OF A LONG TERM MOTIVATIONAL PROGRAM. Camealy, John Bremer. Washington Univ. D.B.A. Thesis. 1963. 249p. University Microfilms (Order No. 69-1149 MF \$3.25, Xerography \$11.25).

This field investigation applied multiple measures to determine effects of management development training when used to increase the benefits from a long term motivational program. The study found that development training produced changes opposite to those desired by top management; top managers need to state and define clearly the organizational goals to be furthered by development courses; early coordination of evaluation strategy, selection of measurements, goals, and program design is needed for effective evaluation; and the measurement instruments did not measure the same thing.

539. THE IMPACT OF PHASE I MANAGERIAL GRID TRAINING. Smith, P.B.; Honour, T.S. In Journal of Management Studies; Oct. 1969. v6 n3 p318-330.

This is a study of the effects of the managerial grid system of training, in a medium sized British factory predominately concerned with batch production.

540. AN APPROACH TO MEASURING THE EFFECTIVENESS OF PARTICIPATIVE METHODS IN TEACHING MANAGERIAL SKILLS. Papaloizos, A.; Nicholls, J.R. In Training and Development Journal; Jun. 1970. v24 n6 p10-14.

Ford Foundation sponsored research at the Swiss International Management Development Institute focused on thought processes, kinds of content, and types of intellectual output or outcomes. Article includes a diagram of relative effectiveness of participative methods in developing specific skills and Guilford's "Structure of the Intellect" model.

541. LEADER PREPARATION PROGRAM IMPLEMENTATION PACKAGE. OVERVIEW OF LEADERSHIP PROGRAM DEVELOPMENT UNDER TASK NCO. TAB A: LEADER SELECTION AND ASSESSMENT MATERIALS. Hood, Paul D.; And Others. George Washington Univ. May 1969. 42p. Clearinghouse for Federal Scientific and Technical Information. (AD-699-318 MF \$0.65 HC \$3.00).

The first part of a six volume compilation of research on the training, orientation, and selection of Army noncommissioned officers (NCOs), this document provides a general overview of Task NCO from its inception in 1957 to its implementation, and includes a summary of the Leader Preparation Course.

542. LEADER PREPARATION PROGRAM IMPLEMENTATION PACKAGE. OVERVIEW OF LEADERSHIP PROGRAM DEVELOPMENT UNDER TASK NCO. TAB B. ORIENTATION AND IMPLEMENTATION MATERIALS FOR LEADERSHIP PREPARATION COURSE. Hood, Paul D.; And Others. George Washington Univ. May 1969. 34p. Clearinghouse for Federal Scientific and Technical Information. (AD-699-319 MF \$0.65 HC \$3.00).
543. LEADER PREPARATION PROGRAM IMPLEMENTATION PACKAGE. OVERVIEW OF LEADERSHIP PROGRAM DEVELOPMENT UNDER TASK NCO. TAB C: CONTENTS OF LEADER PREPARATION PACKAGE AND GUIDES FOR LEADER TRAINING PROGRAM. Hood, Paul D.; And Others. George Washington Univ. May 1969. 229p. Clearinghouse for Federal Scientific and Technical Information. (AD-699-320 MF \$0.65 HC \$3.00).
544. LEADER PREPARATION PROGRAM IMPLEMENTATION PACKAGE. OVERVIEW OF LEADERSHIP PROGRAM DEVELOPMENT UNDER TASK NCO. TAB D: LESSON PLAN GUIDES FOR TECHNICAL CLASSES IN LEADER PREPARATION COURSE. Hood, Paul D.; And Others. George Washington Univ. May 1969. 99p. Clearinghouse for Federal Scientific and Technical Information. (AD-699-321 MF \$0.65 HC \$3.00).
545. LEADER PREPARATION PROGRAM IMPLEMENTATION PACKAGE. OVERVIEW OF LEADERSHIP PROGRAM DEVELOPMENT UNDER TASK NCO. TAB E: INFORMATION BOOKLETS AND GUIDES FOR STUDENTS OF LEADER PREPARATION COURSE. Hood, Paul D.; And Others. George Washington Univ. May 1969. 203p. Clearinghouse for Federal Scientific and Technical Information. (AD-699-322 MF \$0.65 HC \$3.00).
546. LEADER PREPARATION PROGRAM IMPLEMENTATION PACKAGE. OVERVIEW OF LEADERSHIP PROGRAM DEVELOPMENT UNDER TASK NCO. TAB F: LEADER SELECTION AND ASSESSMENT MATERIALS. Hood, Paul D.; And Others. George Washington Univ. May 1969. 21p. Clearinghouse for Federal Scientific and Technical Information. (AD-699-323 MF \$0.65 HC \$3.00).
547. NEEDS, ENVIRONMENTAL WORK SATISFACTION, AND JOB PERFORMANCE. Slocum, John W., Jr.; And Others. In Training and Development Journal; Feb. 1970. v24 n2 p12-15.

Conducted in a Pennsylvania steel fabricating plant, this was a study of effects of first line supervisors' personality traits on

managerial role performance and on satisfaction with various environmental work factors.

548. MAINTENANCE RESEARCH. REPORT 6. MAINTENANCE TRAINING. Louisiana Dept. of Highways, Baton Rouge. Maintenance research project 1965-69. Jun. 1969. 81p. Clearinghouse for Federal Scientific and Technical Information. (PB-188-255 MF \$0.65 HC \$3.00).

The main objective of the training research phase of the maintenance management study was to develop and test training methods suitable for highway maintenance supervisors. Supervisors were trained by one of five different methods (lecture, group discussion, programmed instruction, programmed workshops, audiovisual instruction).

549. AN INVESTIGATION OF THE APPLICABILITY OF MODERN MANAGEMENT PROCESSES BY INDUSTRIAL MANAGERS IN TURKEY. Lauter, Geza Peter. California Univ., Los Angeles. Ph. D. Thesis. 1968. 260p. University Microfilms (Order No. 69-11, 893 MF \$3.35, Xerography \$11.70).

This study noted American concepts of modern management which Turkish industrial managers tend to find difficult; identified cultural, economic, and other factors that impede application of modern management processes; and compared the practices of American overseas managers with those of Turkish managers of domestic firms. Managerial performance was examined in eight American and eight comparable Turkish firms, and 73 representatives of all walks of Turkish life were interviewed.

550. INDUSTRIAL MANAGEMENT PRACTICES AND MANAGEMENT EDUCATION IN WEST PAKISTAN; A STUDY OF THEIR RELATIONSHIP IN THE INDUSTRIAL DEVELOPMENT PROCESS. Richard, Sandra Clayton. Ph. D. Thesis. 1968. 180p. University Microfilms (Order No. 69-6207 MF \$3.00, Xerography \$8.20).

A study was made of relationships of industrial management practices to management education in West Pakistan's industrial development. Directors of institutions having management education courses, and managers at 30 family, government, and foreign controlled plants in Karachi were interviewed on policies, practices, and problems in organization, production, employee relations, management climate, and the selection and training of managers.

See also: SECTION 2350 LEARNING ENVIRONMENTS - ORGANIZATIONAL; 2920 HUMAN RELATIONS, LABORATORY TRAINING; 2950 SIMULATION, GAMING; item 689 survey of American managers overseas; 576 estimating managerial and technical personnel requirements in European countries; 308 book on change process in management training and therapy.

6300 LABOR EDUCATION

- 551 LABOR EDUCATION IN THE UNITED STATES, A SURVEY. Tift, Katherine. In Labor Education Viewpoints; n10 p1-54. Autumn 1968.

This article reviews the history of labor education in the United States, the expansion of labor education in universities, and current trends. Early social reforms (1870-1920), early growth and Depression years (1920-1933), the New Deal and changing concepts in labor education in the 1930s, and the emphasis on industrial relations during the 1940s, are noted. Beginning in the late 1940s, problems and discrepancies in university involvement in labor education are also described. A trend is seen toward broader, more humanistic labor education and fuller cooperation and interdependence with management. Included are 17 references and a list of 26 universities with full time labor education departments.

- 552 EFFECTS OF THE SOCIAL AND ECONOMIC ENVIRONMENTS ON WORKERS' EDUCATION; UNITED STATES AND BRITISH EXAMPLES. Robinson, James W. In Adult Education; v19 n3 p172-185 Spr.1969.

Labor education programs in Great Britain and the United States have differed over time with respect to administration, finance, purpose, and content. However, the essential nature and scope of the programs in each country remained constant until recently. British labor education was traditionally concerned with the worker as an individual member of society and was administered by independent, working class organizations, while American labor education was primarily the responsibility of the unions and was concerned with the worker as a union member. By 1965 the traditional characteristics of the programs in the two nations had become almost totally reversed. The present study traces the events within each country which led to the reversal of the traditional programs and purpose of labor education.

6500 OCCUPATIONAL TRAINING

- 553 MANPOWER REQUIREMENTS FOR NATIONAL OBJECTIVES IN THE 1970's. Lecht, Leonard A. U. S. Dept. of Labor, Washington, D. C. Feb. 1968. 474p.

This report projects future manpower requirements needed for the achievement of the objectives set by the President's Commission on National Goals (1960). The estimate of dollar costs and manpower requirements have been derived from the quantitative relationship their achievement would require. Among the other findings were: (1) full achievement of the goals would require a labor force of 10 million more than can be expected in 1975; and (2) substantial progress toward achieving the goals could be a major factor in creating job opportunities for the country's unemployed and underemployed.

- 554 VOCATIONAL AND TECHNICAL EDUCATION. ANNUAL REPORT, FISCAL YEAR 1967. U.S. Office of Education, Washington, D. C. EDRS PRICE MF \$.75. HC available, Government Printing Office (\$1.50) 174p. May 69.
- 555 MANPOWER RESEARCH PROJECTS SPONSORED BY THE U.S. DEPARTMENT OF LABOR, MANPOWER ADMINISTRATION THROUGH JUNE 30, 1969. U. S. Dept. of Labor, Washington, D. C. Manpower Administration EDRS PRICE MF \$1.25 HC \$14.20 282p. 69.
- 556 TRAINING RESEARCH REGISTER, 1968. Great Britain. Dept. of Employment and Productivity, London(England). Available from Her Majesty's Stationery Office, 49 High Holborn, London, England (10s 6d) 129p. 68.

The 1968 training research register of the British Department of Employment and Productivity lists and classifies current and recently completed projects, and indicates the range of research in the training and closely related fields.

- 557 INVENTORY OF RESEARCH ON ADULT HUMAN RESOURCE DEVELOPMENT IN CANADA. INVENTAIRE DE LA RECHERCHE SUR LE DEVELOPPMENT DES RESSOURCES HUMAINES ADULTES AU CANADA. Page, Garnet T.; Caldwell, George. Canadian Dept. of Regional Economic Expansion, Ottawa (Ontario) EDRS PRICE MF \$1.00, HC \$11.95. Text in English and French, 237p.

This bilingual directory of research (1963-68) in the development of adult human resources in Canada indicates types of projects undertaken, principal objectives, institutions involved, amounts and sources of funding. It also shows which areas of research have been well covered, those with little or no coverage, and those which might be given a higher priority.

- 558 ABSTRACTS OF PERSONNEL RESEARCH REPORTS: VIII. 1954-1968. Barlow, Esther. Lakland Air Force Base, Texas. Clearinghouse for Federal Scientific and Technical Information (AD-695-483, MF \$.65, HC \$3.00) Dec. 1968. 160p.

Abstracts of 444 technical reports issued by the Personnel Research Division through December 1968. They cover studies in selection, classification, and utilization of Air Force personnel; systematizing information flow in support of personnel planning; methods of describing, evaluating, and structuring Air Force jobs; and development of procedures for improving the quality of Air Force personnel.

- 559 RESEARCH VISIBILITY, 1968-69. REPORTS ON SELECTED RESEARCH STUDIES IN VOCATIONAL, TECHNICAL AND PRACTICAL ARTS EDUCATION. American Vocational Association, Washington, D. C. EDRS PRICE MF \$.75 HC \$7.45. Also available from American Vocational Association, 1510 H St N.W., Washington, D. C. 20005 (\$1.50) 147p. 69 Reprinted from The American Vocational Journal.

560 BIBLIOGRAPHY OF PUBLICATIONS, HUMAN RESOURCES RESEARCH ORGANIZATION, AS OF 30 JUNE 1969. Human Resources Research Organization, 300 N. Washington St., Alexandria, Va. 22314 316p. Sept. 69

561 HUMRRO RESEARCH AND THE ARMY'S TRAINING PROGRAMS. Lavisky, Saul. Human Resources Research Organization. EDRS PRICE MF \$.25, HC \$1.25. 23p. Dec. 1969.

This paper reviews examples of Army use of HumRRO (Human Resources Research Organization) research and development products between 1951 and 1969. It describes ways in which behavioral and social science research has helped improve Army training. Categories are: basic combat training, advanced training, support training, officer training, aviation, and social science. One hundred references are included.

562 ABSTRACTS OF TECHNICAL REPORTS, JULY 1968 - JUNE 1969. Dudek, E. E.; Kuehner, Karl E. Naval Personnel and Training Research Lab., San Diego, Calif. Clearinghouse for Federal Scientific and Technical Information (AD-695-777, MF \$.65, HC \$3.00). 42p. Sept. 69.

This publication lists technical reports (and a short abstract of each report) issued by the Naval Personnel and Training Research Laboratory during Fiscal Year 1968. Twenty-five reports deal with aspects of personnel management; 29 others are on training.

563 FISCAL YEAR 1970 WORK PROGRAM FOR THE DEPARTMENT OF THE ARMY; RESEARCH AND DEVELOPMENT IN TRAINING, MOTIVATION, AND LEADERSHIP. Human Resources Research Organization, Alexandria, Va. Clearinghouse for Federal Scientific and Technical Information (AD-701-697, MF \$.65, HC \$3.00). 45p. Dec. 69.

Activities (28 Work Units and six other research efforts) performed by the Human Resources Research Organization for the Department of the Army for Fiscal Year 1970 have been grouped by six major areas: individual training and performance; unit training and performance; training for leadership, command, and control; language and area training; training technology; training management.

564 TRAINING EMPLOYEES. Bureau of National Affairs, Inc., Washington, D.C. Available from Bureau of National Affairs, Inc. 1231 25th Street N. W., Washington, D. C. 20037 (\$2.00) Survey No. 88. 17p. 69.

This survey investigated what employers are doing to meet training needs among rank and file employees and first line management. Data were obtained from executives on the panel of the Personnel Policies Forum (PPF). Some major findings were: (1) both formal and informal training for ordinary employees and first line supervisors are used by about 3/4 of PPF panel companies; (2) in almost half of PPF companies, final responsibility for conducting programs rests with staff exclusively; (3) 70% of the personnel executives said job training is given on company time only; (4)

most successful training methods and aids are on the job training, group conferences, films, written materials, slide projectors, and television; (5) about 1/3 of PPF companies use programmed instruction and more than 1/3 have formal apprenticeship programs; (6) on the job training is the chief method used with production, office and clerical, sales, and management personnel; about 70% of PPF companies have formal training evaluation programs; (7) actual teaching is done by first line management in almost 60 % of the companies.

- 565 TRAINING PROGRAMS OF PRIVATE INDUSTRY IN THE GREATER CLEVELAND AREA. Iacobelli, John Louis. Texas Univ., University Microfilms (Order No. 69-21,834 MF \$3.30, Xerography \$11.70) Ph. D. Thesis. 256p. Jun. 69.

Using personal interviews with 131 employers in greater Cleveland, this study surveyed current policies, practices, and attitudes in training advantaged and disadvantaged labor, and sought to determine the best possible way to coordinate Federal and private training programs.

- 566 OCCUPATIONAL EDUCATION BEYOND THE HIGH SCHOOL IN OKLAHOMA, AN ANALYTICAL STUDY WITH RECOMMENDATIONS FOR A STATEWIDE SYSTEM FOR MANPOWER DEVELOPMENT. Roney, Maurice W.; Braden, Paul V. Oklahoma State Univ., EDRS PRICE MF \$1.00 HC \$12.55. 249p. 15 Jan. 68.

- 567 SURVEY OF VOCATIONAL EDUCATION AND TRAINING, RELEVÉ DE LA FORMATION PROFESSIONNELLE ET TECHNIQUE, 1966-67. Canada. Dominion Bur. of Statistics, Ottawa. Education Div. Available from The Queen's Printer, Ottawa, Ontario, Canada (Catalog 81-209, \$1.00) Text in English and French. 89p. Sept. 69.

This report surveys vocational education and training in Canada during 1966-67 in publicly and privately operated institutions, excluding universities.

- 568 ON THE JOB TRAINING IN MILWAUKEE -- NATURE, EXTENT, AND RELATIONSHIP TO VOCATIONAL EDUCATION. Perlman, Richard. Wisconsin Univ., EDRS PRICE MF \$.25, HC \$2.05 39p. Jun 69.

A questionnaire surveying on the job training programs at industrial firms in the Milwaukee area was administered through interviews with the firm's personnel officers. Of a random sample of 245 companies, interviews were completed at 150 firms. The survey revealed a generally negative attitude toward vocational school efforts in imparting training in specific company jobs because vocational school education is seen as being too generalized, rather than offering adequate preparation in particular skills. It is suggested that there should be a separation of function of vocational school and company training, with the responsibility for training and practice opportunities being left to the company's on the job training, and the vocational school providing the general know-how common to most skilled work. It is also suggested that vocational school should accompany, rather than precede, employment in a firm offering on the job training.

- 569 PRIORITIES FOR VOCATIONAL-TECHNICAL EDUCATION RESEARCH IN NORTH CAROLINA. Puder, William H. North Carolina State Univ., EDRS PRICE MF \$0.25 HC \$1.10. Paper presented at the Adult Education Research Conference, Minneapolis, Minnesota, February 27-28, 1970 20p. Sep 69.

This survey was conducted to establish research priorities in the field of technical and vocational education in North Carolina. Contacted by a mail questionnaire were 812 randomly selected community college administrators, private vocational school operators, State Department of Education personnel, and classroom teachers. Respondents were asked to assign one of four priority rankings (not knowledgeable in this area, no priority, priority, or high priority) to each of 47 potential research items categorized into six general areas: curriculum, guidance, inservice and teacher education, evaluation, occupational education and manpower, and dissemination of occupational information.

- 570 A COMPARISON OF THE OPINIONS OF ADULT EDUCATION LEADERS AND EMPLOYMENT SERVICE SPECIALISTS REGARDING THE RELATIONSHIP OF ADULT EDUCATION PROGRAMS TO EMPLOYMENT NEEDS IN SELECTED URBAN COMMUNITIES. Ripple, Kenneth Earl. Michigan State Univ., University Microfilms (Order No. 68-17, 126, Microfilm \$3.00, Xerography \$10.15). Ed. D. Thesis. 222p. 68.

By investigating the opinions of 35 adult educators and 38 employment service specialists, this study sought to determine how effectively certain adult education programs in Michigan, Illinois, Indiana, and Wisconsin are meeting the educational and job preparation needs of individuals and communities, and to assess the relevance of adult education objectives to participants' needs and interests.

- 571 RESUME OF TWO ADULT EDUCATION SURVEYS, SPRING 1967 AND SCHOOL YEAR 1967-1968, BY RESEARCH COORDINATING UNIT. Wisconsin Board of Vocational, Technical, and Adult Education, Wisconsin Univ. EDRS PRICE MF \$.25, HC \$1.25. 23p. 68.

Two studies were made of part time adult education enrollees in Wisconsin: (1) a Spring 1967 study of relationships between demographic or socioeconomic data and information on reasons for course participation in the vocational system; (2) a study during the 1967-68 school year in which questionnaires were given, to vocational system course enrollees, course dropouts and completers, and enrollees in five University of Wisconsin extension centers. These were among the findings: (1) participation in the extension and vocational systems differed significantly on sex, educational background (both higher for the extension group), and occupation and income; (2) vocational students were generally motivated by occupational and home tasks, while extension students stressed becoming better informed citizens and escaping daily routines; (3) newspapers (for the vocational students) and catalogs (for the extension group) were the leading sources of course information; (4) instructors in the vocational system appeared more empathetic toward their students than extension instructors.

- 572 THE MOTIVATED WORKING ADULT. Hackman, Ray C. Available from the American Management Association, Inc., 135 West 50 Street, New York, N. Y. 10020 (\$13.00) 206p. 69.

To develop a system for describing and measuring the work motivation of individuals, the theoretical and practical implications of such research in both the behavioral and the biological realms are examined. Survey of the research on motivation indicates that a valid approach must be multi-dimensional, taking into account such varying themes as achievement, status, money and wealth, and approval.

- 573 AMERICANS VOLUNTEER. MANPOWER/AUTOMATION RESEARCH MONOGRAPH NO. 10. U.S. Dept. of Labor, Washington, D. C. Manpower Administration EDRS PRICE MF \$.25. HC from U.S. Government Printing Office. (L1.39/3, \$.50). 45p. Apr.69.

The first nationwide survey of volunteers reports social and economic implications for those who work for organized volunteer services in health, education, recreation, and social welfare. The main body of the report describes (1) Who, what, why, and how much (people) volunteer; (2) Recruiting, selecting, supervising and training volunteers; (3) The purpose of volunteers and meeting future needs. Appendixes contain the survey methods, the questionnaire, and the data in tabular form. Tabular information includes: (1) extent of religious and non-religious volunteer work among persons 14 years and over; (2) hours of volunteer work, by age and sex; (3) marital status, educational attainment, family income, and labor force status of volunteers; (4) kind, frequency, and hours of volunteer work, and (5) reasons for volunteer work.

- 574 AN ESTIMATION OF THE MILITARY CONTRIBUTION TO HUMAN CAPITAL. Jurkowitz, Eugene, Lewis. Columbia Univ. University Microfilms (Order No. 69-3079, MF \$3.00, Xerography \$8.80).

Effects of military vocational training on subsequent civilian income were examined in a group of first-term Army enlistees with varying types and amounts of vocational military training, including those with none. Data showed no positive impact by military vocational training on individual postservice income, but did reveal a positive relationship between preservice occupational experience, postservice occupations, and concomitant earnings.

- 575 MANPOWER ALLOCATION MODEL. VOLUME I. Litton Systems, Inc. Monterey, Calif. Clearinghouse for Federal Scientific and Technical Information (AD-698-126, MF \$.65, HC \$3.00) 144p. 16 May 69.

A model was developed to represent a typical Naval Air Training Facility (and perhaps other establishments). The objective was predicting least-cost manning levels in various labor skill categories required to produce trained pilots in predetermined numbers.

- 576 ESTIMATION OF MANAGERIAL AND TECHNICAL PERSONNEL REQUIREMENTS IN SELECTED INDUSTRIES. TRAINING FOR INDUSTRY SERIES, No. 2. United Nations Industrial Development Organization, Vienna (Austria). Available from United Nations Publications, Sales Section, Room 1059, New York, N. Y. 10017 (\$2.50 US) 250P. Sep 68.

The need to develop managerial and technical personnel in the cement, fertilizer, pulp and paper, sugar, leather and shoe, glass, and metal processing industries of various nations was studied, with emphasis on necessary steps in developing nations to relate occupational requirements to technology, processes, and scale of output. Estimates were based on comparable industries in the more industrialized nations.

- 577 BLUE TO-WHITE-COLLAR JOB MOBILITY. Stern, James L.; Johnson, David B. Wisconsin Univ., Clearinghouse for Federal Scientific and Technical Information (PB-177-360, MF \$.65 HC \$3.00) 68.

Employees of Milwaukee firms who had made blue-to-white-collar shifts were interviewed to discover how many white-collar jobs were being filled by former blue-collar workers, what type of jobs these were, and what kind of blue-collar workers made the blue-to-white-collar occupational shifts. Some of the findings were: (1) A substantial number, 22%, of the men hired into white-collar jobs in Milwaukee County in 1961-62 had at least a year of blue-collar experience; (2) 30% of shifts were into managerial, 24% into technical, 21% into clerical, and 17% into sales occupations; (3) those who shifted had an average age of 30 to 35 at the time of the shift, had a higher educational attainment than nonshifters, considered their new jobs better than that held by their friends and father, and three quarters were married; (4) the majority of the shifts occurred within the same company and were company initiated but more than two of three of the inter-firm shifts were attributed to respondent initiative, and (5) no significant carry-over of actual duties was found.

- 578 CAREER DECISION-MAKING PROCESSES OF IOWA YOUNG ADULTS. FINAL REPORT. SOCIOLOGICAL STUDIES IN EDUCATION. SOCIOLOGY REPORT 77. Yoesting, Dean And Others. Iowa State Univ. EDRS PRICE MF \$.25 HC \$2.30 44p. May 68.

This study had four objectives: (1) to determine the relationship between migration, occupational and educational aspirations; (2) to determine differences in career patterns between males and females, farm and nonfarm residents; (3) to determine the relationships between social and personal characteristics and occupational and educational attainments; and (4) to determine the relationships between migration and social and personal characteristics. Data were obtained in 1948, in 1955, and a second follow-up done of 143 of the same population in 1967. (1) more females than males migrated from home communities, (2) males had a higher degree of congruency between occupational aspirations and attainments than females, and (3) occupational attainments were related to socioeconomic background, parents' education, migration, and educational aspirations and attainments.

- 579 EFFECT OF TRAINING ON THE PRODUCTIVITY AND TENURE OF SEWING MACHINE OPERATORS. Lefkowitz, Joel. In Journal of Applied Psychology v54 n1 Pt.1 p81-86 1970.

A significant determinant of the high rate of personnel turnover among a population of female sewing machine operators was inadequate initial training. 208 new trainees received either 1, 2, or 3 days' vestibule training. The longer the training, the lower the turnover rate, but the lower the productivity as well. Both effects were statistically significant, but the effects on productivity were deemed of less practical significance. A 4th training group received 3 days integrated vestibule and on-the-job training and achieved the best balance of productivity and employee retention.

- 580 SOME RESULTS OF THREE BASIC SKILLS TRAINING PROGRAMS IN AN INDUSTRIAL SETTING. Mollenkopf, William G. In Journal of Applied Psychology v53 n5 p343-347 1969.

Analyzed test scores obtained before and after instruction of 65 men and 48 women to evaluate outcomes of 3 types of training. The training programs were designed to improve basic skills of present and prospective employees in production, office, and laboratory work.

- 581 MANPOWER PROGRAMS AS MARKOV CHAINS. Durbin, E. P. RAND Corp., Clearinghouse for Federal Scientific and Technical Information (PB-183-022, MF \$.65 HC \$3.00). 36p. Oct. 1968.

This memorandum indicates how manpower training programs can be viewed as Markov processes (models for setting forth joint probabilities of events in a sequence) and discusses the utility of such a conceptual description.

- 582 THE MECHANICS' INSTITUTES OF THE U.K.: A STUDY OF MIDDLE CLASS DOMINANCE WITHIN A NATIONAL MOVEMENT. Collins, Michael Saskatchewan Univ., Saskatoon. M. Ed. Thesis. 153p. Sept. 1969.

An historical review of the development of the Mechanics' Institutes in the United Kingdom suggests that they acted to emphasize rather than alleviate class differences between the working class and the middle class, by informing the workers of middle class values rather than promoting working class aims and ideals. The author suggests that the attempts of middle class sponsors to impose their values led to the estrangement of the workers from the institutes, and thus the mechanics' institutes came to represent the working class in name only.

- 583 A STUDY OF THE TRAINING OF TOOL AND DIE MAKERS. Horowitz, Morris A.; Herrnstadt, Irwin L. Northeastern Univ., Boston, Mass. Clearinghouse for Federal, Scientific and Technical Information (PB-187-558 MF \$.65 HC \$3.00). 431p. Sept. 1969.

To test a methodology which would determine and evaluate the various paths of skill acquisition of critical occupations, the tool and die makers occupation was selected in the Boston Metropolitan Area for a longitudinal study. The six training paths of tool and die makers interviewed were: on the job training; picked up the trade; vocational high school; apprenticeship; vocational high school plus on the job training; and vocational high school plus apprenticeship. Each training path was examined in terms of performance rating; the length of time spent in training and the amount of time the tool and die makers took to become competent craftsmen. There was some evidence that men with apprenticeship training were upgraded faster than other men. However, upward mobility depended more on the individual apprentice and the company policies, than on the training received in metal working and tool die work.

- 584 RELEVANT LEARNINGS FOR THE INDUSTRIAL MANUFACTURING OPERATIVE. Dirksen, Ralph Edward. Ohio State Univ. University Microfilms (Order No. 70-6765, MF \$3.75, Xerography \$13.30) 291p.; Ph.D. Thesis 69.

To identify relevant knowledges for operatives in manufacturing firms and to compare the way in which three groups perceived these knowledges, a set of 72 items was categorized as personnel, management, production, and general industrial practices. A card deck, an adaptation of Q-sort technique, was administered to 85 operatives, 30 managers, and 30 industrial arts teacher educators at Ohio State University. Each person sorted the cards into (1) related to operative work, (2) somewhat related, and (3) unrelated. There was the strongest agreement between operatives' ranks and managers' ranks. Ranking second in agreement were the ranks between managers and educators, and third were the ranks between operatives and educators. Neither industrial arts experience, age, educational attainment, nor size of firm made any significant difference in how operatives sorted the items.

- 585 AN ANALYSIS OF SKILL REQUIREMENTS FOR OPERATORS OF AMPHIBIOUS AIR CUSHION VEHICLES (ACVs). McKnight, A. James; And Others. Human Resources Research Organization. Clearinghouse for Federal Scientific and Technical Information (AD-698-458, MF \$0.65. HC \$3.00) TR-69-18 59p. Nov 69.

- 586 SOCIAL AND EDUCATIONAL BACKGROUNDS OF STUDENTS AT A COLLEGE OF TECHNOLOGY. Evans, Gareth In Vocational Aspect of Education v21 n50 p135-41 Autumn 69.

A survey was conducted at Wolverhampton College of Technology (England) to attempt to describe the determinants of whether a student pursues full-time or part-time study, and the group differences between full-time students and various categories of part-time students.

See also: SECTION 1650 SELECTION, PREDICTION OF SUCCESS: 6150 TECHNICAL EDUCATION; 6550 OCCUPATIONAL TRAINING - UNSKILLED, DISADVANTAGED; 6600-6850 VARIOUS OCCUPATIONS: item 303 personality of training directors;

688 role of private enterprise in U.S. foreign assistance; 102 taxonomy of perceptual-motor response processes; 385 effect of internal or external controls in prison education; 380 labor mobility in Texas; 743 survey of Federal educational programs; 9, 10 implications of social and economic changes for educational policy in the next two decades; 277 effectiveness of low fidelity training devices; 177 adaptive training in tracking techniques; 324 retention in retraining programs for middle-aged; 187 programmed instruction in Army signal training; 363 review of HumRRO research on low aptitude Army training; 332 Iowa program for training older workers; 742 national survey of private vocational schools; 310 cost-benefit analysis of manpower programs; 180 evaluation of three skill training programs; 349, 355, 347 studies of career patterns of women; 325 pace and accuracy in training middle-aged; 33, 97, 241, 241a. four part annotated bibliography on training.

6550 Unskilled, Disadvantaged

587. MANPOWER AND THE CITY. Bolino, August C. Available from Schenkman Publishing Company, Inc. 1 Story Street, Harvard Square, Cambridge, Massachusetts 02138 (\$8.95) 300p. 69.

Stressing the problems of American inner cities, this volume reviews major manpower problems in their urban setting, various Federal training and educational approaches to maximizing the use of manpower, and the directions that these programs may take during the 1970s.

- 588 PRIVATE INDUSTRY AND THE DISADVANTAGED. Shelley (E.F.) and Co., New York, N. Y. 170p. Jan 69.

This study, made for the Urban Coalition, surveyed and analyzed efforts by private enterprise to recruit and train low skilled minority group workers (especially Negroes) for productive roles in the primary labor market. Emphasis was on apparent successes and failures by 64 large enterprises in 13 selected urban areas, and on problems which they are already facing or can expect to encounter. Recruitment techniques, screening, skill training, staff training, orientation, supportive services, and provisions for upgrading were scrutinized to determine what has proved successful and why. Corporate motivation, program costs, and local trade union attitudes toward "hard core" hiring, emerged as factors affecting the level of company commitment. It was recommended that business and coalition groups focus on analyzing potential upgrading techniques and developing private industry upgrading programs.

- 589 EQUAL APPRENTICESHIP OPPORTUNITIES: THE NATURE OF THE ISSUE AND THE NEW YORK EXPERIENCE. Marshall, F. Ray; Briggs, Vernon M., Jr. Michigan Univ., Available from Publications Office, Institute of Labor and Industrial Relations, P. O. Box 1567, Ann Arbor, Michigan 48106 (\$1.25) 63p. Nov 68.

The main issues in this study are the paucity of black apprentices and the transferability of success achieved in New York by the Workers Defense League to other places. The paper: (1) outlines the general nature of apprenticeship in the United States; (2) discusses the reason for the low participation of the blacks in these programs in the past; (3) analyzes in detail the New York experience; and (4) offers some conclusions concerning a model permanent program to get more blacks into apprenticeship programs.

- 590 EMPLOYERS AND MANPOWER TRAINING PROGRAMS: DATA COLLECTION AND ANALYSIS. Greenberg, D. H. RAND Corp., Clearinghouse for Federal Scientific and Technical Information (PB-183-021, MF \$0.65, HC \$3.00) OEO-4191 86p. Oct 68.

This study uses data collected from the personnel files of 16 firms which hired graduates from four manpower training programs; 11 of the companies also provided information for a control group of persons hired at the same time for the same jobs. This approach was studied as an alternative to interviewing graduates; also it was hoped that it would show something of the role of the company in post-training experiences. The employer approach to followup yielded inexpensive, but somewhat limited data.

- 591 DISADVANTAGED YOUTH APPROACHING THE WORLD OF WORK; A STUDY OF NYC ENROLLEES IN NEW YORK CITY. Mandell, Wallace; and Others. Wakoff Research Institute, Staten Island, N. Y. Clearinghouse for Federal Scientific and Technical Information (PB-189-015, MF \$0.65 HC \$3.00) 234p. Nov 69.

The central question of this research pertained to the degree to which Neighborhood Youth Corps (NYC) enrollees, NYC personnel, and potential employers shared a common frame of reference, and held similar views regarding the transactions involved in entering the world of work. This was studied by an examination of the work related perceptions of NYC enrollees, their work experience supervisors, and employers. The negotiating process itself during employment interviews was studied. Results of the study presented a picture of youth frightened by the prospects of entering the world of work. They viewed the world of work as extremely demanding, and saw themselves as essentially unprepared for these demands. Employers and supervisors took the position that, although young people are unprepared, little preparation is needed. The NYC enrollees believed preparation is needed.

- 592 EMPLOYING THE HARD-CORE UNEMPLOYED. Johnson, Lawrence A. Available from American Management Association, 135 W. 50th St., New York, N. Y. 10020 (\$5.00) AMA Research Study 98. 227p. 69.

Accounts are given of how 43 companies are organized to work with the hard core unemployed and coach their foremen and supervisors.

- 593 UTILITY COMPANIES FIRST YEAR IN NABS PROGRAM. Recchia, Louis In Training Development Journal v24 n6 p46-48 Jun 1970.

An evaluative survey of cooperative disadvantaged training by business and government in 11 gas and electric companies.

- 594 WORK AND TRAINING IN PUBLIC WELFARE. Vigilante, Joseph L. Columbia Univ. University Microfilms (Order No. 68-16,939, MF \$6.65, Xerography \$23.65). D.S.W. Thesis. 523p. 68.

This study described and compared 12 current national work and training programs under the Economic Opportunity Act of 1964 and the 1962 Amendments to the Social Security Act; investigated whether operation of the two public welfare systems reflected the intent of national policy and client needs; and identified operational problems encountered in the public welfare programs.

- 595 MANPOWER RESEARCH PROJECTS SPONSORED BY THE U. S. DEPARTMENT OF LABOR... THROUGH JUNE 30, 1968. U. S. Department of Labor Manpower Administration EDRS PRICE MF \$1.00 HC \$11.25 223p. Oct. 68.

- 596 THE SCHOOL DROPOUT AND THE WORLD OF WORK: A REVIEW OF THE ERIC LITERATURE. ERIC-IRCD URBAN DISADVANTAGED SERIES, NUMBEP 11. Jablonsky, Adelaide, Ed. Columbia Univ. EDRS PRICE MF \$.25 HC \$1.45 27p. Mar. 1970.

This annotated bibliography is arranged in the following groups: data collection and analysis, program planning, program descriptions, and program evaluation and follow-up. A brief review of "The World of Work" of the school dropout precedes the bibliography.

- 597 THE JOB CORPS: A REVIEW OF THE ERIC LITERATURE. Jablonsky, Adelaide Columbia Univ. EDRS PRICE MF \$0.25 HC \$1.75 33p. ERIC-IRCD Urban Disadvantaged Series, No. 13 Mar 70.

This annotated bibliography includes 46 items arranged in the following sections: history and need; planning and program descriptions; administration; instruction (reading, and other); guidance; and, evaluations and recommendations.

- 598 INTERPRETIVE STUDY OF COOPERATIVE EFFORTS OF PRIVATE INDUSTRY AND THE SCHOOLS TO PROVIDE JOB-ORIENTED EDUCATION PROGRAMS FOR THE DISADVANTAGED. Banta, Trudy W.; Towne, Douglas C. Tennessee Univ. EDRS PRICE MF \$1.00 HC \$13.35 263p. Apr 69.

- 599 FEDERAL TRAINING PROGRAMS FOR DISPERSED EMPLOYMENT OCCUPATIONS. Taylor, David P.; Piore, Michael J. Massachusetts Institute of Technology, Working Paper 42. Clearinghouse for Federal Scientific and Technical Information (PB-188-675, MF \$0.65, HC \$3.00). 32p. July 1969.

The focus of this study of three on the job training programs (for tool and die makers, offset printers, and cooks and chefs) was whether Federal financing substituted for private efforts which would have occurred in its absence; or, more generally, how such substitution is to be avoided in program design and administration. Two training patterns emerged: in occupations with concentrated employment, individual employers organize their own training programs; in restaurants and other dispersed employment settings, workers programmed their own training by moving from job to

job seeking new experience. In industries employing tool and die workers, both systems coexisted. It appears that the programs were under great pressure to support the distinctive training patterns they exemplified; and, to the extent that they succumbed to this pressure, they simply substituted for training which would otherwise have been privately executed and financed.

- 600 DETERMINANTS OF RATES OF RETURN TO INVESTMENT IN ON-THE-JOB TRAINING. Ramussen, Dale Bruce Southern Methodist Univ. Clearinghouse for Federal Scientific and Technical Information (PB-184-024, MF \$0.65, HC \$3.00) Ph. D. Thesis. 159p. Mar 69.

The study evaluates public investment in on the job training (OJT) and tries to identify systematic determinants of the profitability of this investment.

- 601 A CASE STUDY IN OBSERVATIONAL MEASUREMENT OF BEHAVIORAL FACTORS ASSOCIATED WITH INCREASED EMPLOYABILITY OF OUT OF SCHOOL NEIGHBORHOOD YOUTH CORPS ENROLLEES. Sykes, Richard E.; And Others Minnesota Univ. Clearinghouse for Federal Scientific and Technical Information (PB-189-034, MF \$0.65, HC \$3.00) Final report. 296p. Dec. 1969.

This study was concerned with whether Neighborhood Youth Corps (NYC) enrollees became any more employable as a result of their work experience. It was also concerned with factors that induce enrollees to remain in NYC or leave it. The study pioneered in a method of quantitative observation of enrollees and work groups in field situations.

- 602 A STUDY OF THE EFFECTIVENESS OF SELECTED OUT-OF-SCHOOL NEIGHBORHOOD YOUTH CORPS PROGRAMS. A STUDY OF TERMINATED ENROLLEES IN THREE URBAN OUT-OF-SCHOOL NEIGHBORHOOD YOUTH CORPS PROGRAMS. Walther, Regis H.; Magnusson, Margaret George Washington Univ. Clearinghouse for Federal Scientific and Technical Information (PB-187-935, MF \$0.65, HC \$3.00) 113p. Feb 69.

The paper reports a study of youth who terminated from the out-of-school Neighborhood Youth Corps. The study goals were to compare the effectiveness of centralized and decentralized program operations, to investigate the effect of different emphases on job development, and to investigate inexpensive evaluation techniques which might serve as a model for self-evaluation by local NYC program.

- 603 A STUDY OF THE EFFECTIVENESS OF SELECTED OUT-OF-SCHOOL NEIGHBORHOOD YOUTH CORPS PROGRAMS. THE CINCINNATI CLERICAL CO-OP: A FORMAL SKILL TRAINING PROGRAM. Walther, Regis H.; Magnusson, Margaret L., George Washington Univ. Clearinghouse for Federal Scientific and Technical Information (PB-187-934, MF \$0.65, HC \$3.00) 165p. 69.

The paper reports a study of a formal skill training program to enhance the clerical employability of enrollees in the Cincinnati out-of-school Neighborhood Youth Corps.

604. ON-THE-JOB TRAINING FOR MINORITIES: AN INTERNAL STUDY. Frank, Harold Hillel. California Univ., Los Angeles University Microfilms (Order No. 70-2202, MF \$4.60, Xerography \$16.20). Ph. D. Thesis. 358p. 1969.

This study evaluated the internal workings of a secretarial and clerical skill training program for nonwhite women. Most data came from over 1,000 two to five minute observations of trainees during the on the job phase of training. Additional observations were made in a classroom on company premises, where trainees received formal instruction during the morning. Arguments were set forth for restructuring this program and others like it.

605. THE EDUCATIONAL DEFICIENCIES OF OCCUPATIONALLY UNSTABLE ECONOMIC-OPPORTUNITY MIGRANTS; AN EDUCATIONAL POLICY STUDY. Jensen, Gale E. Michigan Univ. Program on Community and Educational Reorganization for Economic Development, University of Michigan, Ann Arbor, Mich. 48104 35p. 68.

Concentrating on two regions in Lower Michigan, this study investigated criteria for identifying occupationally unstable persons who contemplate migrating; significant characteristics of this group; and educational deficiencies.

606. A SUMMARY OF JOB TRAINING PROGRAMS IN DETROIT; A COMPARATIVE STUDY. Sommerfeld, Donald Alfred Michigan Univ., Clearinghouse for Federal Scientific and Technical Information (PB-183-742, MF \$0.65, HC \$3.00). Ph. D. Thesis 168p. 69.

A followup study was made of 200 graduates (50 from each program) of different kinds of job training in Detroit.

607. A COMPREHENSIVE AND SYSTEMATIC EVALUATION OF THE COMMUNITY ACTION PROGRAM AND RELATED PROGRAMS OPERATING IN ATLANTA, GEORGIA. Crawford, Fred R. Emory Univ. Clearinghouse for Federal Scientific and Technical Information (PB-186-108; PB-185-939; and PB-185-972 through PB-185-976, each at MF \$0.65, HC \$3.00) Jun 69.

This study which extends over two volumes, four appendices and a final report describes the Neighborhood Service Aide concept within the Economic Opportunity Atlanta, the goal of which was the placing of hardcore unemployed or underemployed in permanent employment.

608. A STUDY OF A SELECTED MANPOWER DEVELOPMENT TRAINING ACT PROGRAM FOR TRAINING ADULTS. Vermeulen, Robert Western Michigan Univ. University Microfilms (Order No. 69-9901, MF \$3.00, Xerography \$8.40) Ed. D. Thesis. 185p. 68.

This study concentrated on evaluating the success of the Lincoln Skills Center, Kalamazoo, Michigan, in helping trainees improve their basic education and vocational skills and then to find suitable employment. Relationships were also investigated between vocational proficiency and literacy skill levels as well as between basic education achievement and job success.

609. A STUDY OF THE CHARACTERISTICS WHICH AFFECT EMPLOYMENT; A CASE STUDY OF THE BUSINESS EDUCATION PROGRAM IN ATLANTA UNDER THE MANPOWER DEVELOPMENT AND TRAINING ACT. Hill, Mary Florence. Atlanta Univ. M.B.A. Thesis. 47p. Aug 67.

This study examined MDTA trainee characteristics which affect employment in general, with emphasis on salaries, job retention, and kind of employment secured by twelve selected Business Education Training Program graduates in Atlanta, Georgia. National MDTA statistics were summarized. Race, age, sex, educational level, prior to training, family status, and duration of unemployment, significantly affected employment patterns both nationally and within the Atlanta sample. Members of the sample who were nonwhites, women, over 45, or with less than a tenth grade education fared less well than others.

610. AN HISTORICAL AND COST ANALYSIS OF MANPOWER AND TRAINING ACT PROGRAMS IN THE WASHOE COUNTY (RENO) SCHOOL DISTRICTS. Flores, Froilan. Utah Univ. University Microfilms (Order No. 69-1775, MF \$3.00, Xerography \$9.25). Ph. D. Thesis. 203p. 68.

This study dealt with the historical development of the Manpower Development and Training Act of 1962 and the cost of administering the program in three bookkeeping classes.

611. THE ECONOMIC EFFECTIVENESS OF ON-THE-JOB TRAINING: THE EXPERIENCE OF THE BUREAU OF INDIAN AFFAIRS IN OKLAHOMA. Scott, Loren C. In Industrial and Labor Relations Review v23 n2 p220-236 Jan 70.

As an incentive to firms to undertake training, a partial wage subsidy was provided. Indians desiring OJT were screened and then referred to the firm for employment and training. Information obtained from participating employers suggests that the length of training periods is generally too long. A theoretical framework for benefit, cost analysis of the program was developed along the following dimensions: (1) private benefits; (2) social benefits; (3) private costs; and (4) social costs.

612. THE EVALUATION OF GOVERNMENT PROGRAMS: THE CASE OF NEW HAVEN'S MANPOWER TRAINING ACTIVITIES. Goldfarb, Robert S. Yale Univ. Ph. D. Thesis. Clearinghouse for Federal Scientific and Technical Information (PB-182-173, MF \$0.65, HC \$3.00) 260p. 68.

This thesis attempts to deal with difficult methodological problems of program evaluation; the particular programs considered are two types of manpower training programs: institutional or "classroom" training and government subsidized on the job training. Characteristics of cost-benefit analysis are investigated and the method is criticized for use in analyzing manpower programs. Two data sources are used to study the production process. First, a group of trainees who underwent each type of training were interviewed. Second, employers who participated in the OJT program were interviewed, as were a group of the largest employers in the New Haven area.

613. A COMPREHENSIVE ASSESSMENT OF THE PROBLEMS AND CHARACTERISTICS OF THE NEIGHBORHOOD YOUTH CORPS ENROLLEES: A PILOT INVESTIGATION. Ekerman, William C.; And Others Research Triangle Inst., Clearinghouse for Federal Scientific and Technical Information (PB-183-080, MF \$0.65, HC \$3.00) 433p. 1 Mar 69.

A study was made of problems and characteristics of Neighborhood Youth Corps enrollees in North Carolina and recommendations made for program development and research. A surprisingly high number (about 21%) show clear evidence of sufficient ability for completing high school or entering college; 35% are good candidates for manpower training programs and with extensive remedial education a sizable number may be able to finish high school. Forty-three percent are seriously deficient in basic school subjects (less than grade 6) and need comprehensive rehabilitative services; specialized training programs combining job skill training with job related educational upgrading, such as is found in work training in industry programs is probably most appropriate for them.

614. TRAINING AND EMPLOYMENT OF THE DISADVANTAGED; A COMMUNITY'S RESPONSE TO THE PROBLEMS. Gatewood, Lucian Beu Wisconsin Univ. M.A. Thesis. 124p. Jun 69.

This study sought to identify the manpower response of Milwaukee to problems in training and employing the hard core disadvantaged. It investigated whether manpower training programs had demonstrated administrative efficiency and reached the disadvantaged; basic strategies being used in the manpower war against poverty; basic manpower problems common to the ghetto or inner city; the role industry can play in training and employing the disadvantaged; and pressures and problems that may arise when employers, unions, and government involve themselves in efforts of this kind.

615. A STUDY OF THE EFFECTIVENESS OF SELECTED OUT-OF-SCHOOL NEIGHBORHOOD YOUTH CORPS PROGRAMS: IMPLICATIONS FOR PROGRAM OPERATIONS AND RESEARCH. Walter, Regis H. George Washington University Clearinghouse for Federal Scientific and Technical Information (PB-187-963, MF \$0.65, HC \$3.00) 75p. Feb 69.

This paper discusses research implications for program operations of the Neighborhood Youth Corps (NYC) and some of the lessons which have been learned about how to conduct research on disadvantaged groups. Two phases of the longitudinal study of the effectiveness of NYC have been completed in five urban sites. During Phase I data regarding program operations were developed and bases were established for more sophisticated studies. In Phase II, subjects were studied over a longer period of time; and more intensive analysis of program components were completed. It was found that the NYC programs were reaching disadvantaged youth with programs which were well accepted by these youths and which resulted in improved work and community adjustments in the post NYC period when the programs emphasized vocational assistance. It was apparent, however, that even in cities where it was best organized, the NYC was not achieving its potential effectiveness.

616. A GROUP ORIENTATION APPROACH FOR FACILITATING THE WORK ADJUSTMENT OF THE HARD-CORE UNEMPLOYED. Rosen, Hjalmar; Teahan, John E. Wayne State Univ. Clearinghouse for Federal Scientific and Technical Information (PB-188-045, MF \$0.56, HC \$3.00) Final report. 209p. 69.

The major objective of this project was to achieve a lasting integration of Negro hard-core unemployed men in an ongoing corporate work force. It was intended to develop values necessary for successful employment, particularly with regard to regularity of attendance, punctuality, conformity to work rules and regulations and motivation to accept and perform job demands. The general assumption behind this study is that effective employment of the hard-core unemployed is dependent on "dual acculturation," involving mutual adaptations by the new workers and their employers (especially first line supervisors).

617. THE WAIS VS. THE GATES AS A VOCATIONAL COUNSELING TOOL WITH DISADVANTAGED ADULTS. Stanley, Charlton S. EDRS PRICE MF \$0.25, HC \$1.30 24p.(69)

This study was to compare the Wechsler Adult Intelligence Scale (WAIS) and the General Aptitude Test Battery (GATB) and to examine the results of these tests in terms of usefulness to the vocational counselor. The population selected had a sixth grade modal reading level and a modal age between 22 and 29, and achieved the fifth grade level in arithmetic. It was 9/10s Negro, and 6/7s female. More than half the subjects failed to make more than two patterns, two or less patterns being the criteria of five experienced counselors for determining the usefulness of the GATB results. The range of scores on the WAIS demonstrated the enormous variance of abilities of the clients tested. On the other hand, because over half of the subjects failed to meet the criteria the GATB was found to lack variability. The primary weakness of the WAIS was that the subtests were not factored for vocational and occupational areas. In this respect, the GATB would be useful if the scores were more readily available. The shortcomings of the GATB seem to outweigh its usefulness for evaluation of a population such as the one used in this study.

618. THE SELF-CONCEPT CHANGE OF MALE ADULTS ENROLLED IN A M.D.T.A. AGRI-BUSINESS TRAINING PROGRAM. Monson, Marvin Ralph. Nebraska Univ. University Microfilms (Order No. 69-22,289, MF \$3.00, Xerography \$6.20) Ph. D. Thesis. 130p. Jun 69.

This study investigated effects of a MDTA program on the self-concept of 178 male adults, high school graduates and dropouts, enrolled in the Agri-Business School. The dropouts were divided into those who successfully passed General Educational Development (GED) tests and received a high school diploma (GED Successful), those who tried but failed (GED Unsuccessful), and those who did not try to obtain the diploma. Self-concept changes were examined in relation to age, intelligence, length of training, and educational accomplishment. These were the conclusions: (1) graduates and nongraduates did not differ significantly on self-concept scores as they entered the MDTA program; (2) participants did show significant self-concept changes (positively related to educational accomplishment and length of training) during their enrollment in the program; (3) intelligence seemed signif-

icantly related to change for all groups but GED Unsuccessful; (4) age seemed significant in the total group and for both GED groups. Recommendations called for additional research on the variables, flexible grouping of trainees, and more attention to motivational considerations.

619. FEASIBILITY OF STOREKEEPER CLASS "A" SCHOOL TRAINING FOR GROUP IV PERSONNEL. Standlee, Lloyd S.; And Others. Naval Personnel Research Activity, San Diego, Calif. Clearinghouse for Federal Scientific and Technical Information, (AD-672-345, MF \$0.65, HC \$3.00). 68.

The performance of Group IV personnel who were additionally restricted on General Classification Test (GCT) was compared with that of 37 regular recruit personnel in two classes of the Storekeeper School. Eight of the 14 Group IV trainees failed the course. All had great difficulty in learning how to fill out and maintain the required record forms. This difficulty was judged to stem from the reading and mathematics requirements of the records system. In view of the high degree of pencil-and-paper task requirements of the Storekeeper rating, and the low probability of success in these tasks, it is recommended that Group IV personnel who are also low on GCT should not be sent to Storekeeper Class "A" School.

620. FLEET PERFORMANCE OF PROJECT 100,000 PERSONNEL IN THE AVIATION STRUCTURAL MECHANICS (STRUCTURES) RATING. FINAL REPORT. Mayo, George D. Naval Personnel Research Activity, San Diego, Calif. Clearinghouse for Federal Scientific and Technical Information (AD-635-601, MF \$0.65, HC \$3.00) 29p. Feb 69.

The fleet performance of a small group of Project 100,000 (low aptitude) personnel was assessed by means of an evaluation form completed by their supervisors after approximately seven months. The performance of Project 100,000 personnel in the AMS rating ranged from above average to satisfactory. On the whole, the study suggests that the use of Project 100,000 personnel in the AMS rating is not in the best interest of the Navy.

621. THE ROLE OF SOCIAL REINFORCEMENT PARAMETERS IN IMPROVING TRAINEE TASK PERFORMANCE AND SELF-IMAGE. Baron, Reuben, M.; And Others Wayne State Univ. Clearinghouse for Federal Scientific and Technical Information (PB-187-700, MF \$0.65, HC \$3.00) 268p. Sep 69.

To determine conditions under which unemployed job trainees can be motivated to obtain maximum benefits from a job retraining program, this study focused on reinforcement; that is, the most effective ways of communicating "success" or positive evaluative experiences to a Negro working class population of high school age.

622. A STUDY OF THE EFFECTS OF PRE-VOCATIONAL TRAINING AND FAMILY SERVICE COUNSELING ON THE LONG-TERM UNEMPLOYED. Philadelphia Manpower Utilization Commission Clearinghouse for Federal Scientific and Technical Information (PB-183-758, MF \$0.65, HC \$3.00). Final Report 257p. Mar 69

This study of prevocational training and family service counseling in Philadelphia is based on the premise that the long term unemployed male

needs preparation on how to become a worker before he can successfully be trained for employment. There are social and psychological factors, chiefly lack of competitiveness, which are obstacles to successful retraining of men unemployed six months or more. Findings show that work adjustment training, and, where indicated, family service counseling, increase a long term unemployed worker's chances of receiving and completing Manpower Development and Training Act training without necessarily improving subsequent experiences in obtaining a job or in wages.

623. WORK CLIMATE AS RELATED TO THE PERFORMANCE AND RETENTION OF HARD-CORE UNEMPLOYED WORKERS. Friedlander, Frank; Greenberg, Stuart. Case Western Reserve Univ. EDRS PRICE MF \$0.25, HC available from Case Western Reserve University, Sch. of Management, Cleveland, Ohio (Single copies are free). 10p.(1969)

The job climate in which 24 hard-core unemployed (HCU) workers were placed was explored with a view toward determining climate variables which might increase performance and retention. HCU's perceived their climate as far less supportive than did their respective supervisors. Those who perceived their climate as supportive tended to be rated by their supervisors as having higher competence, congeniality, and effort. In contrast, HCU reliability was unrelated to job climate and negatively related to job retention. Increasing the supportiveness of the job climate seems to be a major avenue for increasing performance; and the implementation of these changes lies less in increasing the HCU's competence than in exploring the low reliability (lateness and absence) he demonstrates in response to his climate.

624. VALIDITY OF USES APTITUDE TEST BATTERIES FOR PREDICTING MDTA TRAINING SUCCESS. Droege, Robert C. In Personnel and Guidance Journal p984-89 June 1968.

Aptitude test batteries for a large number of specific occupations have been developed. These are in daily use by Employment Service counselors of candidates for training programs established under MDTA. A summary of the available evidence on the predictability of success of enrollees of these tests, based on data for 875 MDTA trainees in 12 courses, showed that in 10 of 12 samples the operational tests norms showed significant cross validity.

625. EMPLOYMENT EXPERIENCE AFTER MDTA TRAINING; A STUDY OF THE RELATIONSHIP BETWEEN SELECTED TRAINEE CHARACTERISTICS AND POSTTRAINING EXPERIENCES. Trooboff, Benjamin Michael. Georgia State College. University Microfilms (Order No. 69-2261, MF \$3.00, Xerography \$10.15). D.B.A. Thesis. 222p. 1968.

Graduates and dropouts of the Atlanta Training Program under MDTA were surveyed to ascertain training effectiveness and to seek relationships between certain trainee characteristics and employment success.

626. RELOCATING MEXICAN AMERICANS WHO HAVE BEEN RETRAINED. Ruesink, David C. And Others. Paper presented at Rural Sociological Society meeting (San Francisco, California, August 28-31, 1969). EDRS PRICE MF \$0.25, HC \$0.80. 14p. August 28, 1969.

A project involving the cooperative effort of the Ling-Temco-Vought Corporation and governmental agencies relocated 684 South Texans to metropolitan areas for work as aircraft assemblers after a four-week training program in the Lower Rio Grande Valley. About 90% of these relocatees were Mexican Americans. Sixteen months after the first families were relocated and four months after the last families were relocated there were 75.58% of the trainees still on the job. The purpose of this project was to study the adjustment which takes place as a result of retraining and relocation and to determine what sociological factors represented the best predictors for success in the program including retention after retraining.

627. THE MEXICAN -AMERICAN CURRICULUM STUDY. REPORT OF A COUPLED BASIC EDUCATION ON-THE-JOB TRAINING PROGRAM FOR MONOLINGUAL MEXICAN-AMERICANS. Lopez, John K., California State Dept. of Education. EDRS PRICE MF \$0.75 HC \$9.15. 181p. 1968.

A curriculum study of Basic Education and On Job Training program for disadvantaged, monolingual Mexican Americans is evaluated.

See also: SECTION 4710 LOW APTITUDE; 5230 ADULT BASIC EDUCATION; 6575 NEW CAREERS, PARAPROFESSIONALS; item 554 Office of Education report on vocational, technical education; 565 survey of training programs in Cleveland; 382 experimental programs in prison education; 310 theoretical aspects of cost-benefit analysis; 452 self-help job training in Watts; 379 attitudes of migrants in training; 624 validity of USES aptitude tests in MDTA program; 109 non-reading edition of GATB; 108 predicting success in Tuskegee MDTA program; 85 measuring values in manpower trainees; 311 cost-benefit analysis of OJT remedial programs; 80 relation of resignation to performance in job training programs; 89 measuring work attitudes in Youth Corps programs.

6575 New Careers, Paraprofessional

- 628 THE FRONTIER OF ACTION; NEW CAREERS FOR THE POOR. A VIABLE CONCEPT. Falk, R. F., And Others. Minnesota Univ. Clearinghouse for Federal Scientific and Technical Information (PB-188-637, MF \$0.65 HC \$3.00). 473p. 1969.

This research report is concerned with paraprofessional training in Minneapolis for poverty adults. The following questions represent the objectives of the research effort: enrollees' mobility orientations, and how these orientations have changed; how the role sets of enrollees influence their effectiveness in social service agencies; the extent to which enrollees change their self conception; job interests and satisfactions of careerists; the effect of higher education on poverty adults; and differences between enrollees who drop out and stay in the program.

629. CAREER MOBILITY FOR PARAPROFESSIONALS IN HUMAN SERVICE AGENCIES. National Committee on the Employment of Youth, New York, N.Y. U.S. Dept. of Labor, Washington, D.C. Manpower Administration. 162p. December 1969.

This study of career mobility for paraprofessionals working in the human agencies was conducted by the National Committee on the Employment of Youth on graduates of its training program; to identify and locate the graduates, examine their experience with respect to advancement on the job, and evaluate their impact on the job structure at place of employment; to assess experiences of employing agencies in providing upward mobility to the graduates; and to develop guides for building in greater upward new career mobility

630. A STUDY OF COMPARATIVE CURRICULUMS TO TRAIN PEOPLE FOR EMPLOYMENT IN THE HUMAN SERVICES: A NEW CAREERS MODEL VS. THE TRADITIONAL ACADEMIC APPROACH. McIntyre Gene Harper. Oregon Univ., University Microfilms (Order No. 70-2528, MF \$3.00, Xerography \$6.40). Ph. D. Thesis. 131p. June 1969.

This dissertation tested the significance of a specially designed training and educational program (college course work, human development learnings, agency training) for new careerist trainees in Washington State, as compared to a strictly academic program in which people plan to enter the human services by the usual college degree route.

631. DOWN THE UP STAIRCASE: A STUDY OF NEW CAREERS DROPOUTS. Larson, Patricia; And Others. Minnesota Univ. EDRS PRICE MF \$0.50, HC \$3.35. 65p. June 1969.

Using a sample of 105 persons who had left the Minneapolis New Careers Program (combined work and higher education), this study sought to predict who drops out of this type of program and to make recommendations for recruitment procedures. Younger men, separated or divorced persons, and nonwhites were more likely than their counterparts to drop out. Dropouts also tended to have fewer children, to be high school graduates, and to have been employed in unskilled jobs or unemployed before joining the program. Illness, family or legal problems, unmet needs in the work or educational situation, and problems of recruitment and placement were among the chief reasons expressed for dropping out.

632. A NEW CAREERS EVALUATION. Institute for Local Self Government. Berkeley, California. EDRS PRICE MF \$0.25, HC \$1.05. 19p. Jan. 1969.

An evaluative study of the New Careers training program of the Oakland Redevelopment Agency was undertaken to measure the program's effectiveness. Factors contributing to success include the following: selection criteria for participants (who had a mean educational level of 11.3 years); quality of on-the-job training; youthfulness of supervisors; positive attitudes of employees; and the socially-oriented nature of the agency.

633. A STUDY OF PUBLIC SERVICE PROGRAMS, COLLEGE LEVEL. Rochester State Junior College, Minn. EDRS PRICE MF \$0.50, HC \$6.00. 118p. 1969.

These curriculum studies were intended to determine the feasibility of new career programs in public service and aviation and to set priorities in

improving or establishing them. The study recommended a police science program; a fire science program; a teacher aide program; the postponement of a program for social work case aides; continuation of the current program in aviation; and an occupational journalism program. Details are given for each step in the examination of all programs.

See also: SECTION 6550 UNSKILLED, DISADVANTAGED; item 497 new careers in local government; 510 social service aide projects; 475 public health assistants; 677 indigenous health aides as parent counselors; 607 new careers in Atlanta community action program; 488, 674, 673 training of low income mothers.

6600 Clerical, Sales

634. DCVR PROJECTS RELATED TO ADULT EDUCATION, AND PROJECTS RELATED WHOLLY OR PARTIALLY TO OFFICE AND DISTRIBUTIVE OCCUPATIONS. JULY 1, 1964 - June 30, 1969. U. S. Office of Education. EDRS PRICE MF \$0.25, HC \$0.85. 15p. June 7, 1969.

635 DETERMINING TRAINING NEEDS OF DEPARTMENT STORE SALES PERSONNEL. Folley, John D., Jr. In Training and Development Journal v23 n7 p24-26 July 1969.

A study analyzed shoppers' evaluation of sales personnel in three department stores over several years. The checklists and narrative statements resulted in 2000 critical incidents grouped into effective and ineffective behaviors. Results form a basis for establishing training objectives and course content.

636 REINFORCEMENT MANAGEMENT; AN APPROACH TO MOTIVATING ARMY TRAINEES. Cassileth, Barrie. Human Resources Research Organization, Alexandria, Va. EDRS PRICE MF \$0.25, HC \$1.25. 23p. Nov. 1969.

To study the effectiveness of reinforcement management, students in an Army clerk-typist course in which self-paced instruction is used were given points for successive approximations to desired learning behavior. The points were exchangeable later for varying lengths of time off. Only trainees of high initial typing skill were found to have been significantly affected by the experimental program.

637. A STUDY OF THE OLDER WOMAN WORKER WHO HAS ATTEMPTED TO ENTER THE WHITE COLLAR LABOR FORCE THROUGH THE ASSISTANCE OF COUNTY TRAINING PROGRAMS IN CLERICAL OCCUPATIONS. Schramm, Dwayne Gene. California Univ., Los Angeles Clearinghouse for Federal Scientific and Technical Information (PB-188-050, MF \$0.65, HC \$3.00). Ph. D. Thesis. 165p. 1969.

638. TRAINING OF EXPORT STAFF; A REPORT BY THE COMMERCIAL AND CLERICAL TRAINING COMMITTEE OF THE CENTRAL TRAINING COUNCIL. Great Britain, Dept. of Employment and Productivity, London(England). Available from Her Majesty's Stationery Office, 49 High Holborn, London, W. C. 1, England (6s 6d) 74p. 1968.

Based on a 1966 survey of export training in British firms, this report concentrates on functions and training needs in management, sales and technical representation, and office practice.

See also: item 270 telephone instruction for off-site procurement personnel; 604 on-the-job training for minority group secretarial workers; 603 clerical training in Cincinnati Neighborhood Youth Corps program.

6650 Service

639. JOB OBSOLESCENCE IN THE LAW ENFORCEMENT AND CORRECTION FIELD. Killinger, George G. and Others. Institute of Contemporary Corrections and the Behavioral Sciences, Huntsville, Texas. EDRS ORDER NUMBER MP 000554 PRICE MF \$0.75, HC \$9.40 186p. March 1, 1968.

The purpose of this study was to identify forces impinging upon correctional and law enforcement occupations and to translate them in terms of present and future manpower needs.

640. A DRIVER EDUCATION SURVEY AND ANALYSIS OF STATE LAWS AND PRACTICES PERTAINING TO NON-PUBLIC AND OUT-OF-SCHOOL YOUTH. Central Missouri State College. CFSTI, (PB-189-273 MF \$0.65 HC \$3.00). 282p. 1969.

The study was made of state and local legal and non-legal problems involved with reaching non-public and out-of-school youth with an approved driver education course; and to develop recommendations and guidelines by which the states could plan to meet the standard requirement.

See also: item 195 training police in community relations.

6700 Agriculture, Home Economics

641. POLICY DIRECTIONS FOR U. S. AGRICULTURE; LONG-RANGE CHOICES IN FARMING AND RURAL LIVING. Clawson, Marion. Resources for the Future, Inc. Available from The Johns Hopkins Press, Baltimore, Md. 21218 (\$10.00) 413p. 1968.

642. RETURNS TO HUMAN AND RESEARCH CAPITAL, UNITED STATES AGRICULTURE, 1949 - 1964. Fishelson, Gideon. North Carolina State Univ. University Microfilms (Order No. 69-7656, MF \$3.00, Xerography \$6.00) Ph. D. Thesis. 121p. 1968.

This study estimated rates of return to public investments in human and research capital (formal schooling and extension and vocational agricultural education) in the United States agricultural industry. Conclusions justified additional investments in these kinds of education and research.

643. HISTORY OF ADULT EVENING SCHOOL IN VOCATIONAL AGRICULTURE IN IOWA. Doubler, Gerald. Iowa State Univ. M.S. Thesis. 1968.

The study aimed at ascertaining the historical development of agricultural education directed to adult farmers, identifying some of the factors which have made the program what it is today, and discovering implications for the improvement of adult school programs for farmers in Iowa.

644. BIBLIOGRAPHY RELATING TO AGRICULTURAL LABOR. Ruesink, David C.; Batson, T. Brice Texas A and M Univ., EDRS PRICE MF \$0.50 HC \$4.90 96p. Mar. 1969.
645. THE IDENTIFICATION OF OPINION LEADERS AMONG TEACHERS OF VOCATIONAL AGRICULTURE. FINAL REPORT. Hensel, James W.; Johnson, Cecil H. Ohio St. Univ. EDRS PRICE MF \$0.50 HC \$4.00. 78p. June 1969.

To examine opinion leadership as an element of a change strategy for agricultural education, a means of identifying characteristics of teachers identified as opinion leaders was developed. Individuals nominated four or more times by their peers as sources of advice and information were considered to be opinion leaders. Twenty-one of the 51 opinion leaders identified were influential in more than one area of the vocational agriculture program. 72% of the opinion leaders selected other opinion leaders as their source of advice and information. 35% of vocational agriculture teachers selected other teachers as the source from which they got advice and information. The opinion leaders tended to be older, had taught longer, had attained a high educational level, had a higher salary and held a greater number of educational offices than their fellow teachers.

646. COMMUNICATION CONCEPTS USED BY ADULT EDUCATORS IN AGRICULTURE TO IMPLEMENT EDUCATIONAL CHANGE. Pietsch, Douglas Harry. Ohio State Univ., University Microfilms (Order No. 68-12,868 MF \$3.05, Xerography \$10.80). Ph. D. Thesis. 236p.

To identify, define, and operationalize the communication concepts required by adult educators in agriculture to fulfill their role as educational change agents, four stages were seen: (1) the determination of anticipated behavioral requirements; (2) identification of relevant communication concepts; (3) the definition of the concepts; and (4) the development of suggested educational objectives. A review of research reports and projections by experts in agricultural education was conducted and a list of an anticipated intellectual behavioral requirement developed. An extensive review of literature in the field of communication served to identify relevant communication concepts. A list of educational objectives for training programs was suggested based on definitions and explanations of the most important communication concepts.

647. FACTORS ASSOCIATED WITH PARTICIPATION IN THE COOPERATIVE EXTENSION SERVICE. Hartman, Joel A. and Others. Paper delivered at Annual Meeting of the Rural Sociological Society, Boston, August, 1968. 23p. August 1968.

The study examined participation in extension activities on the part of 638 dairymen in two Pennsylvania counties in terms of general behavioral predisposition rather than of particular kinds of participation. The independent variables examined together explained about 57% in the dependent variable (high or low participation). Factors traditionally reported as being associated with participation (e.g. educational level, income, and size of farm enterprise) were much less important than other variables. By using regression analysis, goals of farmers and extent of participation in formal and informal agriculturally oriented systems ranked high in explaining variance. Using practices encouraged by the extension services and having a rational attitude toward agriculture are positively associated with extension participation. Having resources which permit one to capitalize on the output of extension explain some of the variance in participation scores.

648. AN ANALYSIS OF "IN-DEPTH" SCHOOLS CONDUCTED BY AREA EXTENSION AGENTS IN THE AGRICULTURAL INDUSTRY. Cunningham, Clarence J. Ohio State Univ., EDRS PRICE MF \$0.25 HC \$1.05 19p. July 1968.

The Ohio Extension Service conducted "in-depth" schools at area centers. Two thirds of the instructional staff were area agents; others were specialists, resident staff, research personnel, and industry representatives. The major audience were full time commercial farmers, 90% of whom were high school graduates, 1/3 having some college; 3/4 had recently been involved in other extension activities. Most had had contact with extension agents during the three previous years, 10% having office or telephone contact with area agents. The school directed toward fertilizer dealers drew both large and small dealers, most of whom had learned about the school from extension agents. Participants made significant gains in knowledge and planned to try new ideas, particularly cash flow analysis.

649. A STUDY TO MEASURE THE EFFECTIVENESS OF WYOMING'S ADULT EDUCATION IN AGRICULTURE. Moller, Frederick H. Minnesota Univ. M.A. Thesis. 1968.

To determine if the adult education offered by agricultural departments in Wyoming is meeting the needs, questionnaires were sent to past enrollees from the years 1963-67. Eighty-five percent of the participants were satisfied with the method of instruction. Nearly 2/3 of the respondents indicated their willingness to join a vocational agricultural farm-ranch program utilizing a record keeping system.

650. FACTORS RELATED TO THE ADOPTION OF AGRICULTURAL INNOVATIONS 1962-1966. Lanham, Orville E. and Others. EDRS PRICE MF \$0.25 HC \$0.95. Paper presented at the Adult Education Research Conference, Minneapolis, Minnesota, February 27-28, 1970. 17p. 1970.

This paper analyzed factors related to adoption of new farm practices by dairy farmers in two Pennsylvania counties in 1962 and 1966. In 1962, four of 24 variables were significantly related to the dependent variables, while the mean index showed an increase of two practices.

651. ATTITUDES TOWARD ENTREPRENEURIAL BEHAVIOR AND EDUCATION--THEIR RELATIONSHIP TO INSTRUCTION. FINAL REPORT. Kittleson, Howard M. Minnesota Univ. EDRS PRICE MF \$0.75 HC \$6.75 133p. September 1969.

To evaluate the non-economic returns to investment in education, a study was conducted to determine the effect of farm management instruction on attitudes toward education and farming, relationships existing between attitudes and farm income, and whether students' attitudes became more like their instructor's with increasing years of instruction. The 70% response revealed a general improvement in attitudes related to more years of instruction, with a strong suggestion of diminishing marginal returns. Families in other than well-organized programs had scores negatively related to instructors; in well-organized programs scores were positively related. All differences in attitudes were very slight. There is a need for a revision of methods, subject matter, or both if adult vocational agriculture instructors want to claim significantly-improved attitude as a product of their educational program.

652. WHO JOINS FARM ORGANIZATIONS? Jacobsen, Chanoch In Journal of Cooperative Extension v7 n4 p225-232 Winter 1969.

653. BENEFITS DERIVED FROM AN ADULT FARMER ORGANIZATION WITHIN THE CLASS STRUCTURE IN VOCATIONAL AGRICULTURE. Hooper, Wayne Edgar, West Virginia Univ. M.S. Thesis. 72p. 1968.

To determine the benefits from an adult organization within the class structure of vocational agriculture and to develop the criteria for establishing an adult farmer organization in vocational agriculture, data were collected through questionnaires. Findings indicate: an interest in initiating an adult farmer organization; dissatisfaction with the present structure of adult education in vocational agriculture in the state in which they are presently employed; that the main purpose of the organization must be education; and that the organization must not be in competition or conflict with other existing agricultural or educational organizations and must be designed to meet the needs and desires of the local community.

654. A STUDY OF ADULT EDUCATION NEEDS AS PERCEIVED BY LINCOLN COUNTY PART-TIME FARMERS. Lewis, William J. Oklahoma State Univ. Dept. of Agriculture Education. M.S. Thesis. 61p. 1968.

To determine the agricultural educational needs of part time farmers in Lincoln County, questionnaires were distributed among 135 part time farmers; the study was based on the first 100 questionnaires returned. Findings were: the part time farmers had sufficient investment in land, machinery, and livestock for them to be a stable segment of the population. Over 50% of the farmers had not attended adult classes and 3/4 were interested in attending. About 32% worked at agricultural related jobs off the farm and about half needed competencies in agricultural mechanics. A comprehensive agricultural education program should include subjects of use to those in off-farm jobs. Human relations was reported to be important for the performance of many off-farm jobs.

655. DEVELOPMENT OF AN ADULT EDUCATION PROGRAM IN AGRICULTURAL MECHANICS FOR THE PORT ALLEGANY SCHOOL DISTRICT. Osani, Charles W. Pennsylvania State Univ. M. Ed. Thesis. 54p. 1968.

To determine the agricultural mechanics training most needed by adult farmers, a random sample of 33 farmers were interviewed. Phases of instruction in agricultural mechanics in which there was greatest interest were: tractor maintenance and adjustment, machinery maintenance and adjustment, arc welding, establishing a farm service center, and using shop tools and equipment.

656. A STUDY OF THE ADOPTION OF SELECTED FARMING PRACTICES WITH IMPLICATIONS FOR ADULT FARMER EDUCATION. Schroeder, Lawrence Max. Oklahoma State University, Dept. of Agricultural Education. M.S. Thesis. 38p. 1968.

To determine if the level of education had any effect on the approved farm practices that the farmers are conducting in the community, a survey schedule was personally distributed among 21 randomly selected adult farmers. The adult farmer respondents, regardless of educational attainment, had accepted the majority of approved practices to about the same degree and the 'higher educated' farmers accepted the latest technological advances to a greater degree than the 'lower educated' farmers.

657. CLIENTELE DIFFERENCES OF A COOPERATIVE EXTENSION PROGRAM AS RELATED TO AREA OF ORGANIZATION. Gross, John G. Nebraska Univ., University Microfilms (Order No. 69-17,325, MF \$3.00, Xerography \$6.80). Ph. D. Thesis. 141p. January 1969.

This study compared the clientele of an area specialist dairy testing program with the clientele of generalized county based programs to determine significant differences and their implications. Compared to their counterparts in generalized county based programs, the area specialist clients were younger, operated smaller farms as measured by acreage, cows milked, and gross receipts, and ranked dairy specialists higher as information sources.

658. AN ANALYSIS OF CHANGES IN CRITICAL THINKING ABILITY, OPEN-MINDEDNESS AND FARM POLICY OPINIONS OF PARTICIPANTS IN THE KELLOGG FARMERS STUDY PROGRAM. Rothert, Lowell Frederick. Michigan State Univ., University Microfilms (Order No. 69-20,923, MF \$3.00, Xerography \$8.20) Ph.D. Thesis. 180p. 1969.

This study dealt with the relationship of educational background, age, sex, and liberal education to critical thinking and open-mindedness for participants (119 Michigan farmers, aged about 25-35, and their wives) in an extensive continuing education program. Three groups admitted to the Kellogg Farmers Study Program (KFSP) in 1965, 1966, and 1967, respectively, comprised the treatment groups. Control subjects consisted of three other groups interviewed and tested but not admitted. (The KFSP is a three year program featuring study institutes, travel seminars, and independent study.) Findings included the following: (1) the KFSP had only limited success in helping develop critical thinking skills, reading skills, greater open-mindedness, and skills in identifying agricultural alternatives; (2) more highly educated subjects had higher initial critical thinking ability and open-mindedness, but less educated subjects generally made

higher gains during the course; (3) participants improved slightly over the three year period, while nonparticipants declined slightly; (4) participants, but not their wives, became better able to identify realistic solutions to farm policy problems.

659. THE ADOPTION AND REJECTION OF INNOVATIONS BY STRAWBERRY GROWERS IN THE LOWER FRASER VALLEY. Alleyne, E. Patrick; Verner, Coolie British Columbia Univ. EDRS PRICE MF \$0.50, HC \$5.60 Rural Sociology Monographs, No. 3. 110p. 1969.
660. INTERPERSONAL COMMUNICATION AND THE ADOPTION OF INNOVATIONS AMONG STRAWBERRY GROWERS IN THE LOWER FRASE VALLEY. Alleyne, E. Patrick. British Columbia Univ. M.S. Thesis. 307p. April 1968.
661. DIFFUSION OF TECHNICAL AGRICULTURAL INFORMATION IN CHILE. Brown, Marion Ray. Wisconsin Univ., University Microfilms (Order No. 68-13,622, MF \$3.20, Xerography \$11.25). Ph.D. Thesis. 247p. 1968.

This study examined current thought concerning the role of mass communication in economic development in developing nations; analyzed existing efforts to diffuse agricultural technology in Chile; assessed the effectiveness of various approaches; and tested the effects (primarily on knowledge levels) of an experimental technical information service for Chilean farmers, as related to variations in land tenure, education, literacy, attitudinal modernity, use of technology, media exposure, and patterns of interpersonal communication.

662. CHARACTERISTICS OF AGRICULTURAL INNOVATION AS PERCEIVED BY FARMERS, EXTENSION WORKERS AND RESEARCH WORKERS. Roy, N. K.; Jaiswal, A. In Manas: A Journal of Scientific Psychology; v15 n2 p95-110 1968.

Reports the results of ratings by 100 Indian farmers, 78 agricultural extension workers, and 68 research workers on a 5-point scale. Characteristics (profitability, cost, cultural-physical compatability, complexity, and communicability) for favorableness for adoption of 4 agricultural practices are reported in terms of mean scores and critical differences.

663. EXTENSION SERVICES AS A SOURCE OF FARMING INFORMATION. Vainio-Mattila, Ilkka. Marketing Research Institute of Pellervo Society, Finalnd 85p. April 1969.

A study was made of characteristics of farmers who need the help of extension services and who are efficient in diffusing new information among other farmers. A preliminary study, undertaken in Cayuga County, New York, in 1967, surveyed contact with extension services and the control of the alfalfa weevil among a small sample population (52) of dairy farmers. The main study was carried out among a stratified sample population (1600) of Finnish farmers in 1968. Extent of contact with extension services was measured, and this was correlated with socioeconomic status, agricultural productivity, age, information source orientation, and other factors. A positive correlation.

was found between level of education and contact with extension services; age was also an important factor (younger farmers had more extension contact). Socioeconomic factors dictate to an important degree the effectiveness of contact between extension agent and farmer. Both the preliminary and the main studies suggest that those farmers who are disproportionately dependent upon their neighbor farmers as their sources of farming information are in general characterized by low socioeconomic status.

664. OPINIONS HELD BY SELECTED GROUPS OF VOLUNTEERS CONCERNING THE COMPETENCY LEVEL USED BY PEACE CORPS VOLUNTEERS IN COLUMBIA. Howell, David L. Pennsylvania State Univ. M. Ed. Thesis. 108p. 1968.

The study aimed at: determining competency levels in selected skills as perceived by four groups of Peace Corps agricultural volunteers before and after Peace Corps training and after working in the host country; rating the importance of the skills; and indicating the technical agriculture training needed by farm and non-farm volunteers. No differences were found among the four Peace Corps groups in their self-perceived level of competency in 11 of the 13 main skill areas before and after training; and in 10 of the 13 skill areas after working in the host country. Instead of being trained as one group, the volunteers with farm and non-farm backgrounds needed separate training. The training of farm volunteers should include more technical agricultural information and skills.

665. COMMUNICATION FIDELITY BETWEEN FARM MANAGEMENT TECHNICIANS AND RICE FARMERS IN LEYTE, PHILIPPINES. Contado, Tito Egargo. Cornell Univ. University Microfilms (Order No. 69-10,424, MF \$4.45, Xerography \$15.75). Ph.D. Thesis. 347p. 1969.

The study focused on the effectiveness of communication between Farm Management Technicians who are the agricultural extension agents in the Philippines and the rice farmers in Leyte, Philippines.

666. IMPACT OF TELEVISION ON FARMERS. Sharma, S. K., Mishra, A. N. In Indian Journal of Extension Education; v3 n4 p248-254 1968.

There is immediate gain in knowledge for farmers as a result of exposure to agricultural telecasts. There is evidence of retention of the gained knowledge. General reactions of the farmers are reported, and the relationship of knowledge and attitude with socioeconomic factors. It supports the introduction of TV for agricultural education.

See also: SECTION 2230 RURAL COMMUNITIES; 7000 HOME, FAMILY, PARENT EDUCATION; 4625 YOUNG ADULTS (4-H); 7600 SPONSORING AGENCIES - COOPERATIVE EXTENSION; item 142 bibliography on diffusion and innovation; 457 agricultural education in Methodist Church; 181 personal contacts and adoption of innovation; 267 telephone instruction in graduate courses in home economics; 685 outdoor recreational resource development; 247 agricultural films during lunch hour in insurance office; 283 sociological concepts in Extension staff training; 77 measuring innovativeness rather than adoption; 101 educational needs of homemakers in Lake County, Indiana; 238 gaming in farm management education; 184 Ontario farmers' use of technical publications; 268 home economics instruction on statewide telephone network; 618 self-concept changes in MDTA agri-business program; 99 identifying

educational needs in home economics; 265, 264 radio education in India.

6900 LIBERAL EDUCATION

667. THE MUSICAL PROGRAMMING OF NATIONAL EDUCATIONAL TELEVISION. Dasher, Richard Taliaferro. Michigan Univ. University Microfilms (Order No. 69-2271, MF \$3.00, Xerography \$7.00). Ed. D. Thesis. 147p. 1968.

This study surveyed musical productions acquired by National Educational Television (NET) since its inception in 1952 in order to report their nature, circumstances of their acquisition, and their relative usage. These were among the findings: (1) most single programs were intended as entertainment, while most program series were instructional to some extent; (2) significant program producers and sources include affiliated NET stations, independent American producers, foreign producers, American universities, private corporations, and NET itself; (3) some NET program acquisitions have rights of use for an indefinite period, while others are subject to contracts with performers' unions or to other types of limitations; (4) productions featuring straight performance averaged 12.1 rentals per year, followed by productions featuring musical personalities (11.4), performance with instruction (10.7), and didactic programs. Recommendations on program planning and use were made to NET and to the music education profession.

668. A PROGRAMMATIC FOUNDATION FOR AN ADULT EDUCATION PROGRAM IN BLACK IDENTITY FOR THE CONGRESS OF RACIAL EQUALITY. Okia, Martha Gray. Indiana Univ. EDRS PRICE MF \$0.50 M.S. Thesis. 59p. June 1969.

To formulate a foundation for a Congress of Racial Equality (CORE) adult education program in "Black Identity," the Danish folk schools and the Opportunities Industrialization Center in Philadelphia were reviewed, as was much literature on black people. CORE has designed a program rooted in the concept of Black Power, with content on politics, economics, self-image, leadership, Federal law enforcement, and consumer education.

669. AN ANALYTICAL SURVEY OF PARTICIPANTS IN NON-CREDIT LIBERAL ARTS EXTENSION CLASSES. Ganz, Lothar Benno. British Columbia Univ., M.A. Thesis. 160p. 1969.

An analysis of participants in university extension liberal arts non-credit courses at the University of British Columbia is based on 1005 interviews. The clientele has been described in terms of socioeconomic characteristics, motivation, participation in adult education, reactions about the scheduling of classes, and methods of obtaining information concerning the courses. The data were utilized in testing the hypothesis that no statistically significant differences at the one % level existed between males and females, between veterans and novices, or between non-committed and committed learners with respect to selected socioeconomic and psychological characteristics and specified ways of obtaining information about extension courses. Participants differed from the general population in that they had a higher ratio of women to men, constituted greater percen-

tages of people in each of the age categories from 25 to 54 years, possessed higher socioeconomic status and were more actively involved in the formally organized life of their community.

See also: SECTION 5400 HIGHER EDUCATION - ACADEMIC PROGRAMS; item 687 guide to U.S. Government agencies in international education; 230, 158 Scandinavian folk schools; 208 influence of small group training on political attitudes; 254 evaluation of NET science programs; 242 mass media in public affairs, science and health; 259 national survey of religious TV programs; 194 public affairs discussion groups; 68 cross-cultural study of political learning in adolescents and parents; 334 older adults in public affairs programs; 290 attitude changes in German art training for adult educators; 172 techniques to improve study motivation and skills in extension students.

6950 HEALTH, MENTAL HEALTH

670. HEALTH AND SAFETY EDUCATION IN UNIVERSITY EXTENSION DIVISION PROGRAMS. Kirchner, Joy Miller. Indiana Univ. University Microfilms (Order No. 68-9172 MF \$4.95, Xerography \$17.55). H.S.D. Thesis. 388p. 1968.

To determine criteria for health and safety education in university extension; the extent and character of current offerings; and practices employed in college and university extension programs, a checklist was mailed to colleges and universities having extension programs in 1964. The four universities that best met the criteria were visited for observation and interviews. These were among the findings and conclusions: (1) a need exists for health and safety extension courses, institutes, workshops, and noncredit continuing education, and for greater numbers of trained health and safety teachers; (2) health and safety teachers need more contact with basic principles, practices, and research in adult education and other extension programs; (3) coordination between university and opportunities and extension division health and safety programs is inadequate as are facilities and opportunities for informal health and safety education; (4) extension students and others in the community are little used in program planning, execution, or evaluation.

671. A FIELD EXPERIMENTAL ATTEMPT TO CHANGE BELIEFS AND BEHAVIOR OF WOMEN IN AN URBAN GHETTO. Kegeles, S. Stephan. In Journal of Health & Social Behavior; v10 n2 p115-124. 1969.

Using standard personal messages within an urban ghetto, an attempt was made to: (1) change women's beliefs in vulnerability to cervical cancer and in the effectiveness of cytology, and (2) persuade them to visit a cytological clinic. More women with higher postbelief scores made visits than their counterparts. The experimental message was more successful than the control in eliciting clinic visits. Though the experimental message did not change beliefs more than the control message, more experimental Ss high in postbeliefs came to the clinic than (1) experimental or control Ss low in postbeliefs, or (2) control Ss high in postbeliefs.

See also: SECTION 5850 PROFESSIONAL CONTINUING EDUCATION MEDICINE AND HEALTH; 6575 NEW CAREERS, PARAPROFESSIONALS; item 308 small group training as psychotherapy; 236 role playing on smoking; 215 training older adults in medication taking; 237 role playing in smoking.

7000 HOME, FAMILY, PARENT EDUCATION

672. RESEARCH ON THE FAMILY: THE SEARCH FOR WORLD TRENDS. Moge, John M. In Journal of Marriage and the Family v31 n2 p225-232 May 1969.
673. EARLY CHILD STIMULATION THROUGH PARENT EDUCATION. FINAL REPORT. Florida Univ. EDRS PRICE MF \$1.00 HC \$11.75. 233p. June 30, 1969.
674. MOTHERS' TRAINING PROGRAM: THE GROUP PROCESS. Badger, Earladeen D. EDRS PRICE MF \$0.25 HC \$1.35 25p. July 1, 1969

This study hypothesized that mothers from a low socioeconomic area could be trained by teachers to implement an infant tutorial program using their 1- to 2-year-old children as subjects. The 20 mothers recruited were ADC recipients or met the OEO poverty definition. Mothers agreed to attend a 2 hour weekly class to learn teaching techniques to be applied at home. Meetings were divided between child-centered activities (presentation of educational toys and materials) and mother-centered activities (discussions on child management and birth control). The second year program suggested mothers use positive reinforcement, show increased interest in learning, and give children experience in problem solving. Study results showed that the infants made intellectual gains on the Stanford-Binet and ITPA. Mothers showed much interest in the 2 year program, attended regularly, and became involved in paraprofessional teaching and Head Start. Teacher observations during home visits indicated that mothers' attitudes changed positively in respect to teaching their infants. The study concluded that parents must be included in programs for the disadvantaged and that the time variable is crucial to attitude change since it was the second year before mothers developed the self-confidence to use at home what they had learned in class.

675. TEACHING MOTHERS TO TEACH: A HOME COUNSELING PROGRAM FOR LOW-INCOME PARENTS. Orham, Shije; Radin, Norma. Michigan Univ. EDRS PRICE MF \$0.25 HC \$0.95. 17p. November 1968.

Twenty-four children attended a special half-day class when not attending regular kindergarten, and 12 of their mothers participated in a home counseling program. Children whose mothers were counseled achieved significantly higher on the Metropolitan Reading Test, and their mothers showed a significantly greater gain on the Cognitive Home Environment Scale. In biweekly home visits, parents were shown how to teach specific cognitive concepts to support school curriculum, to evaluate children's progress, and to motivate the children to become involved in the home education program. Approaches and techniques employed to abet parents' teaching skills are delineated in the report, and an evaluation of the program with recommendations for modifications are included.

676. DETERMINANTS OF INVOLVEMENT OF THE POOR IN PUBLIC FAMILY PLANNING PROGRAMS. Siegel, Earl and Others. North Carolina Univ. Clearinghouse for Federal Scientific and Technical Information. (PB-190-670, MF \$0.65 HC \$3.00) 292p. February 28, 1970.

This study sought to establish the situational, demographic, and psychosocial characteristics, and the knowledge, attitudes, and practices, of low socioeconomic women as related to degree of involvement in a family planning program; and to determine the basic reasons for noninvolvement in the program. As for women newly admitted to the family planning clinic in Mecklenburg County, North Carolina, the decline in age from 1960 to 1967 indicated increasing involvement of women with potentially high fertility. Involvement of eligible white women was relatively low. Previous experience with contraception was reported by only half the enrollees over the span of the program, but male methods may not have been mentioned by some of the women. The interval since last delivery recently declined sharply, indicating more successful involvement of high priority, postpartum women.

677. INDIGENOUS HEALTH AIDES AS COUNSELORS TO PARENTS ABOUT NUTRITION. Wingert, Willis A. and Others. In Public Health Reports v84 n4 p328-332 April 1969.

A program experimented with training several health aides to provide counseling for parents whose children were diagnosed as having iron deficiency anemia. The four indigenous health aides were between 18 and 22 in age; two were married; three were Negro and one Mexican-American. All were high school graduates but none had formal instruction in health sciences. They were given brief training concerning the composition of iron rich diets (four hours over a 4-day period), and then spent 4 hours a day for two weeks observing a dietitian counsel parents. The effectiveness of the health aides was measured against that of two medical students with training in nutrition, through follow-up interviews where the children were checked for improvement and the parents questioned to detect retention of health information and the degree to which it was influencing their children's diet. No significant difference was found between the effectiveness of the health aides and the students.

678. FAMILY FINANCE EDUCATION; AN INTERDISCIPLINARY APPROACH. VOLUME II. Gibbs, Mary S., Ed. and Others, Ed. Indiana State Univ. Center for Education in Family Finance, Terre Haute, Indiana 47809 185p. 1968.

Volume II of a two-part series related to family finance education provides materials for study and discussion. In Part I, members of the advisory council present their viewpoints concerning an interdisciplinary approach to education in family finance. Part II presents basic and current information related to money management--individuals as consumers; decision making; budgets; selecting and financing the home; installment buying; life, health, unemployment, and old age insurance; credit unions; the stock market; and estate planning. Part III covers field trips made to eight financial institutions. Part IV, on educational implications, covers new dimensions in consumer education, the right to consume equitably, the stock market, action research, and a plan for conducting classroom research.

679. AN APPROACH TO LOW RENT PUBLIC HOUSING TENANT EDUCATION IN GREENSBORO, NORTH CAROLINA. Allen, Van Sizar. North Carolina Univ. University Microfilms (Order No. 70-3189 MF \$6.55, Xerography \$23.20). Ph. D. Thesis. 514p. 1969.

Structured around the supposition that merely moving families from sub-standard housing into modern low rent apartments or houses was not enough to bring about the necessary changes in attitudes and living practices, this study examined the educational considerations provided to beneficiaries of low income public housing at the national level through the Greensboro Redevelopment Commission and the Greensboro Public Housing Authority, and some 20 selected public housing authorities in other parts of the United States. The objective of the study included among other goals: the determining of felt and unmet needs of the relocatees; identifying such needs as to their educational, economic, sociological and/or physical origins; determining relocatees' interest and involving the various service agencies in meeting such needs; improving the delivery of services by service agencies to relocatees, developing indigenous leadership in the low rent public housing community. The study determined that some education must accompany the relocation of families from substandard housing communities into new low public housing communities if maximum benefits are to be realized.

680. A STUDY OF HOME AND FAMILY LIVING LEARNING INTERESTS OF YOUNG URBAN HOMEMAKERS AND SELECTED ASSOCIATIONAL FACTORS IN CINCINNATI, OHIO. McCormick, Anita Rose North Carolina Univ. University Microfilms (Order No. 70-9200, MF \$3.00, Xerography \$6.80) Ed. D. Thesis. 141p. 1969.

This study investigated learning interests of 262 urban mothers with kindergarten children; study methods preferred by these women; the preferred institutional setting for classes (assuming that classes proved to be a preferred method); and the relationships of the above variables to selected life cycle and life style characteristics. These were among the findings and conclusions: (1) the urban mothers showed interest in more dimensions of home and family living than they had studied during the preceding year; (2) they were not being adequately served, if measured by the number who studied compared to the number expressing a learning interest; (3) television is not used enough as a medium of home and family life education; (4) educational methods must be varied if the learning interests of urban mothers of kindergarten children are to be met; (5) the urban mothers clearly differentiate among content areas of interest; (6) content areas and preferred methods influenced learning interests more than age or any of the other personal characteristics.

681. THE ROLE OF HOME DEMONSTRATION COMMITTEES IN PROGRAM PLANNING AS PERCEIVED BY THE COUNTY COMMITTEE CHAIRMAN. Meador, Margaret Moore. Virginia Polytechnic Institute, Blacksburg, M.S. Thesis. 115p. March 8, 1969.

This study was prompted by evidence of a lack of understanding of the division of responsibilities within extension home demonstration committees in West Virginia, with a possible dependence on home demonstration agents for functions the committees could perform themselves. A survey of 100 county home demonstration county committees in 50 counties investigated patterns of program planning and execution; program responsibilities of

home demonstration agents as seen by committee chairmen; the responsibilities of the chairmen themselves; the degree of job satisfaction by each committee chairman in carrying out her duties; and the degree of self-direction among the committee chairmen. Differences in age, education, tenure, method of selection, and training for committee work were also evaluated. Of the total, 79% responded to a personally administered interview schedule. Results of this study indicate that the committee chairmen were more self-directed than had been hypothesized, particularly in the areas of program implementation and evaluation. They were most dependent in the area of communications.

682. PRESCHOOL INTERVENTION THROUGH A HOME TEACHING PROGRAM. Weikart, David P., Lambie, Dolores Z. In Disadvantaged Child p435-500 1968.

A project explores the feasibility of home teaching designed to develop cognitive skills of disadvantaged children. The basic procedure involved weekly home visits of one and half hours to each participating family. Direct tutoring was given the children and child management skills were taught to the mothers. The data gathered indicated a significant increase in the general intellectual ability of the participants.

683. INFORMATION AND SERVICES OBTAINED AND DESIRED BY PARENTS OF ELEMENTARY SCHOOL CHILDREN. TECHNICAL BULLETIN NO. 183. Garner, Kate B.; Sperry, Irvin V. North Carolina Agricultural Experimental Station. EDRS PRICE MF \$0.50 HC \$4.35 85p. January 1968.

The total variety of ways in which parents learn to care for their children during different stages of their development is impossible to ascertain. Numerous programs are available to aid parents in understanding children, and evaluation of these programs is difficult. To determine the reception and effectiveness of such resources, 496 mothers of randomly selected rural elementary school pupils were asked to recall from memory the services of information which they had utilized and the sources from which they were obtained. Findings were presented as Descriptive Results and Inferential Results, subdivided by: (1) Sources of Information, (2) Types of Information and Services Received, (3) Desired Services and Information, (4) Related Subjects. The appendix contains titles of selected publications and the number of mothers familiar with them, or similar publications and the relationships between variables and items which were statistically significant.

See also: 83 adoption of family living practices by homemakers; 266 face-to-face versus telelecture in Extension money management program; 376 family life program for Montana Indians; 293 teacher background related to drop-out in adult homemaking classes; 82 interpersonal value orientations in North Carolina homemakers; 153 program for poor mountain families; 101 educational needs of homemakers in Indiana county; 209 group work with parents.

7050 ARTS, CRAFTS, RECREATION

684. A DESIRABLE OUTDOOR EDUCATION PROGRAM FOR ADULT EDUCATION CENTERS. Ferris, David Louis. Indiana Univ. University Microfilms (Order No. 68-17,263, MF \$3.00, Xerography \$9.00). Ed.D. Thesis. 196p. 1968.

This study surveyed the status of existing outdoor education programs in adult education centers whose directors are members of the National Association for Public School Adult Education in cities in Indiana, Illinois, Iowa, Michigan, Ohio, and Wisconsin with a population of 25,000 to 100,000; and worked with a jury of experts (12 authorities on outdoor education and directors of 76 adult education centers) to report elements of effective outdoor education for adults. Following a survey of relevant literature, research, and resources, questionnaires were sent to the experts and directors. These were among the general findings: (1) the centers only partly utilize the areas, facilities, equipment, and resources available in their communities; (2) good outdoor education programs include such areas as conservation, astronomy, ecology, biology, natural history, landscaping, gardening, lapidary skills, flower arranging, winter sports, boating, archery, photography, travelogues, and youth leadership courses; (3) instructors are largely local educators, hobbyists, homemakers, and college majors in the sciences or physical education; (4) demonstrations, laboratory techniques, discussion, and problem solving are the teaching methods most recommended for adult outdoor education classes.

685. OUTDOOR RECREATIONAL RESOURCE DEVELOPMENT THROUGH VOCATIONAL AGRICULTURE AND THE COOPERATIVE EXTENSION SERVICE. Smith, Wendell Lee. Ohio State Univ. University Microfilms (Order No. 70-6887, MF \$3.00, Xerography \$8.80 191p. Ph. D. Thesis 1969.

To assess the opportunities in outdoor recreation both in Ohio as well as across the nation with respect to the present status and development potential of educational programs which are, or may be, provided by vocational agriculture and the Cooperative Extension Service, six groups of respondents supplied data through mailed questionnaires. The general public felt there was a shortage of facilities in Ohio especially in picnicking, fishing, and camping. There was considerable interest in free courses in recreation, especially in golf, horseback riding, swimming, and camping. About half of the teachers and extension agents in Ohio now offer instruction and about 3/4 said they would in 1974. In the United States, 49% of the states now offer instruction in vocational agriculture programs; by 1974, 88% will. At present, in 88% of the states, Cooperative Extension offers programs; by 1974, 93% will offer them.

686. A STUDY OF MUNICIPAL RECREATION PERSONNEL IN ONTARIO WITH IMPLICATIONS FOR CONTINUING EDUCATION. Griffith, Charles Arthur. Indiana Univ. University Microfilms (Order No. 70-1699, MF \$3.00, Xerography \$10.35) Re. D. Thesis. 229p. 1969.

To determine the characteristics and continuing education needs of municipally employed recreation personnel in Ontario, an instrument was administered to individuals representing 58 different municipalities. Of

the 108 respondents; 23 had not received any formalized education; 85 had completed two years of recreation education; and three out of the 85 had completed four years of University study. The personnel recognized the need for continuing education programs that would emphasize personnel management, planning and research, public interpretations, finance, relationships between schools and municipal recreations, programming, and areas and facilities. Recommendations included that the municipalities be encouraged to provide continuing education opportunities for employed personnel, and that research be initiated on the present methods and procedures involved in the certification of personnel.

7150 CROSS CULTURAL EDUCATION

687. A GUIDE TO U. S. GOVERNMENT AGENCIES INVOLVED IN INTERNATIONAL EDUCATIONAL AND CULTURAL ACTIVITIES. U. S. Dept. of State. EDRS PRICE MF \$1.00, HC available from U. S. Government Printing (Dept. of State Publication 8405, International Information and Cultural Series 97, \$1.50) 198p. September 1968.

This revised guide summarizes the 1967-68 fiscal year activities of Federal government agencies involved in international educational and cultural affairs. This 1968 edition contains data-supported descriptive accounts, by agency, of all international programs supported by an agency and gives some ideas of the dimensions of the involvement.

688. INTERNATIONAL MANPOWER DEVELOPMENT: A ROLE FOR PRIVATE ENTERPRISE IN FOREIGN ASSISTANCE. Weintraub, Leon. Available from Frederick A. Praeger, Publishers, 111 Fourth Avenue, New York, N. Y. 10003. 135p. 1969.

Survey of various American firms' programs in Latin America reveals a wide variety of types and topics of training programs, directed toward the effective acquisition and development of skills. Private training programs and similar governmental efforts should be viewed as complementary rather than as competitive. Although government programs may try to achieve and maintain a framework of equity and stability within which economic development will be encouraged, individual private firms can make their own efforts to "flesh out" economic development at various levels from paper plans to living reality.

689. THE AMERICAN MANAGER OVERSEAS REPRESENTING LARGE U. S. INDUSTRIAL CORPORATIONS: A STUDY OF SELECTED STAFFING STEPS AND JOB ATTITUDES. Ivancevich, John Michael. Maryland Univ. University Microfilms (Order No. 69-7630, MF \$3.00, Xerography \$10.35). D.B.A. Thesis. 227p. 1968.

690. DIMENSIONS OF TRAINING FOR OVERSEAS ASSIGNMENT. Foster, Robert J. George Washington University Clearinghouse for Federal Scientific and Technical Information (AD-691-324, MF \$0.65, HC \$3.00). 31p. 1969.

The report presented a conceptual framework for looking at the problem of training personnel for overseas assignment. Characteristics of the over-

seas situation that were relatively unique, prevalent, and likely to have a significant effect on performance were briefly described and classified. The characteristics of overseas jobs, i.e. difference in cultural values and assumptions, political overtones, interorganization conflict, difference in language, technical differences, differences in physical environment, unprogrammed nature of the work and ambiguity were analyzed. From this analysis two types of goals for training were formulated: objectives in terms of kind of learning, and objectives in terms of content. Within each a conceptual breakdown of types of objectives was presented as a general analytical framework for delivering goals for specific training programs. The report represents an interpretive summary of much of the research and writing on training for overseas work, but does not attempt to survey the literature.

691. EDUCATION FOR NATIONAL DEVELOPMENT; EFFECTS OF U. S. TECHNICAL TRAINING PROGRAMS. Gollin, Albert E. Available from Praeger Publishers, 111 Fourth Avenue, New York, N. Y. 10003. 324p. 1969.

The book is devoted to a detailed examination of the character, evaluation and selected consequences of a U. S. technical assistance program called "participant training." This program seeks, through education and training of foreign nationals, to develop the needed human resources for economic progress and modernization of traditional social systems. More than 100,000 people from underdeveloped nations have taken part in this program, receiving training in the United States or other countries. Undertaken on a cooperative binational basis, participants (who make the core of the study) were surveyed in more than thirty developing countries. The same interview tools were designed and used in each country to ensure maximum comparability of findings. The results indicated that the greater the U. S. Overseas Mission support for returned participants through personal contacts and assistance, the greater the use they will make of the skills and techniques they have acquired.

692. A CROSS-CULTURAL STUDY OF ROLE PERCEPTIONS. Triandis, Harry C.; And Others. Illinois Univ. Clearinghouse for Federal Scientific and Technical Information (AD-681-339, MF \$0.65, HC \$3.00). 64p. 1968.

Role differential responses came from 1620 subjects from America, Greece, India, Peru, and Taiwan: principal role differential factors accounting for the variance of role perception in each culture; factors which are cross-culturally equivalent; the factor scores of the roles on the equivalent factors which show a broad pattern; and numerous cultural differences in role perception that are meaningful in terms of known influences on social behavior in the specific cultures. The Role Differential was the instrument used. The data indicated that role perceptions are quite homogeneous within a culture, although differences due to personality and education or social status variables can be found. On the other hand, there are large differences in role perception across cultures.

693. SIMULATING INTERCULTURAL COMMUNICATION THROUGH ROLE-PLAYING. Stewart, Edward C. and Others. George Washington Univ. Clearinghouse for Federal Scientific and Technical Information (AD-688-698, MF \$0.65, HC \$3.00) 70p. May 1969.

The report describes the design and development of training to increase cultural awareness. Significant aspects of intercultural interaction were simulated in a series of role playing exercises. Typical American values and assumptions were demonstrably elicited from a trainee as he interacted with a 'foreign' auxiliary. The auxiliary was trained to reflect a mirror image of American values and assumptions judged important to overseas performance. These values and assumptions were derived from an analysis of American 'middle-class' culture. Several paper-and-pencil tests were developed as interim estimates of training objectives.

694. DIFFUSION OF THE EFFECT OF CULTURAL TRAINING OF THE LEADER IN THE STRUCTURE OF HETEROCULTURAL TASK GROUPS. Mitchell, Terence R.; Foa, Uriel G. In Australian Journal of Psychology v21 n1 p31-43 1969.

In a heterocultural task group, the favorableness of the leader-to-member behavior, as rated by an O is greater when the leader is trained in the interpersonal norms of the culture of another group member. The effect of training decreases systematically as the relation of variables to the leader-member interaction decreases. Sixteen Americans were trained in the Thai culture and 16 received control training. Each of the 32 groups engaged in a construction task and was composed of an American, as leader, a 2 Far Eastern members, one being a Thai. Each participant and an O rated the group effectiveness on 5 variables. The intercorrelation pattern among variables and raters is described. For each variable, the size of the mean difference between trained and control groups varied according to the position of the variable in the intercorrelation pattern.

695. THE CHANGE AGENT AND CULTURAL VALUES: CASE OF THE MIDDLE EAST. Johnson, James E. Kansas State University. 73p. M.S. Thesis. 1968.

This study investigated some of the cultural factors affecting change agents who work in the Middle East. Comparisons are made of the cultural differences (e.g. concepts of time, work, religion, nationalism, family and community, personal relationships) between America and the developing countries of the Middle East.

696. SIMULATION FOR CROSS-CULTURAL RESEARCH AND TRAINING AND MULTI-NATIONAL STUDENT SURVEY. FINAL REPORT. Raser, John R. Western Behavioral Sciences Inst. Clearinghouse for Federal Scientific and Technical Information (AD-691-442, MF \$0.65, HC \$3.00) 47p. July 1969.

This report indicates the status of an ongoing cross-cultural simulation and survey research effort.

See also: item 549 applicability of American management processes in Turkey; 664 assessing competence of Peace Corps volunteers in Columbia; 111 integration of research and training in Peace Corps project; 212 measuring sensitivity in Peace Corps trainees; 638 training of British export staff.

7500 INSTITUTIONAL SPONSORS

7510 Colleges and Universities

697. HIGHER ADULT EDUCATION IN THE UNITED STATES; THE CURRENT PICTURE, TRENDS AND ISSUES. Knowles, Malcolm S. American Council on Education; Available from American Council on Education, One Dupont Circle, Washington, D. C. 20036 (\$3.00) 124p. 1969.

This survey provides a guide for discussion and inquiry for administrators and faculty members of higher educational institutions, people in government who work in adult education, and citizens who are concerned with this area of educational service. It starts with an attempt to place the field of adult education in perspective. Chapter 2 presents a synopsis of the historical roots and a broad picture of the current situation. Chapter 3 identifies some of the external and internal forces that seem to be pressing for change. Chapter 4 summarizes the trends discerned in the literature; and chapter 5 isolates the national, state, and institutional issues that are revealed as concerns of adult educators in institutions of higher education. A selected bibliography, with abstracts, is included.

698. ADULT EDUCATION THROUGH UNIVERSITY EXTENSION; SELECTED RESEARCH ABSTRACTS. Touchette, Claude, Comp. Ontario Inst. for Studies in Education, Toronto, 102 Bloor Street, West, Toronto 5, Ontario, Canada. 90p. 1968.

Taken from issues of "Adult Education" from 1955 to summer 1967, these 168 selected abstracts on university adult education provide information on areas of concern investigated, research methods employed, findings, and location of the original materials. Sources, cross references, and an author index are also furnished.

699. NASULGC COUNCIL ON EXTENSION, COMMITTEE ON PROGRAM INNOVATION AND ACTION... ORIENTED RESEARCH; 1968 REPORT. PART I. PROGRAM INNOVATIONS. PART 2. ACTION ORIENTED RESEARCH. National Association of State Universities and Land Grant Colleges. EDRS PRICE MF \$0.75, HC \$7.35 145p. November 1968.

This report on extension activities of member institutions of the National Association of State Universities and Land Grant Colleges describes 91 program innovations and action oriented research activities.

700. INVENTORY OF CONTINUING EDUCATION ACTIVITIES IN PENNSYLVANIA INSTITUTIONS OF HIGHER LEARNING. Pennsylvania State Univ. EDRS PRICE MF \$0.25, HC \$1.85 35p. 1969.

An inventory of continuing education activities in institutions of higher learning in Pennsylvania produced a 92% return of questionnaires. Activities were classified by the following program categories: associate degree credit, undergraduate degree credit, graduate degree credit, nondegree credit, noncredit, and conferences-workshops-seminars. Data are tabulated by participation by program categories, distribution of courses by credit categories and academic subject areas, and distribution of programs by subject area as.

701. INVENTORY OF CONTINUING EDUCATION ACTIVITIES IN PENNSYLVANIA INSTITUTIONS OF HIGHER LEARNING. Pennsylvania State Univ. University Park, Pa. 16802. 39p. 1970.

This inventory of continuing education activities during the academic year 1968 and 1969 produced a 100% return of questionnaires. Activities have been classified by program categories: associate degree credit; undergraduate degree credit; graduate degree credit; nondegree credit; noncredit; conferences, institutes, and workshops. Data are also tabulated by participation within program categories, distribution of courses by credit categories and academic subject areas, and distribution of programs within the areas represented (Behavioral Sciences, Biological Sciences, Business, Education, Engineering, Health Professions, Humanities, Physical Sciences, Humanities, Other).

702. FINANCIAL SURVEY OF WESTERN STATE EXTENSION DIVISIONS: SUMMARY REPORT, NOVEMBER 25, 1969. Hawaii Univ., EDRS PRICE MF \$0.25, HC \$0.25. 3p. November 1969.

Information was collected from questionnaires returned by 26 of 40 institutions which included state institutions west of the Mississippi River plus some Big Ten schools east of the Mississippi. State appropriations, "General Fund", contributions to the extension divisions' total annual budgets ranged from 100% (1 school) to 0% (5 schools). Revolving funds on a self-support basis, "Special Funds", supply the following percentages: 100% to 85% (10 schools); 84% to 70% (7 schools); 69% to 30% (5 schools); under 30% (3 schools). Although only five schools reported having all administrative positions included in the regular state appropriation, 13 others reported a greater proportion of state-supported positions than their budget breakdowns suggested. The majority of schools reported 5% to 15% cancellations of degree-credit courses, with slightly higher mortality for non-credit classes. Of 101 pre-course salaries, 77 fell in the range \$525-\$825; non-credit salaries per hour of instruction varied from \$5.50 to \$100; tuition ranged from \$15.00 to \$25.00 per credit. Although the size and character of the extension operations reported varied greatly, comparisons in their financial aspects revealed a number of similarities.

703. A NEW ENGLAND LAND-GRANT NETWORK; A STUDY OF THE FEASIBILITY OF ESTABLISHING EDUCATIONAL INFORMATION LINKS BETWEEN THE SIX LAND-GRANT UNIVERSITIES IN NEW ENGLAND. Bardwell, John D. New England Center for Continuing Education, Durham, N. H. EDRS PRICE MF \$0.50, HC \$3.65. 71p.(1968).

This study sought to identify physical facilities needed to connect the six New England land-grant universities. Criteria were time (use of current technology), cost (regular operating budgets of participating institutions), minimal personnel requirements, flexibility, and compatibility. The telephone system, an existing microwave network, a developing radio network, and computers and other communication devices received special attention.

704. SOME ADMINISTRATIVE AND ORGANIZATIONAL ASPECTS OF UNIVERSITY ADULT EDUCATION: A DESCRIPTIVE SURVEY OF OBJECTIVES, ORGANIZATIONAL DIMENSIONS, AND COMMUNITY LINKAGES OF SELECTED CASES. Uno, Frank Ernest Weston. Dalhousie University, Halifax, Nova Scotia. M.S. Thesis. August 1968. 194p.

This study describes some aspects of administration of the Institute of Adult Education, Dar-es-Salaam, and four Canadian university adult education divisions, viz; Loyola College, Macdonald College, Mount Allison University, and St. Francis Xavier University. The administrative aspects described include: organizational dimensions, linking mechanisms, community approach, and objectives.

705. IDENTIFICATION OF CHARACTERISTICS THAT DIFFERENTIATE PARTICIPANTS IN A UNIVERSITY ADULT EVENING SCHOOL PROGRAM FROM NON-PARTICIPANTS. Teichert, Robert Henri. Nebraska Univ. University Microfilms (Order No. 69-22,300, MF \$3.00, Xerography, \$5.00). Ph. D. Thesis. 100p. 1969.

This investigation compared 711 adult evening school students with 397 adult education nonparticipants (next door neighbors of the students).. The majority of nonparticipants had never been enrolled in any formal educational program since ending full time school attendance. Some significant differences were: (1) the participants were younger (a majority under 30), less satisfied with their present jobs, more strongly expected a promotion or change of occupation, and more strongly anticipated an increase in income; (2) compared to participants, a large majority of nonparticipants owned their own homes; (3) participants already had higher educational level than nonparticipating neighbors; but the two groups did not differ in degree of satisfaction with past formal education; (4) participant and nonparticipant males differed more than participant and nonparticipant females; (5) female participants outnumbered men at all age levels except 25-35; (6) participants spent more of their leisure time attending plays, lectures, concerts, athletic events, and other events outside the home; (7) they also showed (and anticipated) greater geographic and socioeconomic mobility.

706. ADULT EDUCATION IN THE UNITS OF THE MONTANA UNIVERSITY SYSTEM. Livingston, Derrald Edward. Arizona State Univ. University Microfilms (Order No. 69-16,481, MF \$3.00, Xerography \$8.00). Ed. D. Thesis. 172p. 1969.

This study traced the historical development of adult education in the Montana University System, ascertained present adult education practices and philosophies in the system, investigated implementation of the centralized control of adult education within the system, and formulated recommendations for future adult education programs in its six units. Recommendations called for a central office for adult education offerings; a research specialist to survey educational needs and wants, find convenient facilities, and locate qualified teachers in local communities; an adult education director at each unit to back up and follow up the work of the specialist; fuller cooperation among units; and active administrative support.

707. GOAL CONGRUENCE AND ORGANIZATIONAL EFFICACY IN TWO MERGING ADULT EDUCATION CENTERS. Hyde, Ralph Abner. Tennessee Univ. University Microfilms (Order No. 70-17, 823, MF \$4.00, Xerography \$9.00). Ed.D. Thesis. 200p. Dec. 1969.

This study investigated the growth and development of two adult education centers (units of the University of Tennessee and Memphis State University) prior to their merger; the goals of the new joint university center (JUC);

and the congruence of JUC goals with the goal perceptions of the faculty, students, administrative staff, and management committee. Both centers had been relatively stable during their early years, but neither had achieved a balance among its finances, personnel, clientele, programs, and physical plant. Both seemed to be young and viable organizations capable of adapting to change but unable to initiate change because of lack of autonomy. Twelve organizational goals were formulated. Management committee goals for the JUC were congruent with those of other respondents, but priorities differed somewhat. The parent institutions were essentially alike on goal perceptions among students and perceptions by faculties. Participant satisfaction with the downtown centers was correlated with attitudes (largely positive) toward change and toward the new JUC.

708. PERCEPTIONS OF UNIVERSITY ACADEMIC DEPARTMENT CHAIRMEN AS RELATED TO THE DEGREE OF PARTICIPATION OF UNIVERSITY DEPARTMENTS IN CONTINUING EDUCATION. Hale, Larry Avon. Nebraska Univ. University Microfilms (Order No. 69-22, 269, MF \$4.60, Xerography \$16.20) Ph. D. Thesis. 359p. 1969.

This study examined perceptions and opinions of academic departmental chairmen in the University of Missouri regarding the participation of academic departments in continuing education (defined to include all off campus programs and all on campus noncredit programs). Major differences were sought and found between chairmen of high participation and low participation departments as to the university's continuing role, internal and external relations, research and continuing education relationships, personnel, administration and organization, curriculum, and financing. Further research was recommended on critical aspects where differences exist in views of continuing education, on differences in the number of responses by chairmen of high and low participation departments, and on building a theory of the assimilation of continuing education into a university.

709. AN HISTORICAL STUDY OF ADULT EDUCATION PROGRAMS OF THE BRIGHAM YOUNG UNIVERSITY FROM 1921-1966. Smith, Keith L. Brigham Young Univ. M. A. Thesis. 185p. May, 1968.

The history of the development of adult education and extension at Brigham Young University began in 1921 with President Harris's proposal for an extension division and for a Department of Social Leadership, Education, and Religion. The Extension Division's aim was to carry to Mormons the philosophy of the University as well as to offer formal and informal instruction. In the beginning, the Division was divided into the Bureaus of Correspondence, Lectures and Entertainments, Publications, and Social Service. By 1924, extension was reaching all but two Utah counties, the first successful Leadership Week had been organized, and the Audiovisual Department had been started. Growth was slow for the first 25 years. It has since expanded rapidly to embrace such activities as home study, and evening school, study travel, and annual Education Week (formerly Leadership Week), off campus lectures and conferences, and four continuing education centers serving Utah, Idaho, and southern California. An adult degree program is also being considered. (The document includes a brief history of Mormon adult education).

710. FACULTY COMMITMENTS TO SELECTED ASPECTS OF CONTINUING EDUCATION. Porter, Lee. EDRS PRICE MF \$0.25, HC \$0.65. Paper presented at the Adult Research Conference, Minneapolis, Minnesota, February 27-28, 1970. 11p.

Using a stratified random sample of 300 Syracuse University instructors, assistant professors, associate professors, and full professors, this study examined the belief that university faculty members view continuing education with disfavor, and analyzed some differences in faculty attitudes. Subjects were sent a 35 item questionnaire to which they responded on a continuum from "strongly agree" to "strongly disagree." The 35 statements were then categorized by attitudes toward administration, students, instruction, purposes, and programs. Responses were mainly favorable; "purposes" ranked highest, followed by programs, students, instruction, and administration. Variances included the following: (1) women were more favorably disposed than men, instructors more so than professors, those involved in research more than those not involved, faculty in noncredit programs more than those in strictly credit programs, and faculty members in professional schools more than liberal arts faculty; (2) faculty with no teaching experience reacted more favorably than faculty with various levels of experience.

711. MERGER IN EXTENSION; A HISTORY AND ANALYSIS OF MERGER AT THE UNIVERSITY OF WISCONSIN. Carlson, Robert A. Wisconsin Univ. EDRS PRICE MF \$0.50, HC \$6.30. M.A. Thesis. 124p. 1968.

A study was made of the antecedents and the results to date (1968) of the merger of Agricultural Extension, General Extension, and educational broadcasting at the University of Wisconsin. The struggle between efforts to maintain a traditional liberal arts orientation and efforts to expand and emphasize practical, applied arts and sciences was traced, beginning with the short courses and the Farmers' Institutes of the late 1800's. Major changes and points of conflict included the rise of Agricultural Extension, aided by the increasingly popular College of Agriculture, from 1914 until after World War II; the shift of General Extension to fee-charging off-campus and correspondence courses within a relatively formal academic program; a change of Agricultural Extension emphasis from agricultural education to Four-H and other urban extension services; and increased General Extension involvement during the 1950's and 1960's in broad, problem oriented, foundation-supported regional development programs. It was concluded that, with the merger, university resources had been effectively concentrated for public service outreach.

712. A DESCRIPTIVE ANALYSIS OF THE EVENING AND OFF-CAMPUS POPULATION, TEMPLE UNIVERSITY FALL SEMESTER, 1966-1967. Sackett, Duane Harry. Temple University. University Microfilms (Order No. 68-9033, MF \$3.00, Xerography \$8.60). Ed. D. Thesis. 190p. 1967.

This study sought (1) to describe the total population (fall semester 1966-67) of the evening and off-campus divisions of Temple University; (2) to identify evening and off-campus students' educational needs, goals, and aspirations, university needs, and purposes relative to its evening division, and the portion of nondegree evening and off-campus students for which the College of Education has or should have basic responsibility; and (3) to

suggest for the College of Education an administrative structure better suiting the needs of its evening and off-campus students. Based on the numerous findings and conclusions, recommendations affecting evening and off-campus study were made for a clear statement of policy; a specific set of rules and regulations; maintenance of the existing vertical administrative relationships to day college; fuller administrative provision for off-campus non-degree, and College of Education students; arrangements for statistical reporting, research, and evaluation; and systematic counseling and preadvising services.

713. TELEVISION FOR HIGHER TECHNICAL EDUCATION OF THE UNEMPLOYED; A FIRST REPORT ON A PILOT PROJECT IN POLAND. REPORTS AND PAPERS IN MASS COMMUNICATION, 55. Paris (France). Available from United Nations Educational, Scientific, and Cultural Organization, Place de Fontenoy, Paris 7-3, France (COM/MC/68.17, \$1.25) 49p. 1969.

Undertaken on a national scale in Poland, this 1966 pilot project provided lectures by television for those who, because of employment or location, could not attend intramural courses in higher technical education. The television lectures embraced subjects from the first two years of extramural technical studies together with aspects of general interest. Questionnaire surveys conducted during the preparatory pilot course centered on personal and socioeconomic characteristics of participants, reasons for pursuing external degree courses, student problems, students' opinions on the instructional value of the lectures, and the influence of the lectures on success in the entrance examination. A followup poll was taken six months after completion of the course. Benefits of the course were tentatively assessed, along with limitations of the study.

See also: SECTION 2300 RESIDENTIAL EDUCATION; 5400 HIGHER EDUCATION - ACADEMIC PROGRAMS; 5500 COMMUNITY SERVICES AND PROGRAMS; 5700-6100 PROFESSIONAL, TECHNICAL CONTINUING EDUCATION; 6200 MANAGEMENT AND SUPERVISORY DEVELOPMENT; 7600 COOPERATIVE AND RURAL EXTENSION; item 669 survey of participants in non-credit classes at University of British Columbia; 189, 193 student survey and faculty evaluation of correspondence study in Oregon; 294 attitudes of agents in West Virginia merged extension; 304 leader behavior of conference directors; 166 emotional needs of evening students; 132 evaluation of Air Force base libraries supporting extension programs; 135 agent perceptions in West Virginia merged extension; 140 faculty attitudes toward continuing education at Syracuse University; 571 two surveys of Wisconsin adult education; 670 criteria for health and safety programs in extension; 630 conventional versus "new careers" type training in human services; 639 manpower projections in law enforcement and correctional field; 346, 348, 354, 341, various aspects continuing education for women; 90 age and Graduate Record Exams; 105 score distribution of those tested through USAFI; 128 age bias in counselors of adults in urban colleges; 108 predicting success in Tuskegee MDTA program; 238 gaming in farm management education; 269 auto-tutorial and "Univex Net" instructional system, University of Illinois; 287 programmed independent study in extension staff training; 267 telephone instruction in graduate home economics classes; 172 techniques to improve study skills of extension students; 262 Morehead State radio programming for elderly.

7600 Cooperative and Rural Extension

714. DIVISION FILE OF EXTENSION RESEARCH MATERIALS; ADDITIONS DURING 1968. Byrn, Darcie, Comp. U.S. Department of Agriculture. EDRS PRICE MF \$0.25 HC \$1.60. 30p. Jan. 1969.

In this annotated bibliography of acquisitions during 1968 appear 265 Extension studies on administrative organization and management; training and staff development; mobilizing participation in Extension work; local leadership; program content and planning procedures; general effectiveness and progress in Extension; teaching methods, techniques, and devices; research methods; and Extension research reporting services.

715. FAILURE IN SUCCESS; AN ASSESSMENT OF AGRICULTURAL EXTENSION IN THE UNITED STATES. Carlson, Robert A. EDRS PRICE \$0.25. Paper presented at the Adult Education Research Conference, Minneapolis, Minnesota, February 27-28, 1970. 10p. February 1970.

The United States formalized its cooperative national support program for agricultural extension in 1941. The hope was to increase agricultural production and to help maintain a rural way of life in the United States. The Cooperative Extension Service was unable to strike a balance between these two goals, emphasizing increased production to such a degree that Extension merely added a further impetus to the trend toward corporate farming. The main accomplishment of Agricultural Extension was the prevention of extensive reactionary political and mob action by farmers wishing to maintain the status quo in the nation's agriculture. Instead of maintaining the rural way of life to which it was dedicated, the Agricultural Extension Service actually assisted in its liquidation.

716. OFFICE OF EXTENSION STUDIES, NEW YORK COOPERATIVE EXTENSION; A CASE STUDY. Alexander, Frank D. State Univ. of New York, Ithaca, College of Agriculture at Cornell. EDRS PRICE MF \$0.50, HC \$4.20. Special report No. 23. 82p. March 1969.

An evaluation was made of activities from 1956 to 1968 by the Office of Extension Studies (OES), a research unit attached to the Office of the Director of New York Cooperative Extension.

717. KANSAS EXTENSION SERVICE FROM 1868 TO 1964. Teagarden, Earl H., Comp. Kansas State Univ. EDRS PRICE \$3.25, HC \$44.05. A three volume report. 879p. (1968)

The comprehensive history of the Kansas Extension Service from 1868 is presented in three volumes and includes administration, information dissemination, club work, special area reports, personnel training, and continuing education.

718. A STUDY OF THE KNOWLEDGE AND ATTITUDES HELD BY COUNTY EXTENSION LAY LEADERS AND MEMBERS RELATIVE TO THE 1966 REORGANIZATION OF THE COOPERATIVE EXTENSION ASSOCIATION OF JEFFERSON COUNTY, NEW YORK. Boice, Robert Andrew. Virginia Polytechnic Institute. EDRS PRICE MF \$0.50 HC \$6.10. M.S. Thesis. 120p. May 1968.

Objectives of this study were to determine knowledge levels and attitudes among lay leaders and members concerning the Cooperative Extension Service (CES) reorganization in Jefferson County, New York; relationships between knowledge and attitudes; and the relation of knowledge levels and attitudes to certain variables. An interview schedule was administered to all 36 leaders in the county and to 116 members (a 5% sample). Findings included the following: (1) leaders had higher knowledge levels and more favorable attitudes than members; (2) Extension participation was higher for leaders than for members; (3) in the member group, women were more favorable toward reorganization; (4) attitudes and knowledge were not significantly related to one another; (5) age, education, occupation, income, tenure in Extension, residence, and Extension participation were not significantly related to knowledge of the reorganization or to attitudes held concerning it.

719. EXPLORING FOR CLIENTELE ATTITUDES TOWARD AGRICULTURAL EXTENSION PROGRAMMING. Burns, Derwood G. Missouri Univ. EDRS PRICE MF \$0.50, HC \$3.95 77p. May 1969.

Data were gathered by a questionnaire given to over 400 farm owners who were members of the Genesee County (New York) Cooperative Extension Association, Agricultural Division, in 1968. Among revelations of the questionnaire were: (1) the majority of clientele felt that staff members providing leadership for agricultural program should be specialists; (2) a significant number felt that agent visits lacked uniformity and that specialization favored some producers; (3) the lower gross sales clientele were more likely to feel alienated by present programming efforts; (4) the higher gross sales clientele were more likely to be participating in and using area extension programs and staff resources; and (5) the majority of all clientele felt that farmers, local businessmen, industry, and public leaders needed to be aware of and understand developments that could affect each other's actions and decisions.

720. STAFF LEADERSHIP IN THE NORTH CAROLINA AGRICULTURAL EXTENSION SERVICE. Shearon, Ronald Wilson. North Carolina Univ. University Microfilms (Order No. 70-9168 MF \$3.00, Xerography \$9.25). 192p. Ed.D. Thesis 1969.

The purpose of this North Carolina study was to examine selected leadership correlates of variation in Cooperative Extension Chairmen's (CEC) conformity to an administrative professional leadership (APL) concept of their role. The findings suggested that the social and working relationships between chairmen and agents were an important source of variation in APL. The chairmen scoring highest in administrative leadership were also those who gave agents a high degree of managerial support. Neither possession of undergraduate majors nor the number of courses taken in administration and education was significantly related to APL. Of the formal educational experiences of chairmen examined, courses in sociology were the only ones significantly related to APL.

721. A SURVEY OF FULL TIME COMMERCIAL FARMERS ATTITUDES AND FEELINGS ABOUT AGRICULTURAL EXTENSION IN SENECA COUNTY, NEW YORK. Brown, William H. Missouri University. 33p. May 1969.

The purpose of this study was to find out how farmers felt about extension programs, information provided by extension agents, agent specialist staff,

office operation and efficiency, and the changing of extension from its method of programming commercial agriculture to the area agent concepts.

722. COUNTY EXTENSION SECRETARIAL STUDY. Holley, A. Leon and Others. Arkansas University, Agricultural Extension Service. 67p. October 1969.

The purpose of this study was to obtain detailed factual data for a job analysis of the various secretarial and non-secretarial duties performed by the 78 county extension secretaries in Arkansas. From an analysis of this data, the secretary's role was clearly and accurately defined. Appendixes include the job description for county extension secretary, class specification for county extension secretary, instructions to county extension secretaries for the position analysis study, and the reporting forms used in the study.

723. CHARACTERISTICS, VIEWS HELD OF AGRICULTURAL EXTENSION ACTIVITIES, AND COMMUNICATION BEHAVIOR OF HSIEN EXTENSION SUPERVISORS IN TAIWAN. Hong, Pi-Feng Missouri Univ. EDRS PRICE MF \$0.75, HC \$8.60. M.S. Thesis. 170p. April 1970.

724. SUPERVISION OF AGRICULTURAL EXTENSION IN THE ASCASUBI EXPERIMENT STATION ARA, ARGENTINA: WITH SUGGESTIONS FOR ITS IMPROVEMENT. Pico, Jorge A. Washington State University, Summary of Master of Extension Thesis. 9p. 1968.

This is a summary of a study of the duties and functions of an extension supervisor. The document provides an outline of the philosophy of supervision; and the function of the extension supervisor in program development, management, personnel selection, training, and evaluation. A job description for a local extension supervisor at the Ascasubi Experiment Station (Argentina) has been included. The duties include line responsibility; general responsibility; program, personnel, financial and relationship responsibilities. Findings of the original study showed that only 38.8% of the supervised personnel received supervision from full time supervisors. The supervisors and the supervised agreed that the frequency of supervision should be increased.

725. STRUCTURAL ELEMENTS OF EXTENSION SYSTEMS IN SELECTED DEVELOPING COUNTRIES. Moncur, Earl. Cornell Univ., University Microfilms (Order No. 68-16,758, MF \$3.15, Xerography \$11.05). Ph.D. Thesis. 1968.

Structural elements of rural extension organizations in 20 developing nations were analyzed in this study. Countries were chosen from 25 national "case studies" made by foreign nationals enrolled at a Cornell University extension education seminar. Among the findings and conclusions were: (1) 13 countries reported an officially organized national extension service; (2) problems included inadequately trained staff, poor supervision, poor recruitment practices, political interference, lack of research, low budgets, too few specialists, and staff members' lack of understanding of their roles; (3) 15 countries had a national extension charged with primary duties to prepare budget proposals and approve local programs; (4) essential organizational elements require some measure of freedom of operation since they are vital to program development and problem solving.

See also: SECTION 2230 RURAL COMMUNITIES; 3900 STAFF TRAINING; 4000 TEACHERS, LEADERS, CHANGE AGENTS; 4625 YOUNG ADULTS (4-H); 6700 AGRICULTURE, HOME ECONOMICS; item 711 extension merger at University of Wisconsin; 441 New York State task force on community resource development; 83 homemaker adoption process in North Carolina county; 82 homemaker value orientations in a North Carolina county; 4 county or multi-county staff organization? 107 life history as predictor of leadership in 4-H youth; 492 history of programs for church leaders, Iowa State University; 681, 139, 138, 137 various studies of advisory committees and groups; 133, 134 bureaucracy and innovation in extension programs; 135 West Virginia Extension merger; 171 testing as method of teaching communication skills; 182, 183 extension newsletters; 263 two-way radio; 266 lecture versus telelecture.

7700 Junior Colleges

726. THE STRUCTURE AND DEVELOPMENT OF COMMUNITY PROGRAMS IN SELECTED COMMUNITY COLLEGES IN THE UNITED STATES. Myran, Gunder Arnold. Michigan State Univ., University Microfilms (Order No. 16, 168, MF \$3.00, Xerography \$8.80). Ed.D. Thesis. 194p. 1969.

A sample of 13 community colleges having effective and comprehensive community service programs was selected; and administrators involved in community service were interviewed. These were among the conclusions: (1) community service may be seen as an orientation of the entire college; (2) each college works its own way to help meet social, economic, civic, and cultural needs; (3) community service is increasingly being seen as a legitimate community college function; (4) local programs are not generally exportable; (5) community service programs are affecting community college organization and instruction; (6) leadership and administration, institutional setting, and liason within a college and with the community are the major factors affecting programs and program administration; (7) major challenges lie in service to disadvantaged groups and the black community, planning and teaching, and cooperation with the community.

727. COMMUNITY SERVICES IN THE COMMUNITY COLLEGE. Myran, Gunder A. American Assn. of Junior Colleges. EDRS PRICE MF \$0.50, HC \$3.10. Also available from American Assn. of Junior Colleges, One Dupont Circle N.W., Washington, D. C. 20036 (\$1.50). 60p. 1969.

This document reviews the concepts and definitions related to the community services function of the community college. Problems of organizing and financing community service programs are examined, as well as problems of leadership and the question of coordination with the community and within the college itself. Several contemporary issues and challenges are discussed. The author feels that of all community college programs, the community services aspect reflects most clearly the socioeconomic structure of the community. Since community services extend the educational services to community groups that are otherwise not affected by conventional college programs, a variety of new and innovative organizational approaches are often required. This factor may in turn affect the traditional approaches of the entire college.

728. AN ANALYSIS OF PUBLIC COMMUNITY COLLEGE TEACHER-PREPARATION NEEDS WITH PROGRAM IDENTIFICATION. Ward, Gordon A. Wyoming Univ. Ed.D. Thesis. 150p. 1969.

This study aimed at analyzing the responses of deans of instruction, department chairmen, and student officers of the Phi Theta Kappa in the North Central Accrediting region to an opinionaire rating desirable teacher characteristics. The responses were used to assist in formulating a teacher-preparation model that might be implemented at the University of Wyoming.

729. PERSONNEL PRACTICES IN COMMUNITY COLLEGE-EVENING PROGRAMS. Williams, F. Neil; Gillham, Louis E. In Adult Leadership v19 n1 p5-6, May 1970.

A study was made of 30 coeducational junior colleges to gather information on staff characteristics of the evening school administrator; selection, orientation and inservice training, and evaluation of teaching staff; salaries; and student personnel services.

730. A STUDY OF ADULT PART-TIME STUDENTS IN A COMMUNITY COLLEGE. Mohawk Valley Community Coll., Utica, N. Y. EDRS PRICE MF \$0.50, HC \$4.60. 90p. 1969.

Using a student biographical inventory, quick word test, and survey of program dropouts, adult part time students in Mohawk Valley Community College (MVCC) Evening Division credit and noncredit courses were studied as to personal background, motivation, self-concept, mental ability, educational and vocational plans, and program satisfaction.

731. A COMPARATIVE STUDY OF CHARACTERISTICS OF EVENING DIVISION STUDENTS ENROLLED AT LOS ANGELES PIERCE COLLEGE. Los Angeles Pierce Coll., Woodland Hills, Calif. EDRS PRICE MF \$0.25, HC \$1.75 33p. 9 January, 1969.

The responses of 81% of the Fall 1968 night students completing a student-characteristics questionnaire are presented in charts and graphs, and compared with responses to similar questionnaires from previous semesters.

732. A STUDY OF THE RELATIONSHIP BETWEEN SELECTED VARIABLES AND ACADEMIC ACHIEVEMENT IN A COMMUNITY COLLEGE. Preas, Nancy Bush North Carolina State University. University Microfilms (Order No. 70-9214, MF \$3.00, Xerography \$5.60). Ed. D. Thesis. 106p. 1969.

The primary purpose of this study was to determine the validity of selected predictor variables for estimating academic performance and to assess which were best predictors of achievement among selected community college students in North Carolina. Six predictor variables (the SAT-verbal, SAT-maths, English Coop., Math Pretest, HSGPA, and HSR) were used. Full predictor models were formulated for the prediction of achievement in CGPA, EGPA, and MGPA. Of the high school records HSPA was the best predictor of all three, SAT was a better predictor of CGPA and EGPA, the Math Pretest was the better predictor of MGPA.

733. A PROPOSAL FOR THE ADULT EDUCATION AND COMMUNITY SERVICE RESPONSIBILITY OF COLBY COMMUNITY JUNIOR COLLEGE. Sanders, James Carroll. Kansas Univ.

University Microfilms (Order No. 68-17,499, MF \$3.00, Xerography \$9.90).
Ed. D. Thesis. 220p. 1968:

To assess the adult education and community service responsibility of Colby Community Junior College, Kansas, a survey was made of pertinent literature, followed by questionnaire surveys of 64 similar public junior colleges in Kansas and five nearby states and of 200 adults residing in the community. These were among the conclusions: evaluation results and proposed program revisions should be reviewed annually by the governing board; (2) Kansas community junior colleges should seek legislation that recognizes adult education and community service as a public responsibility; (3) junior colleges should promote adult educational and community service program research.

734. A STUDY OF PERSISTENCE OF ADULT STUDENTS IN THE FUNDAMENTAL LEARNING LABORATORIES OF THE NORTH CAROLINA COMMUNITY COLLEGE SYSTEM. Killian, William David. North Carolina Univ. University Microfilms (Order No. 70-9194, MF \$3.00, Xerography \$4.80). Ed. D. Thesis. 88p. 1969.

A study was undertaken to identify the characteristics of the adult learner who persists in the North Carolina learning laboratories program. The program was established under the "Open Door Policy" which opened all institutions to all adults regardless of prior educational experience. The learning laboratories are centers in the community college offering instruction of either a programmed or a self directed nature toward high school equivalency, preparation for entrance to a community college, college preparation, upgrading in specific subject areas, and study of a subject for personal satisfaction. Persistence was found to correlate positively with age and with years since attending school, but no significant correlation was found with academic ability, social adjustment, job-related objectives, or employment status.

See also: SECTION 5500 COMMUNITY SERVICES AND PROGRAMS; item 700, 701 inventory of continuing education in Pennsylvania; 344 women over 30 at Joliet College; 475 training public health assistants; 474 drug education program, Nassua College; 510 community college training of social service aides; 633 new careers program, Rochester State College; 395 effects of ABE program in North Carolina community colleges.

7800 Public Schools

735. ADULT EDUCATION STATISTICS, 1968-69. National Education Association. Research Memo 1968-16 EDRS PRICE MF \$0.25, H.C. available from National Education Assn., 1201 16th St., N.W. Washington, D. C. 20036 (\$0.50) 18p. 1968.

This report provides statistical information on adult education programs in school systems with enrollments of 6,000 or more. Table I shows, by enrollment groups, the number of reporting systems with enrollments of 6,000 or more; table II reports the enrollment and number of teachers in elementary and/or secondary school systems and in adult education programs; table III indicates the distribution of maximum hourly rates paid to adult education teachers as well as means, medians, and ranges of the rates. This report is not an all inclusive study of adult education programs throughout the

United States. The summary tables contain data only on those systems in the individual listing.

736. INVENTORY OF CONTINUING EDUCATION ACTIVITIES IN PENNSYLVANIA SECONDARY SCHOOL DISTRICTS. Pennsylvania State Univ., EDRS PRICE MF \$0.25, HC \$1.70 32p. 1969.

An inventory of adult education offerings in high school districts in Pennsylvania produced a 75.8% return of questionnaires and provided information on the courses conducted by school districts by subject categories together with the number of school districts offering each course. Following are comments on the more important or unique aspects of the activities summarized into -- program activities, finances, staffing, and participation.

737. INVENTORY OF CONTINUING EDUCATION ACTIVITIES IN PENNSYLVANIA SECONDARY SCHOOL DISTRICTS. Pennsylvania State Univ. 54p. 1970.

738. A STUDY OF THE CHANGE IN ATTITUDE (TOWARD) ADULT EDUCATION. Jansen, Udo H. EDRS PRICE MF \$0.25, HC \$1.85 Research Report. 35p. Spring 1970.

This study in Lincoln, Nebraska, assessed participants' attitudes toward adult education before and after enrollment in public school adult education classes of their own choice. These were among the conclusions reached: (1) participants were uncertain of their ability to learn; (2) they felt that adult education was worth the money spent, but they were undecided on tax funding; (3) they felt that the program should continue, that it used time wisely, that it had relevant material and subject matter, and that time and effort requirements were reasonable; (4) special participant needs were being met. Many especially liked the program because they felt it increased self-confidence and broadened the mind.

739. COMMUNITY STRUCTURE AND PARTICIPATION IN ADULT EDUCATION. ARDA-CANADA INVENTORY PROJECT 49009, SPECIAL STUDY, 3. Dickinson, Gary; Verner, Coolie. British Columbia Univ. EDRS PRICE MF \$0.25, HC \$2.60. 50p. 1969.

An investigation was made of certain structural characteristics of a small, isolated rural community (Pemberton, British Columbia) that might influence participation in adult education. Existing night school courses were mainly in vocational training, domestic sciences, and recreational activities. Although over half of the 158 males interviewed were interested in further education or job training, courses bore little relationship to expressed needs and interests. Variables significant to participation included the following: younger age groups (15-34); larger numbers of children; local birthplace and kinship ties; residential patterns (including distance from night school); father's education; uncertainty as to adequacy of job skills; educational interest; and activity in formal organizations. Conclusions were drawn as to the educational needs of farmers and businessmen, restrictive effects of distance on participation, and the influence of long-time residents on existing course offerings.

740. EMERGENT PATTERNS IN LEA ADULT EDUCATION. Buchanan, Derek; Percy, Keith National Institute of Adult Education (England and Wales), London (England). Available from National Institute of Adult Education (England and Wales), 35 Queen Anne Street, London W1M 0BL England (5s 6d) 45p. August 1969.

This book deals with three aspects of adult non-vocational classes as provided directly by Local Education Authorities: fees charged in recent years and the association of variations in them with numbers of enrollments; variations in the provision of classes as between authorities of comparable size; and patterns of student enrollment as revealed in the records of a single community-college type center. Changes in down payment, length of session "bought," discriminatory charges for some classes, boundary, and minimum numbers required affect enrollments. Local factors affect provisions for classes made by authorities of comparable size. Patterns of enrollment reveal that classes in domestic and women's crafts, physical education, and arts and languages are common. Many authorities are moving toward the community college/adult education center type of institution.

See also: SECTION 5230 ADULT BASIC EDUCATION; 5300 ADULT SECONDARY EDUCATION; item 302 functions of Director of Adult Education in Canadian public schools; 598 national study of cooperative efforts by schools and industry in training disadvantaged; 610, 608 remedial occupational training; 568 attitudes of Milwaukee personnel officers toward public school vocational programs; 583 training needs of tool and die makers; 5 educational needs in Indiana county; 3 educational needs and offerings, East Orange, N. J.; 484 counseling potential of high school teachers; 209 group work with parents; 649 effectiveness of adult vocational education in Wyoming; 123 dropout study, Wellesley, Mass.; 279 night and day sharing of premises in LEA programs in Great Britain.

7900 Business and Industry

See: SECTION 2350 LEARNING ENVIRONMENTS - ORGANIZATIONAL; 5700-6150 PROFESSIONAL, TECHNICAL CONTINUING EDUCATION; 6200 MANAGEMENT AND SUPERVISORY DEVELOPMENT; 6300 LABOR EDUCATION; 6500-6850 OCCUPATIONAL TRAINING; 311 determining return on investment in on-the-job training; 247 agricultural films at lunch hour in urban insurance office; 244 survey on use of video tape; 688 role of private enterprise in U. S. foreign assistance.

8000 Armed Forces

See: SECTION 1650 SELECTION, PREDICTION OF SUCCESS (in training); 4710 LOW APTITUDE; 6500-6850 OCCUPATIONAL TRAINING; item 313 contribution of military skills to civilian life; 129 GI Bill and its effects in Indiana; 132 evaluation of Air Force base libraries supporting extension class programs; 345 national study of wives of Army officers; 429 military admission qualifications in continuation high school; 696 on-going simulation and student survey; 389 Project 100,000; 477 attitude changes in medical service school; 470 basic Hospital Corps school; 309 identifying difficulty units in technical training program; 125 "motivational

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8100 Religious Organizations

See: SECTION 6000 CONTINUING PROFESSIONAL EDUCATION - RELIGION: item 341 history of Catholic higher education for women in Michigan; 457 agricultural education in Methodist Church; 227 responses of Methodist youth to leniency in leadership training; 259 national survey of religious television programs; 335 pre-retirement education for religious professional women and members of church order.

8200 Libraries, Museums

741. A STUDY OF LIBRARY SERVICES FOR THE DISADVANTAGED IN BUFFALO, ROCHESTER, AND SYRACUSE. Clift, Virgil A. New York Univ. EDRS PRICE MF \$1.50 HC \$17.85. 355p. June 1969.

The purposes of the study were (1) to evaluate existing outreach programs for the disadvantaged; (2) to determine, portray and summarize the personality characteristics in cognitive style of the disadvantaged population that should be viewed in the planning of library or educational projects or programs; (3) to summarize and present demographic data on the unique characteristics of the depressed areas of each city included in the study; and (4) to derive realistic recommendations that can be implemented. The report includes findings and recommendations, a philosophical position on community control of the library, characteristics of the disadvantaged group the library strives to reach, and separate discussions of the situations in Buffalo, Rochester, and Syracuse.

See also: 243 visitor reactions to exhibits in Milwaukee museum; 456 four year adult education project, Vigo County, Indiana Public Library.

8250 Proprietary Schools

742. PRIVATE VOCATIONAL SCHOOLS AND THEIR STUDENTS. Belitsky, A. H. Available from Scheikman Publishing Company, Inc. 1 Story Street, Harvard Square, Cambridge, Mass. 02138 (\$7.95) 192p. 1969.

Results are presented of a study on ways of better using private vocational schools for training. The potential social role of these schools is considered first, followed by advantages to students and employers because of the schools' flexible operation and organization, progress toward better evaluation of schools through voluntary accreditation, and the diversity of edu-

cational resources and opportunities. Other chapters deal with instructor qualifications and duties; characteristics, needs, and performance of the students; student responses to proposed financial aid programs at RCA institutes in New York City; and high school dropout performance in competition with other private vocational school students. Finally, as it illustrates the potential for equalizing educational opportunities by means of proprietary schools, this book offers recommendations for joint public and private training programs, with attention to such concerns as course upgrading and student grants. The document includes an index, questionnaires, and types of courses offered in 544 schools.

8500 Federal Government

743. FEDERAL EDUCATIONAL POLICIES, PROGRAMS, AND PROPOSALS; A SURVEY AND HANDBOOK, PART II. SURVEY OF FEDERAL EDUCATIONAL ACTIVITIES. Quattlebaum, Charles A. Library of Congress. EDRS PRICE MF \$2.00. HC available from U. S. Government Printing Office, \$2.25. 525p. December 1968.

This report surveys the educational activities administered by Federal agencies. It describes each program and summarizes the activities including data on funds obligated for them. Such activities are construed to include: (1) educational activities which are a Federal responsibility, as indicated by statute or other authority; (2) educational or training programs which the Federal Government operates or supports; and (3) Federal activities which provide education similar to other institutions. Included also are the educational programs of international organizations in which the United States participates. Two types of research programs are covered: (1) those carried out entirely or partly by institutions of higher education under contract with Federal agencies, and (2) those carried on by institutions, particularly land grant colleges through their experiment stations, in cooperation with Federal agencies, or vice versa. The Appendix is a chart of Federal monies for education programs administered by the Office of Education during Fiscal Year 1967.

744. FEDERAL EDUCATIONAL POLICIES, PROGRAMS AND PROPOSALS. A SURVEY AND HANDBOOK. PART III: ANALYSIS AND CLASSIFICATION OF THE PROGRAMS. Quattlebaum, Charles A. Library of Congress. EDRS PRICE MF \$1.50 HC available from U. S. Government Printing Office (\$1.50) 356p. Dec. 1968.

This volume analyzes and classifies the Federal training and educational programs under the headings of (1) method of administration, (2) levels of education concerned, (3) geographic areas affected, and (4) number and types of persons affected. In addition to a program-by-program factual report, four chapters summarize these same headings for the whole Federal Government. Programs discussed include the educational activities of international organizations in which the United States participates. Some general patterns and issues are briefly discussed in the final chapter including proposals for a cabinet level Department of Education and Manpower Training, and a National Foundation for the Social Sciences.

745. STUDIES AND REPORTS RELATING TO TRAINING AND EDUCATION, FISCAL YEAR 1969. U. S. Civil Service Commission. EDRS PRICE MF \$0.50 HC available from U. S. Government Printing Office (Pamphlet T-6, \$0.70) Revised edition 71p. March 1970.

This directory of Federal Educational and Training activities contains abstracts of 25 completed reports and studies, followed by 48 others on programs still in progress.

746. FEDERAL EDUCATIONAL POLICIES; PROGRAMS AND PROPOSALS. A SURVEY AND HANDBOOK. PART I: BACKGROUND, ISSUES, RELEVANT CONSIDERATIONS. Quattlebaum, Charles A. Library of Congress, Washington, D. C. Legislative Reference Service. EDRS PRICE MF \$0.75, HC available from U. S. Government Printing Office. (\$.75). Part I of a three part handbook. 177p. Dec. 1968.

This, the first of a three part handbook, seeks to make available to the Congress a compilation, analysis, and summary of certain basic information needed for legislative decision on educational issues that come before Congress. Specifically it (1) summarizes the evolution of Federal policies in education 1777-1960 and congressional enactments concerning education and training; (2) discusses the history, organization, and functions of the U. S. Office of Education and of the National Science Foundation; (3) reviews the recommendations of ad hoc advisory commissions, 1929-1967, concerning Federal educational policies; and (4) sets forth the positions of currently active organizations and agencies, governmental and nongovernmental, concerning the Federal role in education. Three areas of controversy are seen: the extent of Federal control over local education, Federal aid to nonpublic schools; and racial integration in the schools.

See also: 0350 STUDIES AND PLANNING - NATIONAL LEVEL; 5230 ADULT BASIC EDUCATION; 6550 UNSKILLED, DISADVANTAGED; 6050 PROFESSIONAL CONTINUING EDUCATION - PUBLIC SERVICE; 80000 ARMED FORCES; item 634 funded research in adult vocational education; 150 AID training for foreign assistance; 687 U.S. agencies in international education and cultural activities; 383,505 Federal prison training; 451 evaluation of community action programs; 111, 212 Peace Corps training; 508 VISTA training; 152 economic development activities in 10 rural community action programs.

8600 Non-governmental Organizations

See: item 573 national study of volunteers; 213 teen-age leadership training in YMCA; 668 CORE program in black identity.

9000 INTERNATIONAL PERSPECTIVE IN ADULT EDUCATION

9020 International and Comparative Studies

See: item 330 study of elderly in Great Britain, Denmark and U. S.; 422 UNESCO meeting on literacy research needs; 692 cross-cultural study of role perceptions; 329 comparison of work and leisure in U. S. and western European countries; 192 survey of enrollment in foreign correspondence schools; 552 workers' education in Great Britain and U. S.; 314 UNESCO

paper on training youth leaders; 430 review of part-time higher education in various countries; 672 world trends in family research.

9040 Developing Nations

See: SECTION 5280 LITERACY EDUCATION - FOREIGN; 5550 COMMUNITY DEVELOPMENT PROGRAMS - FOREIGN; 7150 CROSS-CULTURAL EDUCATION; item 725 rural extension in 20 developing nations; 691 effects of U. S. programs for persons from developing nations; 250 satellite and TV communication in less developed countries; 688 role of private enterprise in U. S. technical assistance.

9350 Canada

747. L'OPERATION DEPART; SYNTHESE DES RAPPORTS REGIONAUX (OPERATION DEPART; A SYNTHESIS OF REGIONAL REPORTS). Pelletier, Louis, Ed.; and Others, Eds. Quebec Ministry of Education, Quebec (Canada) EDRS PRICE MF \$2.25, HC \$28.35 Text in French 2v 565p. February 1970.

This comprehensive report on the Quebec provincial continuing education scheme describes its position in relation to the Roman Catholic educational system as a whole; the current status of adult education activities; urbanization and socioeconomic development in the nine major regions studied; the extent of need for academic, vocational, and cultural education in different localities; educational needs, among certain groups (women, young adults, farmers, welfare recipients, the handicapped, the unemployed); and the institutional structure, public and private, of adult and continuing education. Statistical data are reported for 57 districts in the nine regions in such categories as adult and regular secondary school attendance, adult dropouts, male and female employment, manpower utilization, and educational levels.

See also: item 557 bilingual inventory of Canadian research on human resource development; 29 directory of education studies in Canada; 30 adult education research at the University of British Columbia; 21 workshop on adult education research in Canada; 7 survey of Sudbury area; 11 Corbett, CAAE and development of adult education in Canada; 252 survey of ETV; 6 adult education participation in Guelph area; 8 adult education survey, Calgary area; 476, 699, 433, 106, 599, 489, 704 various studies of higher adult education in Canadian institutions; 292, 416, 394, 302 literacy, basic and public school adult education; 154, 739, 143, 378, 377, 184, 181, 659, 660 various studies of community development, socio-economic surveys, Canadian Indians, rural extension and adoption studies; 686 educational needs of municipal recreation officials; 131 tuition remission for evening and correspondence students; 355 women returning to labor force; 567 national survey of vocational education; 312 return on investment in adult education in Quebec.

9400 Latin America

See: Section 9040 DEVELOPING NATIONS; item 232 leadership in volunteer medical teams in Central America; 459 effect of communication on rural develop-

ment, cross-cultural study in Costa Rica and India; 724 extension supervision in Argentine experiment station; 661 diffusion of technical information in Chile; 664 competence of Peace Corps volunteers in Columbia.

9500 Europe

See: SECTION 9020 INTERNATIONAL AND COMPARATIVE STUDIES; item 2 survey of adult education finance in various countries; 501 leadership in Belgian naval officers; 329 cross-cultural study of work and leisure in U. S. and various European countries; 713 technical education through television lectures in Poland; 20 adult education research needs in USSR; 31 Council of Europe conference on adult education research in Europe.

9520 Great Britain

748. A HISTORY OF ADULT EDUCATION IN GREAT BRITAIN. Kelly, Thomas. Available from Liverpool University Press, 123 Grove Street, Liverpool 7, England (63s) 420p. 1970.

In a comprehensive study of adult education history in Great Britain, the author describes the development of formal adult education in its variety, and at the same time traces the influence of other less formal modes of instruction. Drawing from a wide range of sources he recounts in detail the various agencies of adult education public lectures, adult schools, mechanics' institutes, churches, working men's colleges, universities, extension courses, and the Workers' Educational Association, which have contributed to the development and perpetuation of adult education in Great Britain. The narrative extends from the Middle Ages to the 20th Century and embraces all these movements and institutions: the pulpit, the press, public libraries, cultural societies, reformation, renaissance, puritanism, science, and radical opposition broadcasting.

See also: 256 research on effectiveness of ETV; 170 research problems in adult learning; 346 history of Girton College for women; 740 LEA non-vocational adult education; 279 day, night sharing of educational premises; 16 social science research useful to adult education; 556 1968 training research register; 582, 480, 465, 324, 469, 586, 539, 113, 638, 552, 42, 330, studies of various aspects of vocational, industrial, management and continuing professional education.

9400 Scandanavia

See: item 126 adult education recruitment and methods in Sweden; 663 agricultural extension in Finland; 22 adult education research in Norway; 330 comparative study of elderly in Denmark, Great Britain and U. S.; 156, 159, 158 folk high schools in Denmark and Finland.

9540 Germany

749. HISTORICAL NOTES ON ADULT EDUCATION IN GERMANY TO 1871. Pirtle, Wayne G. In Adult Education v19 n4 p268-280 Summer 1969

Systematic adult education in Germany was generated by social, political, and economic forces in the first half of the nineteenth century. First was the "Enlightenment" view of adult education as a means of self-help, the conviction that "knowledge is power." Ancillary to this was the emergence of science as a powerful force for technological, economic, and social change. In addition, the Industrial Revolution created a new social class, the industrial workers, whose leaders looked to adult education as a substitute for an inadequate system of public education for the young. These factors gave rise to a movement in adult education that became perceptible in the 1820's, seemed to disappear again under government suppression of the 1850's only to emerge more dynamic than ever in the 1860's.

See also: SECTION 9020 INTERNATIONAL AND COMPARATIVE STUDIES; item 23 documentation, research and training in German Association for Adult Education; 32 adult education research in Germany.

9650 Near, Middle East

See: SECTION 9040 DEVELOPING NATIONS; 549 applicability of modern management processes in Turkey; 458 adult rural education in Iraq; 695 skills needed by American change agents in Middle East; 424 literacy, other programs in Israel.

9700 Africa

See: SECTION 9040 DEVELOPING NATIONS; item 423 evaluation of literacy, other adult education in Tunisia; 500 training in Moroccan civil service; 462 Egyptian use of development concepts from developed nations; 704 Institute of Adult Education, Dar-es-Salaam; 425 low-cost periodical for use in Rhodesia.

9800 Asia

See: SECTION 9040 DEVELOPING NATIONS; item 233 conceptual scheme for participation training in Three Love Movement in Japan; 723 rural extension in Taiwan; 694 cultural training for Americans serving in Thailand; 461 members of Philippine bureaucracy as change agents; 550 management education in West Pakistan; 666, 264, 265, 459, 662 television, radio, other aspects of rural extension in India.

9950 New Zealand

750. NEW ZEALAND ADULT EDUCATION. Hall, David W. O. Available from Michael Joseph Ltd., 52 Bedford Square, London, W.C.1, England. 200p. 1970.

This book contains the history of and commentary upon adult education in New Zealand, describing the ways in which social developments and institutions based on foreign models are modified by indigenous traditions and needs. The growth of the national adult education organizations took place under heavy influence from the Workers Education Association in England,

and in the period between the world wars New Zealand's W.E.A., in association with the country's universities, became an important factor influencing educational, social, and political development. The work of other voluntary associations concerned with adult education precipitated the establishment by Parliament of the National Council for Adult Education. The Council continues to be an important central organization, though its function has been modified several times by Parliament, particularly in relation to university extension programs.

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