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Some informational materials used in the project reported in "Health Manpower Research. Volume 1" (VT 005 426) are presented. A 97-page bibliography covers manpower, health occupations, planning and legislation, migration of health personnel, staffing and utilization, health economics, and research into health manpower. Appendixes include: (1) a catalog of pertinent text materials consisting mainly of reading lists for economics and sociology courses provided by professors in various universities, (2) a listing of masters' thesis topics in the field of hospital administration, (3) medical care administration educational program materials from several universities including statements of objectives, program descriptions, course listings, and information about graduates of the various programs, (4) information about specific Office of Manpower Policy, Evaluation, and Research programs including grants, progress reports, proposals, and a conference report, (5) information and materials relating to manpower research activities at Harvard, Princeton, Pennsylvania State, Wisconsin, and Georgia Institute of Technology, and (6) course outlines and descriptive letters received in response to requests directed to professors for information about training available to potential health manpower researchers. (JK)

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SECTION SEVEN

BIBLIOGRAPHY OF LITERATURE RELATED TO HEALTH MANPOWER

I. MANPOWER

A. General

Alter, Henry C., "Choice: Challenge for Modern Women", National Educational Television and Radio Center, University of California Extension Service.

Becker, Gary S., Human Capital, Princeton University Press, 1964.

Becker, Gary S., "Investment in Human Capital: A Theoretical Analysis", Journal of Political Economy, Supplement. Vol. 70, No. 5, Part 2, October, 1962.

Beckerman, Wilfred, International Comparisons of Real Incomes, O.E.C.D. Development Center, Paris, 1966.

Boulding, Kenneth E., "An Economist's View of the Manpower Concept", National Manpower Council, Proceedings of a Conference on the Utilization of Scientific and Professional Manpower, Columbia University Press, 1954.

Bowen, William, Unemployment in a Prosperous Economy, Princeton University Press, 1965.

Bowman, Mary Jean, "The Human Investment Revolution in Economic Thought", Sociology of Education, Vol. 39, No. 2, Spring, 1966.

Cain, Glen G., Married Women in the Labor Force: An Economic Analysis, The University of Chicago Press, 1966.

Carter, William D., "Investment in People: UNESCO's Exchange of Persons Program", International Educational and Cultural Exchange, Spring, 1966.

Crossman, E.R.F.W., Automation, Skill and Manpower Predictions, U.S. Department of Labor, September, 1966.

Dewhurst, J. Frederic, et al., Europe's Needs and Resources: Trends and Propects in Eighteen Countries, Twentieth Century Fund, 1961.

Easterlin, Richard A., Current Project: "Labor Force Trends and Projections in the United States", National Bureau of Economic Research, 1966.

Fisher, Joseph Lyman, Perspectives on Natural Resources and Human Resources, U.S. Department of Labor, January, 1967.

Gibbons, William J., Scientific and Technical Manpower: Inventory of World Resources, Fordham University, Department of Economics, 1966.

I. A. MANPOWER GENERAL CONTINUED

Ginzberg, Eli, Human Resources: The Wealth of a Nation, Simon and Schuster, 1958.

Ginzberg, Eli, Technology and Social Change, Columbia University Press, 1964.

Haase, Peter E., "Technological Change and Manpower Forecasts", Industrial Relations, Vol. 5, No. 3, May, 1966.

Hansen, W. Lee, Labor Force and Occupational Projections, The Proceedings of the Eighteenth Annual Meeting, Industrial Relations Research Association, December, 1965.

Hiestand, D. L., Changing Careers in Middle Years, Columbia University, 1966.

The Journal of Medical Education, "Datagrams, International Personnel Resource Survey", Vol. 37, No. 11, November, 1962.

Journal of Political Economy, Supplement, "Investment in Human Beings", Vol. 70, No. 5, Part 2, October, 1962.

Keyserling, Mrs. Mary Dublin, Current Project: "Employment Opportunities for Women in Subprofessional Professions", Women's Bureau, U.S. Department of Labor.

Larson, Tom C., A Study of Sick-Leave Patterns Indicative of Abuse Among Selected Employees, University of Minnesota, 1964.

Lecht, Dr. Leonard, Current Project: "Manpower Needs for National Objectives in the 1970's", National Planning Association, Washington, D.C.

Marsh, John and Stafford, Frank, Income Foregone: Affects of Values on Pecuniary Behavior, National Opinion Research Center, March, 1966.

Miller, Herman, Trends in the Income of Families and Persons in the U.S.: 1947-1960, Technical Paper No. 8, U.S. Bureau of the Census.

Morgan, James N., Barlow, Robin, and Brazer, Harvey E.; "A Survey of Investment Management and Working Behavior Among High-Income Individuals", American Economic Review, Vol. 55, No. 2, May, 1965.

"National Commission on Technology, Automation, and Economic Progress", Technology and the American Economy, February, 1966.

National Science Foundation, Current Projects on Economic and Social Implications of Science and Technology, 1965.

I. A. MANPOWER GENERAL CONTINUED

Prelesnik, Warren L., Job Evaluation and Compensation, University of Michigan.

Reder, Dr. Melvin W., Current Project: "International Differences in Unemployment Rates of New Entrants to the Labor Force", Stanford University.

Roe, Anne R., Bibliography on Careers, Harvard University, Graduate School of Education, March, 1964.

Roe, Anne R., Factors Influencing Occupational Decisions: A Pilot Study, Harvard University, Graduate School of Education, 1964.

Ross, Arthur and Ruttenberg, Stanley, Report on Manpower Requirements and Supply, Bureau of Labor Statistics, Department of Labor, July, 1966.

Rossi, Peter H., Factors Influencing Career Choice, National Opinion Research Center, Aldine Press, 1965.

Rutzick, Max A., "A Ranking of U.S. Occupations by Earnings", Monthly Labor Review, March, 1965.

Sauter, Gerald R., Employee Attitudes Toward Non-Wage Payments, The University of Minnesota, March, 1964.

Schultz, Theodore W., "Reflections on Investment in Man", Journal of Political Economy, Vol. 70, No. 5, Part 2, Supplement, October, 1962.

Scoville, James G., The Job Content of the U.S. Economy, 1940-1970, Harvard University, Department of Economics, 1965.

Stigler, George J., "Information in the Labor Market", Journal of Political Economy, Supplement, Vol. 70, No. 5, Part 2, October, 1962.

Sweet, James A., Thesis Topic: "Family Composition and the Labor Force Participation of Married Women", University of Michigan.

Taylor, Cora E., "Employment Projections by Occupation", Long-Term Manpower Projections, Conference June 25-26, 1964, Institute of Industrial Relations, University of California, 1965.

Thomas, D. L. An Investigation of the Process by Which Women Become Employed, University of Iowa, Sociology Dissertation, 1964.

U.S. Congress, Exploring the Dimensions of the Manpower Revolution, 88th Congress, 2nd Session.

U.S. Congress, Job Vacancy Statistics: Hearings Before the Subcommittee, May 17 and 18, 1966, Joint Economic Committee, Subcommittee on Economic Statistics, 1966.

I. A. MANPOWER GENERAL CONTINUED

U.S. Congress, Job Vacancy Statistics, Joint Economic Committee, Subcommittee on Economic Statistics, 1966.

U.S. Congress, Nation's Manpower Revolution, 88th Congress, 1st Session, November 12, 13, 14, 22, and December 3, 1963, Part 8.

U.S. Department of Labor, America's Industrial and Occupational Manpower Requirements 1964-75, Bureau of Labor Statistics, January 1, 1966.

U.S. Department of Labor, Manpower Implications of Automation, September, 1964.

U.S. Department of Labor, Occupational Employment Statistics, Sources and Data, Report No. 305, Bureau of Labor Statistics, June, 1966.

U.S. Department of Labor, Bureau of Labor Statistics Occupational Outlook Handbook, Supplement of Documents, 1959, 1964.

U.S. Department of Labor, "Unused Manpower: The Nation's Loss", Manpower Research, Bulletin No. 10, November, 1965.

U.S. Department of Labor, "Protective Labor Legislation for Women in 91 Countries", Women in the World Today, International Report No. 5, Women's Bureau, March, 1963.

U.S. Department of Labor, "Maternity Protection Benefits in 92 Countries", Women in the World Today, International Report No. 6, Women's Bureau, June, 1963.

U.S. Department of Labor, "Notes on Women's Employment in the United States and Nine European Countries", Women in the World Today, International Report No. 7, Women's Bureau, January, 1963.

U.S. Department of Labor, Women Workers in 1960, Geographical Differences, Women's Bureau, Bulletin 284, 1962.

U.S. Internal Revenue Service, Statistics of Income - U.S. Business Tax Returns, annually from 1957. Before 1957, published in two parts: Statistics of Income for Partnerships and Statistics of Income for Private Persons.

I. A. MANPOWER GENERAL CONTINUED

Walsh, J. R., "Capital Concept Applied to Man", Quarterly Journal of Economics

B. Manpower: Scientific and Technical Personnel and Education

The American Assembly, Columbia University, The Federal Government and Higher Education, Prentice-Hall, Incorporated, 1960.

Aronson, Robert L., Labor Markets for Scientific and Professional Manpower: Structure and Functioning, Cornell University, School of Industrial and Labor Relations, 1967.

Astin, Alexander, "Distribution of Students Among Higher Educational Institutions", Journal of Educational Psychology, Vol. 55, No. 5, 1964.

Astin, Alexander W., "Productivity of Undergraduate Institutions", Science, Vol. 136, No. 3511, April 13, 1962.

Astin, Alexander W. and Holland, John L., "The Distribution of 'Wealth' in Higher Education", College and University, Winter, 1962.

Aurback, Herbert A., Lent, Richard H. and Levin, Lowell S., "Men and Women in the Biosciences - a Twenty-five Year Analysis of Doctorate Recipients", Federation Proceedings, Vol. 23, No. 5, September - October, 1964.

Bartlett, Neil, Finger, Frank, and Williams, Stanley, "On Recruiting Graduate Students", American Psychologist, Vol. 12, No. 10, October, 1957.

Blank, David S. and Stigler, George J., The Demand and Supply of Scientific Personnel, National Bureau of Economic Research, 1957.

Blaug, Mark, "An Economic Interpretation of the Private Demand for Education", Economica, May, 1966.

Blaug, Mark, Economics of Education: A Selected Annotated Bibliography, Pergamon Press, 1966.

Blaug, Mark, The Rate of Return on Investment in Education in Great Britain, The Manchester School, September, 1965.

Bowen, William, Economic Aspects of Education, Princeton University, 1965.

Bowman, Mary Jean, "The New Economics of Education", The Instit. J. Educ. Sci., Vol. 1, Pergamon Press, 1966.

I. B. MANPOWER: SCIENTIFIC AND TECHNICAL PERSONNEL AND EDUCATION, CONTINUED

Brode, Wallace R., "Approaching the Ceilings in the Supply of Scientific Manpower", Science, Vol. 143, No. 3604, Jan. 24, 1964.

Butter, Irene, "Financial Input of Graduate Education", Association for Institutional Research, May, 1966.

Cartter, Allan M., An Assessment of Quality in Graduate Education, 1966.

Cobb, Montague, "Not to the Swift: Progress and Prospects of the Negro in Science and the Professions", Journal of Negro Education, Vol. 27, No. 2, Spring, 1958.

Conley, Ronald, W., The Economics of Vocational Rehabilitation, The Johns Hopkins Press, 1965.

Copeland, William L., Leibling, Harold S. and Golomb, Jack, A Survey of Scientific and Technical Personnel Employed by State Governments: 1964, Commission of Labor Statistics, U.S. Department of Labor.

Creager, John A., A Study of Graduate Fellowship Applications in Terms of Ph.D. Attainment, Office of Scientific Personnel, National Academy of Sciences.

David, Henry, "Manpower Problems and Education", Education and Manpower, Columbia University Press, 1960.

Fernandex, J. M., "Professional Education and Training of Personnel", (Spanish), Bol. Ofic. Sanit. Panamer., 55, 1963.

Flanagan, John C., Identification and Development of Human Abilities, Project Talent Office, Washington, D.C.

Folger, John K., Project: "Study on the Development and Utilization of Talent in the U.S.", Human Resources and Advanced Education Committee, Conference Board of Associated Research Councils.

Folger, John K., Project: "Symposium on Manpower Theory", National Science Foundation

Franke, Walter H., Project: "Training and Recruitment Problems for Selected Technical Occupations in Short Supply", The University of Illinois, Institute of Labor and Industrial Relations, Champaign, Ill.

Ginzberg, Eli, Project: "Manpower Resources and Economic Growth", Columbia University.

Hansen, W. Lee, "Human Capital Requirements for Educational Expansion: Teacher Shortages and Teacher Supply", Education and Economic Development, Aldine Publishing Company, 1965.

I. B. MANPOWER: SCIENTIFIC AND TECHNICAL PERSONNEL AND EDUCATION, CONTINUED

Hansen, W. Lee and Tuckman, Howard, The Economics of Scientific Manpower, University of Wisconsin, 1966.

Harmon, Lindsey R., Background and Experience Patterns of the Doctorates of 1962, National Research Council.

Harris, N. E., "Technical Education in the Junior Colleges: New Progress for New Jobs", American Association of Junior Colleges, 1964.

Häurek, Edward W., Thesis Topic: "Sociological Determinants of College Aspiration, College Curriculum Choice, and Occupational Aspiration Among Working Class Adolescents", University of Ill.

Horejsi, Glenn G., A Study of Factors Influencing Senior Students' Choice as to Location and Type of Future Employment, University of Minneapolis, 1966.

Houchins, Joseph R., "The Negro in Professional Occupations in the U.S.", Journal of Negro Education, Vol. 22, No. 3, Summer, 1953.

Hufner, Klaus and Naumann, Jens, A Selected Annotated Bibliography in the Economics of Higher Education, Max-Planck Institute for Educational Research, Berlin, Germany, 1966.

Jacobson, Paul B., Innes, Jon T. and Pellegrin, Roland, The Economic Returns to Education: A Survey of the Findings, University of Oregon, 1965.

Kerr, C., Harbison, F. H., Dunlop, J. T. and Myers, C.A., "Technical and Scientific Personnel: Methods of Assessing Supply and Demand", International Labor Review, Vol. LXXXI, No. 1, January, 1960.

Kidd, Charles V., "The Growth of Science and the Distribution of Scientists Among Nations", Impact of Science on Society, Vol. 14, 1964.

Kinsinger, Robert E., Education for Technicians - An Overview, A Report to the American Association of Junior Colleges, 1965.

Leibenstein, Harvey, "Shortages and Surpluses in Education in Underdeveloped Countries: A Theoretical Survey", Education and Economic Development, Aldine Publishing Company, 1965.

Mattfeld, Jacquelyn A. and Van Aken, Carol G., Women and the Scientific Professions, M.I.T. Press, 1965.

McGlothlin, William J., Project: "Career Motivation Study and Recruitment Project", University of Louisville, Louisville, Ky.

Mincer, Jacob, "On-the-Job Training: Costs, Returns and Some Implications", Journal of Political Economy, Supplement, Vol. 70, No. 5, Part 2, October, 1962.

I. B. MANPOWER: SCIENTIFIC AND TECHNICAL PERSONNEL AND EDUCATION, CONTINUED

National Academy of Science, National Research Council, Research Bibliography of the Office of Scientific Personnel, July 17, 1966.

National Science Foundation, American Science Manpower 1964.

National Science Foundation, Profiles of Manpower in Science and Technology, 1963.

National Science Foundation, Scientific Manpower - 1956, Scientific Manpower - 1957, Scientific Manpower - 1958.

National Science Foundation, Summaries of Studies Concerning Scientific and Technical Manpower and Education as of June 1965, October, 1965.

National Science Foundation, Third Conference on Scientific Manpower, December, 1963, Fourth Conference, December, 1954.

Nichols, Robert C., "Effects of Various College Characteristics on Student Aptitude Test Scores," Journal of Educational Psychology, Vol. 55, No. 1, 1964.

Organization for Economic Cooperation and Development, "Resources of Scientific and Technical Personnel in the O.E.C.D. Area," Paris, 1963.

Page, David A., "Retraining Under the Manpower Development Act: A Cost-Benefit Analysis," Public Policy, Vol. 13, 1964.

Pellegrin, Roland; Jacobson, Paul B.; Innes, Jon T., The Economic Returns to Education: A Survey of the Findings, University of Oregon, 1965.

Pundeff, Marvin V., Science and Engineering Manpower Resources in Eastern Europe, San Fernando Valley State College, 1966.

Rabinowitch, Eugene, Editorial: "Scientific Womanpower," Bulletin of Atomic Scientists, Vol. 7, No. 2, February, 1951.

Rivlin, Alice M., Critical Issues in the Development of Vocational Education, The Brookings Institution, 1966.

Rivlin, Alice M., The Role of Federal Government in Financing Higher Education, The Brookings Institution, November, 1961.

Roe, Anne R., "Research in Teacher Mobility," Graduate School of Education, Harvard University, March, 1964.

Schultz, Theodore, W., The Economic Value of Education, Columbia University Press, 1963.

Sewell, William H., "Community of Residence and Occupational Choice," American Journal of Sociology, Vol. 70, March, 1965.

I. B. MANPOWER: SCIENTIFIC AND TECHNICAL PERSONNEL AND EDUCATION, CONTINUED

Sheth, U. K., "International Cooperation in Postgraduate Education," British Medical Journal, 5148:328-330, 1959.

Somers, Gerald G., "Retraining: An Evaluation of Gains and Costs," Employment Policy and the Labor Market, University of California Press, 1965.

Stalnaker, J. M., "The Attitudes of High School Students Toward Higher Education," Journal of Medical Education, Vol. 38, No. 9, September, 1963.

U.S. Congress, Joint Economic Committee, Subcommittee on Economic Progress, Automation and Technology in Education, August, 1966.

U.S. Department of Commerce, Studies in Scientific and Engineering Manpower, October, 1963.

U.S. Department of Health, Education and Welfare, National Institutes of Health, Resources Analysis Branch, Basic Reference Tables on Graduate Enrollment and Ph.D. Output in Selected Science Fields at 100 Leading Institutions, 1959-60, to 1963-64.

U.S. Department of Health, Education and Welfare, Education and Training, 1966.

U.S. Department of Health, Education and Welfare, Resource Analysis, Memos 1-8, 1960-65.

U.S. Department of Health, Education and Welfare, National Institutes of Health, Resources Analysis Branch, Summary Report on NIH Extramural Training Programs 1963 - 1964.

U.S. Department of Labor, "Careers for Women as Technicians," Women's Bureau Bulletin 282, 1961.

U.S. Department of Labor, "Continuing Education Programs for Women," Women's Bureau, Pamphlet 10, September, 1966.

U.S. Department of Labor, "Sheltered Workshops: A Pathway to Regular Employment," Manpower Research Bulletin, No. 15, March, 1966.

U.S. Department of Labor, Women's Bureau, Trends in Educational Attainment of Women, June, 1966.

U.S. Department of State, Bureau of Intelligence and Research, Cross Cultural Education: A Bibliography of Government Sponsored and Private Research on Foreign Students and Trainees in the U.S. and in Other Countries, April, 1965.

Warner, Arron W., Pilot Study of Obsolescence of Scientific and Engineering Skills, Columbia University, 1966.

I. B. MANPOWER: SCIENTIFIC AND TECHNICAL PERSONNEL AND EDUCATION, CONTINUED

Weisbrod, Burton A., "Education and Investment in Human Capital," Journal of Political Economy, Supplement, Vol. 70, No. 5, Part 2, October, 1962.

Weisbrod, Burton A., External Benefits of Public Education, An Economic Analysis, Industrial Relations Section, Department of Economics, Princeton University, 1964.

Wolfle, Dael, America's Resources of Specialized Talent, Harper & Brothers, 1954.

Yett, Donald E., and Borland, Melvin, Trends in the Return on Investments in Higher Education, 1949-59, University of Southern California, Los Angeles.

II. HEALTH OCCUPATIONS

A. Health Manpower General

1. General

Alhadeff, A. V. "Research Proposal Draft on the Substitutability of Some Health Services Personnel," Triangle Research Institute, Durham, N. C.

American Medical Association, Horizons Unlimited: A Handbook Describing Rewarding Career Opportunities in Medicine and Allied Fields, 1966.

California Medical Association, "Information: Measures of Health Personnel in California," California Medicine, April, 1966.

Connelly, John P., M. D., "The Physician and the Nurse-Their Interprofessional Work in Office and Hospital Ambulatory Settings," The New England Journal of Medicine, Vol. 275, No. 14, October 6, 1966.

Cummins, James F., M. D., Tasks and Roles of the Health-Serving Professions, The Florence Heller Graduate School for Advanced Studies in Social Welfare, Brandeis University.

Elling, Ray, "New Pathways to Health Services," Journal of American Dental Hygienists' Association, Third Quarter, 1966.

Fincher, Cameron, "Survey of Personnel Needs in Para-medical Occupations and Professional Nursing for the State of Georgia," Nursing and Para-medical Personnel in Georgia; a Survey of Supply and Demand, December, 1962.

Goerke, L. S., "Utilization, Recruitment and Training of Health Manpower," American Journal of Public Health, 55:1511-20, 1965.

Goulet, Charles R., "Education and Training," Hospitals, Vol. 40, No. 7, April, 1966.

Hansen, W. L., "Shortages and Investment in Health Manpower," Economics of Health and Medical Care, Proceedings of the Conference on the Economics of Health and Medical Care, May 10-12, 1962, School of Public Health, University of Michigan.

Harrell, G. T., "Trends in Education, Practice and Organization of Health Services," JAMA, 196:334-338, 1966.

Health Information Foundation, "A Survey of Sixty Years of Health Progress: U. S., 1900-1960," Chicago, Ill., 1961.

Jaco, E. Gartly, Attitudes Among Members of Different Health Professions, Program in Hospital Administration, University of Minnesota.

II. A. 1. HEALTH MANPOWER GENERAL CONTINUED

Jeffries, Malcomb, "Partnership in Training: A Short Account of Two Training Courses Organized in Association with Durham Technical College," The Hospital, Vol. 62, No. 10, October 1966.

Klarman, Herbert, "Changing Requirements for Health Manpower," Paper Presented at the American Public Health Association Meeting, November 2, 1966.

Lee, Milton, Current Project: "Study of Manpower Needs in the Basic Health Sciences," Federation of American Societies for Experimental Biology.

McNulty, M. F., "Health Manpower," Hospitals, Vol. 40, No. 7, April 1, 1966.

Magnuson, P. B., Building America's Health, U. S. Printing Office, 1953.

Mase, Darrel J., "The Utilization of Mindpower," Paper Presented to the American Public Health Association, Health Manpower Section, November 2, 1966.

Michael, Bernard and Stewart, Maxine G., Studies of Employment Trends and Outlook in Health Service Occupations, U. S. Department of Labor, Bureau of Labor Statistics.

Millis, John S., "Communications: Manpower for Tomorrow's Health Services," Text of Speech Presented at the National Health Forum, New York, New York, May 10, 1966.

National Health Council, Report. Health Resources—A Public and Private Responsibility, 1963.

New York City: Community Council of Greater New York, Salaries and Related Personnel Practices in Voluntary Social and Health Agencies in New York City: September, 1962, 1963.

New York State Committee on Medical Education, Education for the Health Professions, June, 1963.

North Carolina Hospital Education and Research Foundation, Health Careers for North Carolina, June, 1966.

Parke-Davis, "The Nation's Health Manpower," Patterns of Disease, January 19, 1964.

Polony, Louis J., "Programmed Instruction and Automated Education for Hospital and Other Medical Personnel," Hospital Progress, February, 1965.

II. A. 1. HEALTH MANPOWER GENERAL CONTINUED

Reed, L. S., Incomes of Physicians and Dentists from Private, Self-Employment Practice, U. S. Social Security Administration, Research and Statistical Note No. 13 1965.

Riback, Nancy, Utilization of Health Facilities and Services, 1950-63: An Annotated Selected Bibliography, State of California Department of Public Health, Sacramento, California.

0 Schechter, Daniel, "Innovations in Education and Training of Health Manpower," Paper delivered at the APHA Meeting in San Francisco, November 2, 1966.

Scitovsky, Tibor, Paper: "An International Comparison of the Trend of Professional Earnings," University of California, Berkeley, California.

Scitovsky, Tibor, "Professional Earnings," American Economic Review, March, 1966.

South Carolina Employment Security Commission, Manpower Requirements for Health Facilities in South Carolina, March, 1966.

0 Sturm, Herman, "Technological Developments and Their Effects Upon Health Manpower," Monthly Labor Review, January, 1967.

Texas Hospital Association, Interim Report, Internal Study, Committee of Health Careers, Study Committee, Texas Hospital Association, Revised as of April 8, 1965.

U. S. Department of Health, Education, and Welfare, Background Material Concerning the Mission and Organization of the Health Activities of the Department; Two Volumes, March, 1966.

U. S. Department of Health, Education, and Welfare, Health Manpower Chart Book, P.H.S. Publication 511, Government Printing Office, 1957.

0 U. S. Department of Health, Education, and Welfare, Enrollees in Health Occupation Training Courses, October 20, 1966.

U. S. Department of Health, Education, and Welfare, Health Resources Statistics, 1965, Public Health Service Publication No. 1509.

d U. S. Department of Health, Education, and Welfare, Medical Care in Transition, Two Volumes. Reprints from the American Journal of Public Health, 1949-57.

II. A. 1. HEALTH MANPOWER GENERAL CONTINUED

U. S. Department of Health, Education, and Welfare, Report to the Surgeon General on the Second National Conference on Public Health Training, PHS Publication #1087, 1963.

U. S. Department of Health, Education, and Welfare, Resumé of Federal Programs Related to Expansion of Health Manpower, April, 1966.

Department of Health, Education, and Welfare, Task Force on Health, Education, and Welfare Manpower Requirements, "Trends in Health Manpower," Staff Paper 1.

U. S. Department of Health, Education, and Welfare, "Training for Service and Leadership in Health Professions," Health, Education, and Welfare Indicators, August, 1964.

U. S. Department of Labor, Bureau of Employment Security, Health Careers Guidebook.

U. S. Department of Labor, Office of Manpower Policy, Technology and Manpower in the Health Service Industry, 1965-75, August, 1966.

U. S. Employment Service, "Health Manpower," Employment Service Review, Vol. 111, No. 11, Bureau of Employment Security, November, 1966.

U. S. Government General: A National Program to Conquer Heart Disease, Cancer, and Stroke, Report to the President, Vol. II, "Appendix C: Major Programs Concerned with the Development of Health Manpower," February, 1965.

U. S. Government General, "National Advisory Commission on Health Manpower," Weekly Compilation of Presidential Documents, May 13, 1966.

U. S. Government General, The Whitehouse Conference on Health, Publication No. O-797-936, Government Printing Office, November, 1965.

Weiss, J. H., The Changing Job Structure of Health Manpower, Harvard University, 1966.

West, Margaret D., "Manpower for the Health Field: What are the Prospects?" Hospitals 37:82-88, September 16, 1963.

Wirick, Grover Jr., Health Care Facility and Personnel Needs: An Annotated Bibliography, April, 1966.

II. A. 1. HEALTH MANPOWER GENERAL CONTINUED

Wren, George R., "Why Waste Scarce Manpower with a Fixed Retirement Age?" Hospitals, Vol. 38, January 16, 1964.

II. A. 2. Hospital Personnel General.

American Hospital Association, Survey of Manpower Resources in Hospitals 1966.

Anderson, Wayne and Haag, Gregory, "A Study of Hospital Employee Attitudes," Hospital Management, Vol. 96, No. 6, December, 1963.

Barclay, G. N., "Keeping Trainee Personnel at the Bed-side," Hospitals, Vol. 37, April 16, 1963.

Benedict, L. W., "Personnel," Hospitals, Vol. 40, No. 7, April 1, 1966.

Birky, Lucy, "New Approaches to Attracting and Keeping Personnel," Hospitals, Vol. 38, June 1, 1964.

Bonanno, R. A., and Sidel, Victor W., "'At Risk' Hospital Personnel Singled Out by Smallpox and Tetanus Survey," Hospitals, Vol. 40, No. 16, August 16, 1966.

Custer, John C., An Investigation of Certain Factors Relating to Labor Turnover in a Teaching Hospital, University of Minnesota.

Dauw, Dean C., "Human Factors Outrank Salary as Turn-over Cause in this Hospital," Hospital Topics, Vol. 44, No. 8, August, 1966.

Dubin, Samuel S., Continuing Professional Education Needs of Supervisory Personnel in Psychiatric, Proprietary, and Tuberculous Hospitals, Pennsylvania State University, University Park, Pennsylvania.

Dubin, Samuel S. and Marlow, Leroy H., The Determination and Measurement of Supervisory Training Needs of Hospitals Personnel. A Survey of Pennsylvania Hospitals. Pennsylvania State University, 1965.

Ederer, C. J., A Study of Some Personal Characteristics of Hospital Department Heads and Supervisors Related to Managerial Effectiveness, University of Minnesota, 1964.

Feldstein, Paul J., Study of Personnel Turnover, Bureau of Hospital Administration, University of Michigan.

Flagle, Charles D., "Measures of Effectiveness for Selection, Training, and Motivation of Hospital Personnel," Paper presented at the session on Operations Research in Hospitals, Fifth Annual Meeting, Operations Research Society of America, Philadelphia, May 10, 1967.

II. A. 2. HOSPITAL PERSONNEL GENERAL CONTINUED

Freeman, John R., Labor Unionization of Hospital Employees, Hospital Systems Research Group, Georgia Institute of Technology, October, 1964.

Freund, Louis E., The Influence of the Supervisor's Attitude on Subordinate Training and Performance in the Situation of Procedural Changes, Washington University, St. Louis, Mo.

Haas, Eugene, Role Conception and Group Consensus: A Study of Disharmony in Hospital Work Groups, Bureau of Business Research, Monograph No. 117, Ohio State University, 1964.

Hart, Peter Fenley, An Analysis of Sickness Absence Among Employees of a Children's Hospital, University of Toronto.

Hill, Lawrence A., "The Continuing Education of Hospital Personnel," Hospital Forum, Vol. VIII, No. 12, March, 1966.

Krueger, George R., An Employee Orientation Program Feasible for Use at San Antonio State Hospital, Baylor University, San Antonio, Texas.

McCreary, J. R. and Douglas, E. K., "Retirement, Replacement, and Recruitment in the Hospital Service," New Zealand Hospital, Vol. 18, No. 3, January, 1966.

Micic, B. T., "Performance Standards and Personnel Standards for Patient Care," Narod. Zdrav., Vol. 21, No. 8-9, 1965.

Miller, R. L., An Analysis of the 1965 Cooper Hospital Strike, Working paper No. 4, University of Pennsylvania, 1965.

Miller, R. L., Current Project: "Employee Relations in Hospitals," University of Pennsylvania.

Odiorne, George and Parker, H., Labor Relations in Hospitals, University of Michigan.

Odoroff, Maurice E., Cost of the Teaching Function at Freedmen's Hospital, Washington, D. C. Program Evaluation and Reports Branch, Division of Hospital and Medical Facilities, Department of Health, Education, and Welfare.

Osterhaus, Leo Benedict, Labor Unions in the Hospital and their Effect on Management, University of Texas, Austin, Texas.

Palola, Ernest G. and Larson, William R., "Some Dimensions of Job Satisfaction Among Hospital Personnel," Sociology and Social Research, Vol. 49, January, 1965.

II. A. 2. HOSPITAL PERSONNEL GENERAL CONTINUED

Parks, Madelyn N., The Development of a Model Director Training Program from New Hospital Employees at the Robert B. Green Memorial Hospital, Baylor University, San Antonio, Texas.

Patton, David W., A Comparative Study of Female Employee-Benefit Preferences in a Voluntary Community Hospital, University of Minnesota.

Paulson, Isabel S., A Study to Determine the Degree to Which Present Job Descriptions Reflect the Performance of Persons in the Jobs at Grace Lutheran Sanitorium and Hospital, San Antonio, Texas, Baylor University.

Penchansky, Roy, Manpower and Industrial Relations in Hospitals, School of Public Health, Harvard University.

Pratt, O. G. and Monagle, W. J., "Medical and Paramedical Education in Hospitals," Hospitals, Vol. 37, April 16, 1963.

Revans, R. W., Standards for Morale: Cause and Effect in Hospitals, Oxford University Press for Nuffield Provincial Hospitals Trust, 1964.

Robertson, Robert L., The Role of a University Hospital, College of Business Administration, University of Cincinnati.

Metropolitan St. Paul Hospital Planning Council, Teaching, Training, Research 1964.

Schechter, Daniel and O'Farrell, Thomas, "Continuing Education for Hospital Personnel-a Progress Report," Hospitals, Vol. 39, June 16, 1965.

Schill, John H., "Productivity Sharing-A Boon for Patients, Employees, Morale," Hospital Topics, Vol. 44, No. 8, August, 1966.

Skarupa, Jack A., "Multihealth Institutions-A New Administrative Challenge," Hospitals, Vol. 40, No. 1, January 1, 1966.

Smith, Leslie H. and McClusky, D. O., "Hospital and Employees Benefit from Absenteeism Control Program," Hospitals, Vol. 40, No. 14, July 16, 1966.

U. S. Department of Labor, U. S. Bureau of Labor Statistics, Earnings and Supplementary Benefits in Hospitals, Bulletin No. 1210, U. S. Government Printing Office, 1956-57.

II. A. 2. HOSPITAL PERSONNEL CONTINUED

U. S. Department of Labor, Bureau of Labor Statistics, Earnings and Supplementary Benefits in Hospitals Mid-1960, Bulletin No. 1294, U. S. Government Printing Office.

U. S. Department of Labor, Bureau of Labor Statistics, "Hospital Wages Surveyed by Four Major U. S. Regions," Hospitals, Vol. 38, July 1, 1964.

U. S. Department of Labor, Bureau of Labor Statistics, Industry Wage Survey, Hospitals Mid-1963, Bulletin No. 1409, U. S. Government Printing Office, June, 1964.

U. S. Department of Labor, Bureau of Labor Statistics, "Nursing Homes and Related Facilities, April, 1965," Industry Wage Survey, Bulletin No. 1492, April, 1966.

U. S. Department of Labor, Wage, and Hour Public Contracts Divisions, Nongovernment Hospitals, January, 1965.

Walker, Robert, "Personnel Productivity Survey Shows Where Improvements are Needed," Hospitals, Vol. 39, No. 19, October 1, 1965.

Watters, Gregg V., A Performance Evaluation of the Wake County Hospital Authority, Duke University, Durham, North Carolina.

Wirsig, Claus, "Salary Survey: What Canadian Hospitals Pay Senior Employees," Hospital Administration in Canada, Vol. 8, No. 7, July, 1966.

Wirsig, Claus, "Salary Survey: Less Pay for Key Jobs in Non-Active Hospitals," Hospital Administration in Canada, Vol. 8, No. 10, October, 1966.

Yeracaris, C. A., Social Factors Associated with Labor Turnover in Modern Hospitals, Department of Sociology, University of Buffalo.

Zawachi, J. S., The System of Unofficial Rules of Bureaucracy: A Study of Hospitals, University of Pittsburgh.

II A. 3. Health Occupations: International

American Medical Association, Proceedings of the Second AMA Conference on International Health, 1964.

Canada. Royal Commission on Health Services, Vols. 1 and 2, 1964.

Donald, B. L., "A Study of Problems in Some West European Countries," Institute of Hospital Administrators, 1966.

II. A. 3. HEALTH OCCUPATIONS: INTERNATIONAL CONTINUED

Douglas, E. K. and McCreary, J. R., "Retirement, Replacement, and Recruitment in the Hospital Service," New Zealand Hospital, Vol. 18, No. 3, January, 1966.

Fendall, N. R. E., "Organization of Health Services in Emerging Countries," Lancet, II:53-56, 1964.

Foreman, Alice and Deushle, Kurt, Comparative Health Manpower-Turkey Study, Division of International Health, Johns Hopkins University.

Great Britain, Ministry of Health, List of Hospital Abstracts: A Monthly Survey of World Literature, Her Majesty's Stationery Office.

Great Britain, Ministry of Health, List of Hospital Studies (H.M. (63) 18) Ministry of Health, 1963.

Hanlon, J. J., "A Bookshelf on International Health," American Journal of Public Health, 48:412-424, 1958.

Milbank Memorial Fund, "Health Manpower and Medical Education in Latin America," Milbank Memorial Fund Quarterly, January, 1964.

Pan American Health Organization, Health Conditions in the Americas 1961-64, Scientific Publication No. 138, August, 1966.

Porritt, A., Medical Aid to the Developing Countries: Report by a Working Party, London, 1962, Department of Technical Cooperation.

Taylor, Carl E., "Ethics for an International Health Profession," Science, Vol. 153, August 12, 1966.

U. S. Government, International Health, U. S. Government Printing Office, 1960.

U. S. Government, The Status of World Health in Outline Text and Chart, U. S. Government Printing Office, 1959.

U. S. Government, United States Contributions to International Organizations, U. S. Government Printing Office, 1960.

Weir, J. M., "Medical Care: Its Social and Organization Aspects, the United States Foreign Medical Aid Program," The New England Journal of Medicine, 270:344-351, 1964.

II. A. 3. HEALTH OCCUPATIONS: INTERNATIONAL CONTINUED

World Health Organization, Monograph 21. The Rural Hospital, 1955.

World Health Organization, Public Health Paper 3. Health Services in the U.S.S.R., 1960.

World Health Organization, Reports on the World Health Situation: O. R. 46, Executive Board Study on the Education and Training Programs of WHO, 1953.

World Health Organization, Report on the World Health Situation, O. R. 94. First Report on the World Health Situation (1954-56), 1959.

World Health Organization, Report on the World Health Situation: O. R. 122. Second Report on the World Health Situation (1957-60), Supplement to Second Report (1961-62), 1963.

World Health Organization, Technical Report Series No. 22, Professional and Technical Education of Medical and Auxiliary Personnel (PTEMA), 1950.

World Health Organization, Technical Report Series No. 109, Professional and Technical Education of Medical and Auxiliary Personnel, 1956.

World Health Organization, Technical Report Series No. 216, Recommended Requirements for Schools of Public Health, 1961.

II. B Physicians

II B 1. General

Adams, Ralph E., A Market Study of Hospital House Officers, Graduate Program in Hospital Administration, University of Chicago, 1961.

Altman, I., Kroeger, H., Clark, D., et. al., "Patient Load", J.A.M.A., Vol. 193, No. 8, August 23, 1965.

American Medical Association, Facts You Should Know About the Physician Population, 1966.

Axelrod, S.J., and Mels, W.R., Medical Manpower in Michigan IV, "The Role of Osteopathy", School of Public Health, University of Michigan, unpublished.

Bailey, Richard, An Economic Analysis of Private Medical Practice Organization, Economics Dissertation, 1964, School of Business Administration, University of California, Berkeley.

Brewster, Agnes W., and Seldowitz, Estelle, "Medical Society Relative Value Scales and the Medical Market", Public Health Reports, Vol. 80, No. 6, June, 1965.

Foulon, A., Les Medecins Liberaux d'apres les Sources Fiscales, 1962 and 1957-1963, C.R.E.D.O.C., Paris, 1966.

Friedman, Milton, and Kuznets, Simon, Income From Independent Professional Practice, National Bureau of Economic Research, 1945.

George, A., Le Corps Medical d'un Hôpital, C.R.E.D.O.C., Paris, Jan. 1967.

Hayes, G.S., "Opportunities Abroad for Service in Medical Education and Public Health", New England Journal of Medicine, 271:993-995, 1964.

Health Facilities Planning Council for Metropolitan Washington, D.C., Some Facts About Physicians in Metropolitan Washington, Feb., 1965,

Hospital Physician, "Earnings of M.D.'s in Hospital Practice", Vol. 2, January, 1966.

Hospital Physician, "Fringe Benefits Hospital Pay", Feb., 1966.

International Social Security Association, Medico-Social Committee, Questionnaire on the Relationship Between Social Security Institutions and the Medical Profession, Geneva, 1965.

Jackson, John D., Physicians' Perceptions of Rehabilitation Services in a Michigan County, Michigan State University, East Lansing, Michigan.

Journal of the American Medical Association, "The Role of Computers in Modern Medicine", 196:1014-1015, 1966.

II B 1 PHYSICIANS GENERAL CONTINUED

Keiser, Kay A., A Quantitative Analysis of the Quality of Medical Care Given by Two Different Medical Resident Staffs in a City Hospital, The Program in Hospital Administration, Yale University New Haven, Conn.

Kindersley, Lord; Bagnall, Arthur; Dennison, S.R.; Gunlake, F.H.; Tampleman, Geoffrey; Smith, Reginald Verdon, "Review Body on Doctors' and Dentists' Remuneration, Seventh Report", British Medical Journal, May 14, 1966

Lubin, J.W.; Reed, I.M.; Worstell, G.L.; and Drosness, D.L., "How Distance Affects Physicians Activity", The Modern Hospital, Vol. 107, No. 1, July, 1966

Magraw, R.M., Ferment in Medicine, W.B. Saunders Company, 1966

Medical Care, "The Income of Physicians: A Comparison of Published Studies", 4:3 August, 1944

Medical Economics, "Medical Economics Survey of General Surgery", Oradell, New Jersey, 1966

Medical Economics, "Physicians' Economic Health: Excellent", 42, Dec. 13, 1965

Medical Economics, "The Latest Fees for Surgery", 43, Feb. 21, 1966

Menzel, Herbert, "Innovation, Integration, and Marginality: Facts and Problems from a Survey of Physicians", American Sociological Review, 25, 1960

Montague, Joel B., Jr., Professionalism in Medicine as Revealed by Samples of English and American Doctors, Department of Sociology, Washington State University

Montin, Marie-Christine, "Prevision d'effectif de Medecins pour 1970, 1975 et 1980", C.R.E.D.O.C., Paris, 1965

Morison, R.S., "Medical Overseasmanship: Obligations, Opportunities, Operations", Journal of Medical Education, 36:207-216, 1961

Office of Health Economics, Medical Manpower, London, July, 1966

Paxton, H.T., "The Computer - A Report on How It's Affecting the Hospital Physician", Hospital Physician, 2:35-51, Sept., 1966

Penchansky, Roy, and Rosenthal, Gerald, "Productivity, Price and Income Behavior in the Physicians' Services Market - A Tentative Hypothesis", Medical Care, Vol. 3, No. 4, Pitman Medical Publishing Co., Ltd., October-December, 1965

Rada, Dr. Edward L., Rates of Return on Physicians' Investments, School of Public Health, University of California, Los Angeles

Rayack, Elton, "Table - Income of Physicians and Selected Occupational Classes: 1929-1959", Industrial & Labor Relations Review, 17:221-37, Jan. 1964

II B 1 PHYSICIANS GENERAL CONTINUED

Keiser, Kay A., A Quantitative Analysis of the Quality of Medical Care Given by Two Different Medical Resident Staffs in a City Hospital, The Program in Hospital Administration, Yale University New Haven, Conn.

Kindersley, Lord; Bagnall, Arthur; Dennison, S.R.; Gunlake, F.H.; Tampleman, Geoffrey; Smith, Reginald Verdon, "Review Body on Doctors' and Dentists' Remuneration, Seventh Report", British Medical Journal, May 14, 1966

Lubin, J.W.; Reed, I.M.; Worstell, G.L.; and Drosness, D.L., "How Distance Affects Physicians Activity", The Modern Hospital, Vol. 107, No. 1, July, 1966

Magraw, R.M., Ferment in Medicine, W.B. Saunders Company, 1966

Medical Care, "The Income of Physicians: A Comparison of Published Studies", 4:3 August, 1944

Medical Economics, "Medical Economics Survey of General Surgery", Oradell, New Jersey, 1966

Medical Economics, "Physicians' Economic Health: Excellent", 42, Dec. 13, 1965

Medical Economics, "The Latest Fees for Surgery", 43, Feb. 21, 1966

Menzel, Herbert, "Innovation, Integration, and Marginality: Facts and Problems from a Survey of Physicians", American Sociological Review, 25, 1960

Montague, Joel B., Jr., Professionalism in Medicine as Revealed by Samples of English and American Doctors, Department of Sociology, Washington State University

Montin, Marie-Christine, "Prevision d'effectif de Medecins pour 1970, 1975 et 1980", C.R.E.D.O.C., Paris, 1965

Morison, R.S., "Medical Overseasmanship: Obligations, Opportunities, Operations", Journal of Medical Education, 36:207-216, 1961

Office of Health Economics, Medical Manpower, London, July, 1966

Paxton, H.T., "The Computer - A Report on How It's Affecting the Hospital Physician", Hospital Physician, 2:35-51, Sept., 1966

Penchansky, Roy, and Rosenthal, Gerald, "Productivity, Price and Income Behavior in the Physicians' Services Market - A Tentative Hypothesis", Medical Care, Vol. 3, No. 4, Pitman Medical Publishing Co., Ltd., October-December, 1965

Rada, Dr. Edward L., Rates of Return on Physicians' Investments, School of Public Health, University of California, Los Angeles

Rayack, Elton, "Table - Income of Physicians and Selected Occupational Classes: 1929-1959", Industrial & Labor Relations Review, 17:221-37, Jan. 1964

II B 1 PHYSICIANS GENERAL CONTINUED

Roemer, Milton I., School of Public Health, University of California, Medical Staff Organization and Hospital Performance, Hospital Program, Sept. 1964

Rosch, Georges, Les Effectifs de Medecins Exerçant une Pratique Libérale a Partis des Sources Fiscales, (Incomes of French Physicians in Private Practice from Tax Registers), C.R.E.D.O.C., Paris, 1966

Ruhe, C.H. William, "Present Projections of Physician Production", J.A.M.A., Vol. 198, Dec. 5, 1966

Sanazaro, Paul J., Criteria for Professional Performances of Physicians, Association American Medical Colleges, Evanston, Illinois

Schonfeld, H.K; Falk, I.S.; Sleeper, H.R.; Johnston, W.D., The Development of Standards for the Audit and Planning of Medical Care: Research Design and the Content of Primary Physician's Care, Preliminary Draft, October 4, 1966, School of Medicine, Yale University, New Haven, Conn.

Stead, Eugene A., "Conserving Costly Talents - Providing Physicians' New Assistance", AMA Journal, Vol. 198, No. 10, Dec. 5, 1966.

Weinerman, E.Richard, "Research into the Organization of Medical Practice", Milbank Memorial Quarterly, "Health Services Research II", Vol. XLIV, No. 4, October, 1966

Winefeld, William, "Income of Physicians 1929-1949", Survey of Current Business, July, 1951, Followup: July 1952, Survey of Current Business, "Income of Physicians, Dentists, and Lawyers, 1949-51"

World Health Organization, Technical Report Series No. 269, "Promotion of Medical Practitioners: Interest in Preventive Medicine", Twelfth Report of the WHO Expert Committee on PTEMA 1964

Yett, Donald E., Physicians: Expenses Relative to Output, School of Business, U.C.L.A., Los Angeles, California

II B 2 Physicians: Demand and Recruitment

Association of American Medical Colleges, Selection of Specific Personality Types by Medical School Admissions Committees, Office of the Director of Research, Evanston, Illinois

Axelrod, S.J., and Mills, W.R., "Medical Manpower in Michigan: I - Applicants to Medical School", Journal of Medical Education, 34(9): 916-26, September, 1959

II B 2 PHYSICIANS: DEMAND AND RECRUITMENT, CONTINUED

Bradshaw, Henry and Vera, "Future Physicians' Clubs Attract Teenagers to the Medical Profession", Today's Health, Jan., 1964.

Buggs, C.W., "Problems in the Premedical Education of Negroes", Journal of Negro Education, Vol. 19, No. 2, Spring, 1950.

Caughey, John L, "More Medical Students: The Need and Available Supply" J.A.M.A., Vol. 198, Dec. 5, 1966.

Churchill, Edward D., "Should I Study Medicine?" The New England Journal of Medicine, Vol. 268, No. 10.

Gee, Helen Hoffer, Problems in Medical Student Selection: A Longitudinal Study of Ability Interest, and Personality Characteristics as Predictors of Medical School Achievement", Association of American Medical Colleges, 1959, Report of the First National Meeting, Continuing Group on Student Evaluation, 1957.

Gerber, A., "How Serious is the Doctor Shortage?", Medical Economics, Vol. 43, May 30, 1966.

Ginzberg, E., "Physician Shortage Reconsidered", New England Journal of Medicine, Vol 275, 1966.

Holland, John W., M.D., "An Experiment in Medical Manpower Recruitment", The Journal of the Medical Society of New Jersey, Vol. 61, No. 1, Jan., 1964.

Hutchins and Gee, "The Study of Applicants 1960-1961", Journal of Medical Education, Vol. 37, No. 11, Nov., 1962.

Hutchins and Morris, "Follow-up Study of Non-entrants and High Ability Rejected Applicants to the 1958-1959 Class of U.S. Medical Schools", Journal of Medical Education, Vol. 38, No. 12, Dec. 1963

Industrial and Labor Relations Review, "The Shortage of Physicians' Services", Vol. 18, No.4, July, 1965.

Journal of American Medical Association, "The Future Supply of Physicians", Vol, 182, 1962.

Journal of Medical Education, Datagrams, "Undergraduate Origins of Medical Students", Vol. 36, No. 10, Oct., 1961.

Journal of Medical Education, Datagrams, "Application Activity and MCAT Data of Applicants to the Class of 1960-1961", Vol. 36, No. 11, Nov., 1961.

Journal of Medical Education, Datagrams, "Physicians Supply and the Talent Pool: A National Problem", Vol. 37, 1962.

Journal of Medical Education, "Recruiting for Medicine through the Explorer Movement", Vol. 37, No. 1, Jan., 1962.

II B 2 PHYSICIANS: DEMAND AND RECRUITMENT CONTINUED

Journal of Medical Education, Datagrams, "Application Activity of the Freshman Class, 1961-1962 Related to State of Residence, Population Changes, and Total First-Year Places Available", Vol. 37, No.9, Sept., 1962.

Journal of Medical Education, Datagrams, MCAT Data of Applicants to the Class of 1961-62", Vol. 37, No.10, 1962.

Journal of Medical Education, Datagrams, "Medical School Application Trends for Classes Entering 1954-1964", Vol. 39, No.2, Feb., 1964.

Journal of Medical Education, Datagrams, "Applications, Enrollment, and MCAT Data for Entering Class 1963-64 in United States Medical Schools", Vol. 39, No. 10, October, 1964.

Journal of Medical Education, Datagrams, 'Undergraduate Origins of Medical Students", Vol. 40, No. 2, Feb., 1965, Special Issue.

Journal of Medical Education, Datagrams, "Medical School Application Trends for Classes Entering 1954-1965", Vol. 40, No. 6, June, 1965.

Klarman, Herbert E., "Requirements for Physicians", American Economic Review, Vol. 41, No. 2., May 1951.

Klinger, Eric and Gee, Helen Hoffer, "The Study of Applicants, 1958-59", Journal of Medical Education, Vol.35, No. 2, Feb., 1960.

Meerman, Jacob P., "Some Comments on the Predicted Future Shortage of Physicians", J.A.M.A., Sept. 16, 1961.

Rayack, Elton, "The American Medical Association and the Supply of Physicians: A Study of the Internal Contradictions in the Concept of Professionalism", Medical Care, Vol. 2, No. 4, Oct.-Dec., 1964. Concluded in Vol. 3, No. 1, Jan.-March, 1965

Rayack, Elton, "The Shortage of Physicians' Services", Industrial and Labor Relations Review, Vol. 15, No. 4, July 1965.

Robertson, Dr. Alexander, Evaluation of Academic Success of Medical Students, University of Saskatchewan, Department of Social and Preventive Medicine, University of Saskatchewan.

Rosch, Georges, "Methodes d'Estimation des Besoins en Medecins" (Methods for appraising Physician Needs), C.R.E.D.O.C., Paris, 1965.

Sandier, Simone, "Estimation des Besoins en Medecins a Partir des Previsions d'evaluation de la Demande" (Appraising Physician Needs from Demand Evolution Forecasts), C.R.E.D.O.C., Paris, 1966.

Stevens, Carl M., Economic Efficiency and the Shortage of Physicians' Services, Reed College, Portland Oregon, Nov., 1966.

Stewart, W.H., "Physician Shortage is Acute", J.A.M.A., Vol. 185, 1963.

II B 3 Physician Training

A. Physician Training: General

Accardi, Patrick, Evaluation of Closed Circuit F.M. Radio System for Transmission of Post-Graduate Medical Education, Community Welfare Council, Buffalo, New York

Association of American Medical Colleges, A Study of the Relationships Among 30 Criteria of Performance in Medical School, Office of the Director of Research, Evanston, Illinois

Boek, Walter E., An Annotated Bibliography of Studies on the Flow of Information to Practitioners, Institute for the Advancement of Medical Communication, New York, September, 1961

Boek, Walter E., How Do Physicians Learn?: A Critical Review of Published and Unpublished Studies on How Practitioners Utilize the Present Communication Channels, Institute for the Advancement of Medical Communication, New York

Brickman, William W., "Medical Education and the Critical Shortage of Physicians", School and Society, Vol. 84, No. 2090

British Medical Journal, "Medical Teachers", Vol. 2, No. 5519, Oct. 15, 1966

Brown, Ray W., "Dollars and Sense in Medical School Teaching Hospital Relationships", The Journal of Medical Education, Vol. 40, No. 11, No. V, Part 2, 1965

Bucher, Rue, Faculty Perspective in the Medical School, University of Illinois, College of Medicine, Chicago

Buck, R.L., "The Behavioral Sciences in Medical Education", Russel Sage Foundation

Buck, R.L., "Training Social Scientists for Medical Research and Teaching", Journal of Health and Human Behavior, Vol. 1, Spring, 1960

Bugher, J.C., "Medical Education Activities of the Rockefeller Foundation", Journal of Medical Education, Vol. 34, 1959

Caliva, Francis S.; Mullin, Edward W.; and Gigantelli, Thomas N., et. al., "An Experiment in Education for Family Practice", Journal of the American Medical Association, Vol. 195, No.2, Jan. 1966.

Collick, I.L., "The American Medical Student at the 'Grass Roots of Depressed Cultures: A Contribution of International Understanding", Journal of Medical Education, Vol.36, 1961

Comroe, J.H., Jr., ed., Research and Medical Education: Report of the Ninth Teaching Institute, Association of American Medical Colleges, Evanston, Illinois, 1962

Deitrick, J.E. and Berson, R., Survey of Medical Education: Medical Education at Mid-Century, McGraw-Hill, 1953

II B 3 a. PHYSICIAN TRAINING GENERAL CONTINUED

Demone, Harold W., Jr., Medical Radio Network for Professional Education and Evaluation, Medical Foundation, Inc., Boston and Harvard School of Public Health, Sept., 1964.

Dryer, B.V., "Lifetime Learning for Physicians: Principles, Practices and Proposals", Journal of Medical Education, Vol. 38, 1963.

Evans, L.J., Crises in Medical Education, University of Michigan Press, 1964.

Fosick, F.A., The First Year Medical Student: Selected Factors Affecting His Expectations and Experience, Columbia University, Sociology Dissertation, 1963.

Funkenstein, D.H., "Failure to Graduate from Medical School", Journal of Medical Education, Vol. 37, No. 6, June, 1962.

Gershon-Cohen, J., "We Can Train GP's in Half the Time!", Medical Economics, Jan. 9, 1967.

Glaser, William A., "Internship Appointments of Medical Students", Administrative Science Quarterly, Vol. 4, Dec. 1959.

Harking, Donald, Report on Training in Gerontology: Identification of Needs, Gap Areas and Mechanisms, National Institute of Health, Washington, D.C.

Health Facilities Planning Council for New Jersey, Internships and Residencies, Newsletter, Princeton, New Jersey, Feb., 1966.

Henry, William Dean, Survey of Professional Education for General Practice, Commission on Education of the American Academy of General Practice, Kansas City, Mo.

Hill, Lawrence A., "Educating the Physician for Medical Staff Responsibilities", Hospitals, Vol. 34, Part 1, Aug. 1, 1960.

Howard, Robert, and Hubbard, William, The Educational Environment in the Large Medical School, Paper delivered at the Association of American Medical Colleges, Oct., 23, 1966.

Hutchins, "The AAMC Logitudinal Study: Implication for Medical Education", Journal of Medical Education, Vol. 39, 1964.

Institute for Advancement of Medical Communication, Improving the Practice of Preventive Medicine, Dec. 1960.

Johnson, Davis G., and Hutchins, Edwin B., "Doctor or Dropout? A Study of Medical Student Attrition", Journal of Medical Education Vol. 41, No. 12, Dec., 1966.

Journal of the American Medical Association, "Medical Education in the United States", Vol. 194, No. 7, Nov. 15, 1965.

Journal of the American Medical Association, "Residency Training", Vol. 194, 1965.

II B 3 a. PHYSICIAN TRAINING GENERAL CONTINUED

Journal of Medical Education, Datagrams, "How Many More Medical Schools?" Vol. 35, No. 1, January, 1960

Journal of Medical Education, Datagrams, "Veterans Administration-Medical-School Relationships", Vol. 35, No. 2, Feb., 1960

Journal of Medical Education, Datagrams, Patterns of Medical Student Employment", Vol. 35, No. 4, April, 1960.

Journal of Medical Education, Datagrams, "Paid Clinical Externships", Vol. 35, No. 5, May, 1960.

Journal of Medical Education, Datagrams, "Medical School Performance of High and Low MCAT Students", Vol. 36, No. 12, Dec., 1961.

Journal of Medical Education, Datagrams, "Specialty Distribution, Language Skills and Geographic Preference of Medical Faculty Members Available for Service Abroad", Vol. 37, No. 12, Dec., 1962

Journal of Medical Education, "Trends in Medical Education", Vol. 38, Aug., 1964.

Journal of Medical Education, Datagrams, "Estimated Teaching Responsibilities of Full-Time Faculties in U.S. Medical Schools, 1962-63", Vol. 39, No. 5, May, 1964

Journal of Medical Education, Datagrams, "Medical School Programs in Development 1963-64", Vol. 39, No. 8, August, 1964.

Journal of Medical Education, Datagrams, "National Intern Matching Program Results 1953-1964", Vol. 39, No. 9, Sept., 1964.

Journal of Medical Education, Datagrams, "Women in Medical Schools", Vol. 41, No. 2, Feb. 1966.

Journal of Medical Education, "Bibliography on Medical Education, for 1964-65", No. 11, Part 2, November, 1966

Karel, L., "Earned Degrees in the Fields of Medicine, 1901-1962, and the Projections to the Year 2,000", Journal of Medical Education, Vol. 40, No. 5, May, 1965.

Kendall, Patricia L., "The Relationship Between Medical Educators and Medical Practitioners", Journal of Health and Human Behavior, Vol. 6, No. 2, Summer, 1965.

McGuiness, Aims C., New York Academy of Medicine TV Poll, New York Academy of Medicine, New York, N.Y.

McGuire, Christine; Miller, George E.; and Larson, Carroll B., The Efficient Use of Medical Manpower, Center for the Study of Medical Education, University of Illinois, College of Medicine, Chicago.

Maxwell, James A., A Proposal for the Training of Physicians in Emergency Care, The University of Chicago, Chicago, Ill. June, 1966.

II B 3 a. PHYSICIAN TRAINING GENERAL CONTINUED

Mendel, Werner M. and Green, Gerald Allen, "On Becoming a Physician" Journal of Medical Education, Vol. 40, No. 3, March, 1965

Merton, Robert, et.al., The Student Physician, Department of Sociology, Columbia University, New York, N.Y.

Miller, G.E., "Medical Education, Research and Development", J.A.M.A., Vol. 197, 1966

Miller, G.E. et.al., Teaching and Learning in Medical Schools, Harvard University Press, Cambridge, Mass., 1961

Millis, John S., The Graduate Education of Physicians, A.M.A. Report of the Citizens' Commission on Graduate Medical Education, Chicago, 1966

Nyberg, Charles E., Survey of Professional Education for General Practice, American Academy for General Practice, Kansas City, Mo., May, 1964.

Orr, Richard H., "The 'Newer' Media for Post-graduate Education - Their Promises and Problems", Journal of Medical Education, Vol. 37, Feb., 1962.

Peterson, Osler L., Quantity and Quality of Medical Care and Health, Harvard University, Cambridge, Mass., Aug., 1962.

Rosenberg, Herbert, Faculty in Medical Schools, 1963-64, Association of American Medical Colleges, Evanston, Ill.

Rosenberg, Herbert, Logitudinal Studies of June 1961 College Graduates: Employment, Ph.D. Expectations, The Graduate Student, The Medical Students, Women, 1965

Rosenberg, Herbert, Medical Faculty Roster, Association of American Medical Colleges, Fall 1965.

Ruhe, C.H.W., "Survey of the Activities of Medical School in the Field of Continuing Medical Education", Journal of Medical Education, Vol. 38, No. 10, October, 1963.

Ruhe, C.H.W., "The AMA's Program of Accreditation in Continuing Medical Education", Journal of Medical Education, Vol. 39, 1964.

Sanazaro, Paul J., "Class Size in Medical Schools," Journal of Medical Education, Vol. 41, No. 11, Part 1., Nov., 1966

Shafer, Helen B., Doctor Supply and Medical Education, Editorial Research Reports, Vol 2, 1960.

Sheatsley, Paul B., and Brunswick, Ann F., "NORC Interview Study of American Cancer Society Professional Education Program, National Opinion Research Center Report No. 73, University of Chicago, Chicago, Ill., Jan. 1960

II B 3 a. PHYSICIAN TRAINING GENERAL CONTINUED

Shepard, William P., Annotated Bibliography on Public Health Education, Institute for the Advancement of Medical Communication, New York, New York

Sheps, C.G.; Wolf, G.A., Jr.; and Jacobson, C., eds., Medical Education and Medical Care - Interactions and Prospects, Report to the Eighth Teaching Institute Association of American Medical Colleges, Evanston, Illinois, 1961

Sheps, C.G.; Clark, D.A.; Gerdes, J.W.; Halpern, E. and Hershey, N., "Medical Schools and Hospitals - Interdependence for Education and Service," Journal of Medical Education, Vol. 40, No. 9, Part 2, Sept. 1965, Association of American Medical Colleges, Evanston, Ill.

Spiegel, Allen D., The Use of the Teaching Machine in Continuing Education of Physicians, The Medical Foundation, Inc., 227 Commonwealth Ave., Boston, Mass.

Stapleton, John F. and Zwernman, James A., "The Influence of an Intern-resident Staff on the Quality of Private Patient Care", Journal of the American Medical Association, Vol. 194, No. 8, Nov. 1965

U.S. Department of Health, Education and Welfare, National Institutes of Health, Resources Analysis Branch, Development of Staffing Patterns in Six New Medical Schools Established 1952-1960, May, 1965

U.S. Department of Health, Education and Welfare, The Advancement of Medical Research and Education Through the Department of Health, Education and Welfare, Bayne-Jones Report, 1958

Whipple, George H., "Medical Students: Source, Selection, Training", Science, Vol. 142, No. 3712, Nov. 1, 1963

Williams, Greer, "Quality Versus Quantity in American Medical Education", Science, Vol. 153, August 26, 1966

II B 3 b Cost and Financing of Medical Education

Alexander, Marian and West, Margaret, "How Medical Students Finance their Education", U.S. Public Health Service, June, 1965

Association of American Medical Colleges, Medical College Costs and Manual of Procedures, 1965

Carrol, Augustus J., A Study of Medical College Costs, Association of American Medical Colleges, 1958

Carrol, Augustus J., and Darley, Ward, "Medical College Costs", Journal of Medical Education, January, 1967

Carrol, Augustus J., "Education Costs in Hospitals", The Journal of Medical Education, Vol. 37, No. 8, August, 1962

Ceithaml, J., "The Financial State of the American Medical Student", Journal of Medical Education, Vol. 40, No. 6, June, 1965

II B 3 b COST AND FINANCING OF MEDICAL EDUCATION CONTINUED

Hepner, James O., Study of Attitudes Toward Financial Support of Hospital Programs for Graduate Medical Education, Graduate Program in Hospital and Health Administration, Washington University, St. Louis

Hill, Lawrence A., "The Cost of Medical Education of the Hospital", J.A.M.A., Vol. 180, No. 7, May 1962

Hill, Lawrence A. and Pratt, Oliver G., "The Price of Medical Education: A Dissection of One Hospital's Expenditures", Hospitals, Vol. 34, Part I, August, 1960

Journal of the American Medical Association, "Medical Education Loans, Public and Private", Special Report, Vol. 187, No. 1, Jan. 4, 1964, pp. 47-51

Journal of the American Medical Association, "Summary of the Report on a Study of Medical College Costs", Vol. 33, No. 10, Oct. 1958

Journal of Medical Education, Datagrams, "Financial Aid to Medical Students", Vol. 35, No. 3, March 1960

Journal of Medical Education, Datagram, "Loan Assistance, Medical Schools, and Medical Students", Vol. 37, No. 7, July, 1962

Journal of Medical Education, Datagram, "Sources of Medical School Loan Assistance Monies", Vol. 37, No. 8, Aug. 1962

Journal of Medical Education, "Estimated Costs for Expansion and Renovation of Education and Research Facilities on U.S. Medical School, 1963-1973", Vol 38, August 1963, pp. 703-4

Journal of Medical Education, Datagram, "Voluntary Support of U.S. Medical Schools Originating From Physicians and From the National Fund for Medical Education", Vol. 39, No. 1, Jan., 1964

Journal of Medical Education, Datagram, "Health Professions Educational Assistance Act of 1963 and Construction of Medical Facilities", Vol.39, No. 3, March, 1964

Journal of Medical Education, Datagram, "Changes in Relative Importance of Sources of Income for Basic Operations of Public and Private Medical Schools, 1941-1962", Vol. 39, No.4, April 1964

Journal of Medical Education, Datagram, "Trends in Financing Medical Education, 1941-1962", Vol.39, No. 6, June 1964

Journal of Medical Education, Datagram, " Trends in Financing Medical Education According to Three Main Categories of Income, 1941-1962", Vol. 39, No. 7, July, 1964

Journal of Medical Education, Datagram, "Federal Grants for Undergraduate and Research Training, 1948-1963", Vol.39, No.12, Dec., 1964

II B 3 b COST AND FINANCING OF MEDICAL EDUCATION CONTINUED

Journal of Medical Education, Datagram, "Medical Student Finances, 1962-64", Vol. 40, No. 1, Special Issue, Part 1, Jan., 1965

Journal of Medical Education, "Nonrefundable Grants for Medical Students in U.S. Medical Schools", Vol. 40, No. 3, March 1965, pp. 245-66

Journal of Medical Education, Datagram, "Annual Medical School Expenditures for Sponsored and Regular Operating Programs", Vol. 40, No. 3, March 1965

Journal of Medical Education, Datagram, "NIH Training Grants 1958-1965", Vol. 40, No. 12, December, 1965

MacLure, Stewart, "Financing of Students: Grants or Loans", British Medical Journal, January 21, 1967, pp. 166-67

Powers, Lee, "Medical College Costs", Association of American Medical Colleges, Evanston, Ill., p. 245

Rosenholtz, Mitchell J., "Federal Loans to Medical Students" Maryland State Medical Journal, January, 1964

Straus, William L., Jr., "The Financing of Medical Schools", Science, Vol. 120, No. 3112, August, 1954, p. 5A

II B 3 c Foreign Medical Students in the U.S and International Medical Education

Aird, I., "Results of the First World Conference on Medical Education", J.A.M.A., 170:2155-57; British Medical Journal, 5148:324-325

American Medical Association, "Conference on International Educational Exchange for Medicine", Chicago, 1960

Arnot, W.M., "Proceedings of the First World Conference on Medical Education", J.A.M.A., 270:2152-2155; British Medical Journal, 5148: 321-324, 1959

Association of American Medical Colleges, "Bibliography on Medical Education in the Developing Countries 1956-64", Journal of Medical Education, Vol. 40, October 1965, pp. 931-47

Association of American Medical Colleges, "First Annual Conference on International Medical Education: Papers and Notes", Division of Medical Education, Evanston, Illinois

Association of American Medical Colleges, "Foreign Students in U.S. Medical Schools", Journal of Medical Education, 38:1059-1060, 1960

Barnes, F.W. and Fitcher, P.H., "Preparation in the United States of Foreign Medical Graduates for Academic Careers Abroad", Journal of Medical Education, 37:2153-57, 1962

II B 3 c FOREIGN MEDICAL STUDENTS IN THE U.S. AND INTERNATIONAL
MEDICAL EDUCATION CONTINUED

Barr, R., "New Help for the Foreign Graduate", National Magazine for Residents, Interns, and Senior Students, June 1962, pp. 37-47

Braga, E., "Aspects of International Medical Education: The Selection of Students", Federal Bulletin, 47:240-48, July, 1960

Brown, Roy E., "Medical Problems of the Developing Countries", Science, Vol. 153, July 15, 1966

Candau, M.G., "Medical Education and Research: A World Perspective", Royal Soc. Health Journal, 81:191-98, March, 1964

Casberg, M.A., "The Emerging Nations and Medical Education", Milt. Med., 129:191-98, March, 1964

Charnes, M., "Problems Confronting Foreign Students Beginning Professional Education in the United States and in Adapting it to Practice at Home", The Professional Education of Students from Other Lands, Sanders, I.T. (ed.) New York: Council on Social Work Education, 1963, pp. 256-261

Diamond, E.G., "An Education Program in Academic Cardiology for the Foreign Physician", New Physician, 12:507-08, Dec., 1963

Eberwein, A.C., "International Aspects of Medical Education", Rev. Med. Moyen Orient, 20:52-64, Jan.-Feb., 1963

Eberwein, A.C., "International Standards in Medical Education", Ethiopian Medical Journal, II:189-90, January, 1964

Educational Council for Foreign Medical Graduates, "Action of Educational Council for Foreign Medical Graduates Concerning Foreign Intern-Resident Program: As Proposed by Steering Committee of Conference on International Education in Medicine, February 3, 1962" Feb. 3, 1962, ECFMG Annual Report, (1961), Evanston, Ill., 1962, pp. 23-24

Forkner, C.E., "An International Medical School - The Focal Point for an International University", New England Journal of Medicine, 270:1399-1430, 1964, 271:631-632, 1964

Foraker, A.G., "Foreign Medical Graduates", New Engl. Journal of Medicine, 268:621-624, 1963

Fulmer, H.S.; Adams, A.C.; and Deuschle, K.W., "Medical Student Training in International Cross-Cultural Medicine", Journal of Medical Education, 38:920-31, 1963

Greeley, David McL., "American Foreign Medical Graduates", The Journal of Medical Education, Vol. 4, No. 7, July, 1966.

Grillo, Hermes C., "A Program of Regional Collaboration in Surgical Education for Foreign Medical Graduates", The Journal of Medical Education, Vol. 41, No. 9, Sept., 1966

II B 3 c FOREIGN MEDICAL STUDENTS IN THE U.S. AND INTERNATIONAL MEDICAL
EDUCATION CONTINUED

Grzegorzewski, E. "Medical Education in International Perspective",
Journal of Medical Education, 36:971-85, 1961

Grzegorzewski, E., "International Cooperation in Postgraduate
Medical Education - Cross-fertilization of Ideas", J.A.M.A.
170:2157-59, British Medical Journal, 5148:326-27, 1959

Grzegorzewski, E., "The World Health Organization and the Dev-
opment of the Physician", (in Spanish), Bol. Ofic. Sanit.
Panamer., 41:7-9, July, 1956

Halsted, J.A., "Medical Education and Health Problems in the
Developing Countries", Wayne State Univ. Grad. Comment, VIII,
29-31, Fall, 1964

Hill, K.R., "Some Reflections on the Medical Education and
Teaching in the Developing Countries", British Medical Journal,
5304:585-87, 1962

Himan, E.H., and Pease, C.A., "International Assistance in Medical
Education", Journal of Medical Education, 36:42- 51 1961

Hyde, H.v.Z., "Call to International Action", Journal of Medical
Education, 36:;728-30, 1961

Hyde, H.v.Z., "Steady Progress Abroad", Journal of Medical
Education, 39:319-21, 1964

Hyde, H.v.Z., "The Forward Thrust in Medical Education", Journal
of Medical Education, 37:808-14, 1962

Hyde, H.v.Z., "The World Role of the Association of American
Medical Colleges", Journal of Medical Education, 37:165-70, 1962

Iverson, L., "Toward Wholeness: Medical Education and the New
Nations", Journal of Medical Education, 35:953-63, 1960

Journal of Medical Education, "Foreign Students in U.S. Medical
Schools", Datagram, Vol. 38, No. 12, December, 1963

Lee, P.R., The Agency for International Development: The
Universities and Medical Education in Developing Countries,
Washington, D.C., Office of Technical Cooperation and Research,
A.I.D., Department of State, October 30, 1964

Mackintosh, J.M., "International Trends in Medical Education",
Journal of Medical Education, 34:826-35, 1959

New England Journal of Medicine, "The International Role of
Research Training", (editorial), 271:319-20, 1964

Pan American Health Organization, "Directory of Schools of Medicine,
Latin America 1966", Medical Education Information Center

II B 3 c FOREIGN MEDICAL STUDENTS IN THE U.S. AND INTERNATIONAL MEDICAL EDUCATION CONTINUED

Parkin, R. (ed.) "Medical Education for Foreign Scholars in the Medical Sciences", Journal of Medical Education, March, 33, Part 2, 1958

Petitpierre, C., "The Importance Given to Basic Medical Sciences in the Training of Physicians in Rapidly Developing or newly Independent Countries," (in French) Schweiz. Med. Wschr., 92:1204-06, 1962

Prywes, M., An Undergraduate Medical Course for Students from Developing Countries at the Hebrew University - Hadassah Medical School in Jerusalem: Its Scope and Aims, E/Conf. 39/F/7, New York: United Nations Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas, September 26, 1962

Rao, K.N., "Trends in Medical Education in the World", Journal of Medical Education, 36:1233-1244, 1961

Rorrie, Colin C., Jr., An Analysis of the Foreign Medical School Graduate's Involvement in the Medical Education Program of the Hospital, Graduate Program in Hospital and Health Administration, Univ. of Iowa, Iowa City, Iowa, June, 1966

Shumaker, H.B., Jr., "Foreign Medical Graduates and their Surgical Training", J.A.M.A., 178:34-37, 1961

Smyth, F.S., "The Role of Medical Education in Promoting International Understanding", Journal of Medical Education, 36:723-28, 1961

Taylor, Carl E., "The Teaching of Preventive Medicine Around the World", Journal of Medical Education, 36:723-28, 1961

U.S. Advisory Commission on International Educational and Cultural Affairs, U.S. Department of State, "Foreign Students in the United States", September, 1966, Washington D.C.

Wallace, H, M., and Hunt, E.P., "Study of Foreign Physicians Who Have Received Maternal and Child Health Training in U.S. Schools of Public Health", Journal of Medical Education, 39:531-39, 1964

Wegman, M.E., "Pediatric Education Around the World", Journal of Medical Education, 36:38-57, 1961

Weir, J.M., "Obstacles to Medical Education at the International Level", J.A.M.A., 173:1451-1453, 1960

Wendel, W.B.A., "Biochemical Training Program for Foreign Medical Scholars", Journal of Medical Education, 36:1131-39, 1961

II B 3 c FOREIGN MEDICAL STUDENTS IN THE U.S. AND INTERNATIONAL MEDICAL EDUCATION CONTINUED

West, Kelly, "Foreign Interns and Residents in the U.S." Journal of Medical Education, Vol. 40, No. 12, Dec., 1965

West, K.M., "Training for Medical Research: The World Role of the United States", Journal of Medical Education, 39:237-64, 1964

World Health Organization, "Education and Training of the Physician for the Preventive and Social Aspects of Clinical Practice: Report of the Technical Discussions at the Sixteenth World Health Assembly," Geneva, 1963

World Health Organization, Medical Education: An Annotated Bibliography, 1946-1955, Geneva, 1958

World Health Organization, Public Health Paper 20, "Preparation of the Physician for General Practice", 1963

World Health Organization, Reports on the World Health Situation: EURO-22.5, Report on the Conference on the Training of the Doctor for His Work in the Community", Edinburgh

World Health Organization, Reports on the World Health Situation: EURO-110, "Report on the European Symposium on Training in Tropical Medicine and Hygiene", Copenhagen

World Health Organization, Reports on the World Health Situation, EURO-249, "Report on the Symposium on Postgraduate Medical Education in Europe, Prague

World Health Organization, Technical Report Series, No. 140, "Conference on Public Health Training of General Practitioners", Report, 1957

World Health Organization, Technical Report Series, No. 155, "Introduction of Radiation Medicine into the Undergraduate Curriculum", Fifth Report of the Expert Committee on PTEMA, 1958

World Health Organization, Technical Report Series, No. 159, "The Foreign Student and Postgraduate Public Health Courses", Sixth Report of the Expert Committee on PTEMA, 1959

World Health Organization, Technical Report Series, No. 175, "Preventive Aspects in the Teaching of Pathology", Seventh Report of the Expert Committee on PTEMA, 1959

World Health Organization, Technical Report Series, No. 238, "The Teaching of Genetics in the Undergraduate Medical Curriculum and in Postgraduate Training", First Report of the Expert Committee on Human Genetics", 1962

World Health Organization, Technical Report Series, No. 239, "Internationally Acceptable Minimum Standards of Medical Education", Report of a Study Group, 1962

II B 3 c FOREIGN MEDICAL STUDENTS IN THE U.S. AND INTERNATIONAL MEDICAL EDUCATION CONTINUED

World Health Organization, Technical Report Series, No 257, "The Training of the Physician for Family Practice", Eleventh Report of the Expert Committee on PTEMA, 1963

World Health Organization, Technical Report Series, No. 266, "Social Aspects of the Teaching of Obstetrics and Gynecology", Fourth Report of the WHO Expert Committee on Maternal and Child Health, 1963

World Medical Association, Proceedings of the First World Conference on Medical Education, London 1953, Oxford University Press, 1954

World Medical Association, Proceedings of the Second World Conference on Medical Education, Chicago, 1959, New York, World Medical Association, 1961

World Medical Association, "Standards of Medical Education", Report No. 1, (Summary), World Med. Assoc. Bull., 1:43-54, July, 1949

II B 4 Physician Distribution and Career Patterns

American Medical Association, "Distribution of Physicians, Hospitals, and Hospital Beds in the U.S. by Census Region, State, County and Metropolitan Area," American Medical Association Annual, 1956

American Medical Association, "Meeting the Challenge of Family Practice", The Council on Medical Education, 1966

American Medical Association News, "Physician 'Shortage'", 9:4, May 16, 1966

American Osteopathic Association, "A Statistical Study of the Osteopathic Profession", Chicago, June, 1966

Axelrod, S.J.; and Mills, W.R., "Medical Manpower in Michigan; II 'Supply of Physicians and Type of Practice'", Journal of Michigan State Medical Society, May, 1960

Axelrod, S.J. and Mills, W.R., "Medical Manpower in Michigan; III, 'The Distribution of Physicians'", Journal of Michigan State Medical Society, 59(2): 252-57, Feb., 1960

Back, Kurt; Coker, R.E., Jr.; Donnelly, T.G.; Phillips, B.G., "Public Health As A Career in Medicine: Secondary Choice Within a Profession", American Sociological Review, 23(5):533-541, Oct. 1958

Back, Kurt; Coker, R.E., Jr.; Donnelly, T.G.; Phillips, B.G., "Public Health as Viewed by the Medical Student", Journal of Public Health, 49(5): 601-609, May, 1959

II B 4 PHYSICIAN DISTRIBUTION AND CAREER PATTERNS CONTINUED

Back, Kurt; Coker, R.E., Jr.; Donnelly, T.G.; Phillips, B.G., "The Medical Student, Specialization and General Practice", N.C. Medical Journal

Calahan, Don; Collette, Patricia; Hilmar, Norman A., "Career Interests and Expectations of N.J. Medical Students", Journal of Medical Education, August 1957, Vol. 32, No. 8

Campau, R.M., "About Physician Distribution in Michigan and Nation", Journal of Michigan State Medical Society, Vol. 62, May, 1963, pp. 478-79

Cartwright, Ann and Marshal, Rosalind, "General Practice in 1963: Its Conditions, Contents and Satisfactions", Medical Care, Vol. 3, No. 2, April-June, 1965, pp. 69-87

Clark, D.; Kroeger, H.; Altman, I., et. al., "Background and Form of Practice of 500 Internists in New York State", J.A.M.A., Vol. 194, No. 5, Nov. 1, 1965, pp. 533-538

Clark, D.; Kroeger, H.; Altman, I., et.al., "Professional Activities Other Than Care of Private Patients", J.A.M.A., Vol. 194, No. 2, Oct. 11, 1965, pp. 177-81

Clark, D.M., and Connings, J.S., "General Practice, Today and Tomorrow", New England Journal of Medicine, 248: 1141-48, 183-94, 1953

Colombotos, John L., "Part-time Health Officers- A Study of Physician Roles", Public Health, Adm. Med., Columbia University, New York

Dickinson, Frank G., How Bad is the Distribution of Physicians? Bureau of Medical Economic Research Bulletin 94B, American Medical Association, Chicago, 1954

Dickinson, Frank G., "Supply of Physicians' Services", J.A.M.A., Vol. 145, No. 16, April 21, 1951

Durbin, Richard L., The Effect of Availability of Hospital Facilities on Physician Supply, University of Chicago, 1962

Falk, I.S., and Stevens, R.A., The Medical Specialist in Great Britain and the U.S.A., Study in Progress at Yale University, 1966

Fein, Rashi, Factors Influencing the Location of North Carolina General Medical Practitioners: A Study in Physician Distribution Ph.D. dissertation, Johns Hopkins University, Baltimore, Md., 1956

Fowler, Manet, "Public Health Physician-Training and Image of Public Health Practice: Evaluative Results", N.Y. State Dep't. of Health, Albany, C 142, p. 100

II B 4 PHYSICIAN DISTRIBUTION AND CAREER PATTERNS CONTINUED

Friedson, Elliot, "Client Control and Medical Practise", The Journal of Sociology, Jan., 1960, Vol. 65, pp. 374-382

Gee, Helen H., "Choice of Type of Career in Medicine", American Association of Medical Colleges, Evanston, Ill. 1959

Gooch, Marjorie, "Trends in Medical Practice - An Analysis of the Distribution and Characteristics of Medical College Graduates, 1915-1950", Journal of Medical Education, Dec. 1960

Hall, Oswald, "The Stages of a Medical Career", Professionalization, Vollmer & Mills (eds.), Prentice Hall, 1966

Hassinger, Edward W., Background and Community Orientation of Rural Physicians Compared with Metropolitan Physicians in Missouri, Univ. of Missouri College of Agriculture, Research Bulletin 822, Series in Rural Health, No. 19, Columbia, Missouri, 1963, pp.b.d. 127

Hassinger, Edward W., What's Happening to Rural Doctors and Health Facilities, University of Missouri, Agricultural Experiment Station, Rural Health Series, No. 21, June, 1965, Columbia, Missouri

Holtmann, A., "Another Look at the Supply of Physicians", Industrial Labor Relations Review, April 1965, pp. 18, 423-24

Jeffers, William N., "Which Specialties are Most Satisfying?", Medical Economics, Oct. 3, 1966, pp. 158-176

Jones, Jane G., "The Career Patterns of Women Physicians", Doctoral dissertation, Brandeis University, Waltham, Mass.

Journal of American Medical Association, "The Supply of Medical Graduates: A Time Re-evaluation", Editorial, 190:678, 1964

Kandel, Denise B., "Career Decisions of Medical Students: A Study in Occupational Recruitment and Occupational Choice", PhD. Dissertation (unpublished), Columbia University, N.Y., 1960

Kandel, Denise B.; Glaser, William A.; and Emery, Jane, "Changes in Career Expectations of Medical Students", Paper presented at the annual meeting of the American Sociological Society, August 1958, Columbia University

Kinney, Thomas D., "Study of Sources and Training of Research Pathologists", Duke University Medical Center, Durham, N.C.

Kroeger, Hilda H.; Altman, Isidore; Clark, Dean A.; Johnson, Allen C., and Sheps, Cecil G., "The Office Practice of Internists", J.A.M.A., Nov. 1, 1965, Vol. 194, No. 5, pp. 145-150

II. B. 4 PHYSICIAN DISTRIBUTION AND CAREER PATTERNS CONTINUED

Lurie, M., State Medical Licensing Boards and the Supply of Physicians' Services, University of Wisconsin, Milwaukee, Wisconsin.

Mills, D., A Study of Three Canadian Healing Arts Professions (Chiropractic, Osteopathy, and Naturopathy), Department of Sociology, University of Alberta, Calgary, Alberta, Canada.

The New England Journal of Medicine, "Female Doctors Afield", Vol. 270 No. 18, April 30, 1964, p. 960.

Nicholson, Hayden C., "Survey of Hospital Staff Appointments for Negro Physicians in New York City", Hospital Council of Greater New York 3 East 54th Street, New York, New York.

Parker, Ralph and Tuxill, Thomas G., "Social, Economic and Demographic Factors Affecting the Physician Population in Small Communities", Rochester Regional Hospital Council, October, 1965, 23 pp.

Pennell, Maryland Y., "Career Patterns in Medicine", Public Health Reports, Vol. 80, No. 2, February, 1965, U. S. Public Health Service, Washington, D.C.

Pennell, Maryland Y., Health Manpower Source Book, Section 14: "Medical Specialists", (PHS Pub. #263, Section 14), USPHS, Washington, D.C., p. 107.

Phillips, George C., Jr., An Analysis of the Influence of the Hill-Burton Act upon Physician Population in North Carolina, Duke University, Durham North Carolina, 138 pp., b.d.th. MHA.

Prince, M., Questionnaires to Fourth Year Medical Students on Expectations and Experiences, Department of Sociology, Sociology Dissertation, Columbia University, New York, New York.

Rayack, Elton, "The Supply of Physicians' Services", Industrial and Labor Relations Review, Vol. XVII, January, 1964, pp. 221-238.

Reed, I. M., "How Distance Affects Physicians' Activity", The Modern Hospital, July, 1966.

Richards, J. M.; Taylor, C.W.; Price, P. B., and Jacobsen, T.L., "An Investigation of The Criterion Problem for One Group of Medical Specialists", Journal of Applied Psychology, Vol. 49, No. 2, April, 1965, pp. 79-90.

Rimlinger, Gaston V., and Steele, Henry B., "An Economic Interpretation of the Spatial Distribution of Physicians in the U.S.", Southern Economic Journal, 30, No. 1, July, 1963, pp. 1-12.

Rochester Regional Hospital Council, Attitudes of Physicians Towards Small Community Practice - Parts I and II, Rochester Regional Hospital Council, Project No. HM0026601, 74 pp.

Roemer, M. I., "Group Practice: A Medical Care Spectrum", Journal of Medical Education, December, 1965, Vol. 40, No. 12.

II B 4 PHYSICIAN DISTRIBUTION AND CAREER PATTERNS CONTINUED

Roemer, Milton I., "Hospital Utilization and the Supply of Physicians", Journal of the American Medical Association, Vol. 178, December 9, 1961, pp. 989-993

Scofield, Dr. Carleton F., "A Pilot Study of the Nature and Extent of the Medical Profession's Uncompensated Activities", Center for Applied Social Research, New York University, Washington Square, N.Y., N.Y.

Severinghaus, Aura E., "Distribution of Graduates of Medical Schools in the U.S. and Canada According to Specialties: 1900 to 1964", J.A.M.A., Vol. 40, No. 8, pp.721-736

Shepard, William; Elling, Ray; Grimes, Walter, "Study of Public Health Careers: Some Characteristics of Industrial Physicians", Journal of Occupational Medicine, Vol. 8, No. 3, March, 1966

Siebenthal, B.J., and Wheatley, G.M., "International Opportunities for Experience", Pediatrics, 32:938-939, 1963

Silver, G.A., Family Medical Care, Harvard University Press, Cambridge, Mass., 1963,

Spencer, F.J. and Rosinski, E.F., The Assistant Medical Officer, University of North Carolina, Chapel Hill, 1965

Stevens, R.A., Medical Practice in Modern England - The Impact of Specialization and State Medicine, Project supported by U.S. Public Health Service Grant CH00047, Yale University, New Haven, Conn. (forthcoming)

Terris, Milton; Monk, Mary, "Changes in Physicians' Careers Relation of Time After Graduation to Specialization", J.A.M.A., Vol. 160, 1956, pp.653-665

Theodore, Christ, "Distribution of Physicians, Hospitals and Hospital Beds in the U.S.", American Medical Association, Chicago, 1966

Tipner, Anne, "Trends in Medical Practice - An Analysis of the Distribution and Characteristics of Medical College Graduates", Journal of Medical Education, Dec., 1960

Tresnowski, Bernard R., A Study of Social and Economic Factors Influencing Surgical Practice in the United States, Bureau of Hospital Administration, The University of Michigan, April, 1963, 58 pp.

Vermont State Health Department, Div. of Chronic Illness Control, Vermont Physician, Trends, Distribution, and Characteristics, Burlington, Vermont, June, 1963, 25 pp.

II B 4 PHYSICIAN DISTRIBUTION AND CAREER PATTERNS CONTINUED

Weiskotten, Herman G.; Wiggins, Walter S.; Altenderfer, Marion; Gooch, Marjorie, and Tipner, Anne, "Trends in Medical Practice - An Analysis of the Distribution and Characteristics of Medical College Graduates, 1915-1950", Journal of Medical Education, Vol.35, No. 12 (December, 1960) pp. 1071-1121

Yett, D.E., The Shapes of the Cost and Production Functions for Physicians; Services by Specialty, Type of Practice, and Geographic Area, Paper read before the meeting of the American Public Health Association, San Francisco, Nov., 1, 1966

Yett, D.E., Variations in the Rates of Return on Physicians' Training by Specialty, Type of Practice and Geographic Region, Study in progress at University of California, Los Angeles, 1966

TT. C. Dentists and Dental Health Manpower

American Association of Dental Schools, Cost Study of Dental Education, 1965.

American Council on Education, Commission on the Survey of Dentistry in the U.S., "Dentistry in the U.S.: Status, Needs and Recommendations," Washington, 1960.

American Dental Association, Distribution of Dentists in the United States by State, Region, District and County, 1965.

American Dental Association, 1964 Facts About States for Dentists Seeking a Location, Chicago, 1965.

American Dental Association, "Population per Dentist, 1960 to 1980," Journal of the American Dental Association, May, 1962.

American Dental Association, Survey of Dental Opinion, Chicago, 1964.

American Dental Association, "Survey of Dentists 60 and Older", Journal of the American Dental Association, 1963.

American Dental Association, "Survey of the Dental Laboratory Industry: I", The Journal of the American Dental Association, Vol. LVIII, May, 1959, pp. 102-113.

American Dental Association, "Survey of Needs for Dental Care", Journal of the American Dental Association.

American Dental Association, "The 1962 Survey of Dental Practice", The Journal of the American Dental Association, Vol. LXVI, August, 1963.

Bauer, John C., "Wanted: A Re-evaluation of the Professions' Philosophy Regarding Manpower", The Journal of the American Dental Association, Vol. LVI, March, 1958, pp. 389-399.

Boyd, Miss B. Isabel, Longevity and Mortality of Canadian Dentists, Canadian Dental Association, Spring, 1965.

Boyd, Miss B. Isabel, "Professional Attitudes Toward Recruitment of Dental Students", Canadian Dental Association.

Boyd, Miss B. Isabel, Current Project: "Survey of Recent Dental Graduates", Canadian Dental Association.

Council on Dental Education, "Phase Out of Educational Waivers for Dental Assistant Certification", Report of Councils and Bureaus.

Dental Survey, "Dentists Do Slightly More Lab Work Than They Did in 1946", Vol. XXIX, October, 1953, pp. 1310-1312.

Gilman, C. W., "Dental Manpower and Federal Aid", The Journal of the American Dental Association, Vol. LXIX, October, 1964, p. 476.

II. C. DENTISTS AND DENTAL HEALTH MANPOWER CONTINUED

Hollinshead, Byron S., "The Survey of Dentistry", American Council on Education, 1961.

Kincaid, Dr. Harry V., "The Applications of Programed Instructional Techniques to Undergraduate and Postgraduate Dental Education", Behavioral Sciences Research Program, Stanford Research Institute, 333 Ravenswood Avenue, Menlo Park, California.

Leven, Maurice, The Practice of Dentistry and the Incomes of Dentists in Twenty States: 1929, University of Chicago Press, February, 1932.

Ludwick, William E., "Greater Utilization of Dental Technicians", U.S. Navy Training Center, Great Lakes, Illinois.

Mitchell, George E., and Connor, Kathryn J., "Salaries of Dental Personnel in State Health Departments 1962", Public Health Service Publication No. 1016.

Moen, B. Duane, "The 1959 Survey of Dental Practice", The Journal of the American Dental Association.

Pennell, Maryland Y., Health Manpower Source Book, Section 7 - "Dentists", Public Health Service Publication 263, 1955.

Quarantelli, Prof. Enrico L., The Professionalization of Dental Students, The Ohio State University, Department of Sociology and Anthropology.

Schonfeld, H. K.; Falk, I. S.; Sleeper, H. R.; Johnston, W. D., The Content of Good Dental Care: Methodology in a Formulation for Clinical Standards and Audits, and Preliminary Findings, School of Medicine, Yale University, New Haven, Connecticut.

Strauss, Marvin, Needs for Dentists in Selected Metropolitan Areas of Ohio, Public Health Federation, Cincinnati, Ohio.

Thomas, Glen, "Scope of the Use of Auxiliary Personnel", Journal of the Tennessee State Dental Association, Vol. XLII, July, 1962, pp. 179-190.

U.S. Department of Health, Education and Welfare, Construction Preparedness for Dental-teaching Facilities, Washington, D.C.

U.S. Department of Health, Education and Welfare, Dental Manpower Guide, Washington, D.C.

U.S. Department of Health, Education and Welfare, U.S. Public Health Service, Evaluation of Programs Training Dental Assistants.

U.S. Department of Health, Education and Welfare, U.S. Public Health Service, "Evaluation of a Special Training Program for Dental Students".

II. C. DENTISTS AND DENTAL HEALTH MANPOWER CONTINUED

U.S. Department of Health, Education and Welfare, U.S. Public Health Service, "Survey on Dental-education Financing".

Wisconsin State Dental Society, "The Effects of Urbanization on the Distribution of Dental Manpower in Wisconsin", Journal of Wisconsin Dental Association, 1961.

World Health Organization, "Dental Education", Report of an Expert Committee on Dental Health, 1962.

II. D. Nurses

Nurses: General

Alder, Patricia, "Day Care Services Help Recruit Nurses", The American Journal of Nursing, Vol. LXIII, September, 1963, pp. 97-98.

American Nurses' Association, Facts about Nursing, 1965 Edition, New York, 1965.

American Nurses' Association, Project: "Inventory of Professional Registered Nurses", New York, 1966.

Bottonè, S., Thesis: "The Professional Association and Collective Bargaining: The American Nurses' Association Experience", Columbia University, 1966.

Canadian Nurses' Association, "Project for the Evaluation of the Quality of Nursing Service", Ontario, Canada.

Chase, Howard M., "A Comparative Study of Values Placed on Selected Fringe Benefit Programs by Full-Time Registered Nurses", University of Minnesota, Minneapolis.

Christman, Luther, "Mandatory vs. Permissive Licensing", Practical Nurse.

Corwin, Ronald C., "The Professional Employee: A Study in Conflict in Nursing Roles", American Journal of Sociology, Vol. 66, No. 6, May, 1961, pp. 605-615.

Drew, Jacqueline and Blumberg, Mark, "Methods for Assessing Nursing Care Quality", Hospitals, Vol. 37, Nov. 1, 1963.

Folta, J. R., Nurses' Perceptions of Role Requirements and Role Action in Situations Involving Death in Hospitals, University of Washington, Seattle, Washington.

Gruneau Research Limited, "Study of Attitudes of Registered Nurses in Ontario", Research House, Ontario, Canada, April, 1964.

Henderson, Cynthia, "Freeing the Nurse to Nurse", The American Journal of Nursing, Vol. LXIV, March, 1964, pp. 71-77.

Hershey, Nathen, "Nurses' Medical Practice Problems", American Journal of Nursing, Vol. LXII, July, 1962, pp. 82-83.

Journal of the American Medical Association, "Mandatory vs. Permissive Licensure for Nurses", February, 1966, Vol. 195, No. 6.

Klein, Sister M. Amadeus, "Factors Affecting the Work Performances of Licensed Practical Nurses", The National League for Nursing, New York, 1963.

II. D. 1. NURSES: GENERAL CONTINUED

Kroeger, Louis J., Nursing Practice in California Hospitals, A Report Based on a Study of Actual Practice in Forty California Hospitals, California State Nurses Association, 1953.

Levine, Eugene, and Tibbetts, Helen G., Health Manpower Source Book, Section 2 - "Nursing Personnel", Public Health Publication No. 263, Section 2, May, 1953.

Maher, William, "Economic and Institutional Factors Influencing the Shortage of General Duty Nurses in the Metropolitan Nursing Market", Boston College, Boston, Massachusetts.

Marden, P. W., "Orientations of Registered Nurses Toward Their Professional Association", University of Illinois, Sociology Dissertation, 1964.

Marshall, Mrs. Eleanor, "1962 Inventory of Registered Professional Nurses", American Nurses' Association, New York.

Melbin, M. and Taub, D. L., "The High Cost of Replacing a Nurse", Hospitals, Vol. 40, No. 20, October 16, 1966, pp. 112-122.

Miller, Michael R., "A Comparative Study of the Attitudes of Registered and Practical Nurses Toward Each Other in Two Large City Hospitals", University of Minnesota, March, 1966.

Mortimer, Kendrick, "Nurse Attitudes to Intensive Care", British Hospital Journal and Social Service Review, Vol. LXXV, No. 3989, September 30, 1966.

Moses, Evelyn, "Nursing's Economic Plight", American Journal of Nursing, June, 1965, pp. 68-71.

National League for Nursing, "A Method for Rating the Proficiency of the Hospital General Staff Nurse", New York, 1964.

National League for Nursing, Self-evaluation Guide for Nursing Service Personnel Programs, New York.

The New England Journal of Medicine, "Nursing Shortage", Vol. 270, No. 15, April 9, 1964, pp. 798-799.

Olsson, David E., "An 'Active Reserve' Program for Registered Nurses", Hospitals, Vol. 37, May 1, 1963, pp. 42-43.

Rosen, Albert and Abraham, G. E., "Attitudes of Nurses Towards Performance Appraisal System", Nursing Research, Vol. 15, No. 4, Fall, 1966, pp. 317-322.

Spolyar, William P., A Study of Sick Leave Use by Registered Nurses and Certain Related Factors, University of Minnesota, Minneapolis, Minnesota, 1966.

II. D. 1. NURSES: GENERAL CONTINUED

U.S. Public Health Service, Division of Nursing, "Selected Division of Nursing Publications", Washington, D.C.

U.S. Bureau of Labor Statistics, "The Economic Status of Registered Professional Nurses 1946-47", Bulletin No. 931, Washington, D.C., 1947.

U.S. Veterans Administration, Department of Medicine and Surgery, "Performance Standards Guide-Nursing Service Performance Standards for Central Service Units in Veterans Administration Hospitals", 1966.

Yett, Donald, Project: "Economic Analysis of Hospital Nursing Shortages", Social Science Institute, Washington University, St. Louis, Missouri.

Yett, Donald, "The Supply of Nurses: An Economist's View", Hospital Progress, February, 1965.

II. D. 2. Nursing Training

Alexander, Florence M., "Education for a Career in Nursing", Journal of the American Medical Association, Vol. 195, No. 7, February, 1966, pp. 591-593.

American Medical Association, Committee on Nursing, "Educational Programs in Nursing and Related Career Opportunities", Journal of the American Medical Association, Vol. 185, No. 2, July, 1963, pp. 144-5.

American Nurses Association, A Position Paper: "Education for Those who Work in Nursing should take Place in Institutions of Learning within the General System of Education", 1965

American Nurses Association, "President Asks \$53,538,000 for Nursing Programs", American Journal of Nursing, Vol. 67, No. 3.

Anderson, Bernice E., Nursing Education in Community Junior Colleges, Lippencott Co., 1966.

Badgley, R. F., "The Cost and Scope of Ward Activities of Student Nurses", Canadian Hospital, Vol. 38, No. 9, September, 1961, pp. 46-47.

Booz, Allen & Hamilton, Inc., Program for Merging Three Independent Schools for Nursing, Wilmington, Delaware, July 30, 1962.

Borland, M., and Yett, D. E., Project-"The Rate of Return on an Investment in Professional Nurse Training", Washington University, St. Louis, Missouri, 1966.

Brown, Roy E., "Report of Survey of Nursing Education in North Carolina", North Carolina Board of Higher Education, July, 1964.

II. D. 2. NURSING TRAINING CONTINUED

Community Welfare Council, Project-"Public Health Nursing Need Study", National League for Nursing, New York.

Coulter, P. P. and Leino, A., "Validation of the Collegiate Nursing Curriculum through Use of the Critical Incident", Laramie, Wyoming, 1965, University Bookstore.

Courtney, M. E., "Nursing Education"; Hospitals, Vol. 37, April 16, 1963, pp. 139-142.

Dahl, H. A., "Past Clinical Instruction Experience As Viewed by the Graduates of the Methodist-Kahler School of Nursing", University of Minnesota, Minneapolis, 1964.

Dubin, Dr. Samuel S. and Marlow, Dr. H. Leroy, "Continuing Professional Education Needs of Supervisory Personnel in Nursing Department", Pennsylvania State University, University Park, Pennsylvania.

Edelson, Ruth, "A Local League Initiates Refresher Courses", American Journal of Nursing, Vol. 51, No. 8, August, 1951, p. 501.

Elliott, Jo Eleanor, "Evaluation of a Continuation Education Program for Nurses in Leadership Positions in the Western Region", Western Interstate Commission for Higher Education, University of Colorado, Boulder, Colorado.

Flitter, Hessel H., "Developing a Programmed Unit of Instruction in Rehabilitation Nursing", National League for Nursing, New York.

Freeman, Ruth B., "A Retraining Project for Preparing Men Practical Nurses", Nursing Outlook, pp. 33-34, August, 1966.

Gabig, M. G., A Study of 488 Graduates of Masters Programs in Nursing: The Catholic University of America, 1934-57, The Catholic University of America, Washington, D.C., Sociology Dissertation, 1963.

Gass, Gertrude Z.; Rutledge, Al and Peimer, S. C., "An Experiment in Retraining Unemployed Men for Practical Nursing Careers", Hospitals, Vol. 40, No. 20, October 16, 1966, pp. 87-90.

Henderson, Virginia, "An Overview of Nursing Research", Nursing Research, Vol. 6, October, 1957.

Henderson, Virginia, "Research in Nursing Practice-When?", Nursing Research, Vol. 4, No. 3, 1955, p. 99.

Hill, Lawrence A., "Cost of Nursing Education in Hospitals", Bureau of Hospital Administration, The University of Michigan.

Hill, Richard J., "Management Training for Supervisory Nurse Personnel", Department of Sociology, University of Texas, Austin, Texas.

Klump, Mrs. Olive, "Improving the Research Competencies of the Nursing Staff", Bureau of Public Health Nursing, Los Angeles County Health Department, California.

II. D. 2. NURSING TRAINING CONTINUED

Leone, Lucille, "Trends and Problems in Practical Nursing Education", The American Journal of Nursing, Vol. LVI, January, 1956, pp. 51-53.

Levine, Eugene; Belcher, Helen and Taira, Joy, "Study of the Education Preparation and Educational Needs of Professional Nurses", Division of Nursing, U. S. Public Health Service, Washington, D.C.

Lu, Y-O, "In-Service Education Programmes", International Nursing Review, Vol. 10, No. 3, June, 1963, pp. 24-30.

McGibony, J. R., Planning Educational Facilities for Nursing Education, U. S. Public Health Service, Washington, D.C.

Mussallem, Helen K., The Pilot Project for Evaluation of Schools of Nursing in Canada, Canadian Nurses' Association, Ontario, Canada.

National League for Nursing, Education for Practical Nursing 1960, New York, 1962.

National League for Nursing, Sources for Assistance in Inservice Education, Code #20-688, New York, New York.

Neal, Mary V., Disaster Nursing Preparation, Report of a Pilot Project Conducted in Four Schools of Nursing and One Hospital Nursing Service, National League for Nursing, New York, 1963.

New York State, State Education Department, Office of Nurse Education, Admissions and Graduations in Programs of Registered Professional Nursing, Fact Sheet, July 1, 1965-June 30, 1966.

New York State, Department of Mental Hygiene, Mental Health Research Unit, Project: "Evaluation of Research Training for Public Health Nurse Trainees", Syracuse, New York.

Nichols, David D., A Comparative Study of the Performance of Foothill College School of Nursing Graduates Versus Diploma and Baccalaureate Graduates Working at El Camino Hospital, M.H.A. Thesis, Bureau of Hospital Administration, University of Michigan, Ann Arbor, Michigan, 1966.

Nursing Outlook, "Let's Examine: Separate Licensure Examinations for Diploma and Degree Program Graduates", 13:51, July, 1965.

Olive, George, and Co., Indianapolis Hospital Development Association, Inc. Report on Review of the Cost of Nursing Education in the Indianapolis Area, 26 pp.

Ollerenshaw, K., "The Education Service and The Nursing Profession", Nursing Times, Vol. 59, No. 24, June, 1963, pp. 743-45.

II. D. 2. NURSING TRAINING CONTINUED

Pair, Nona Tiller and Elliott, Jo Eleanor, Project: "Defining Clinical Content in Graduate Nursing Programs", University of Colorado, Boulder, Colorado.

Pair, Nona Tiller and Elliott, Jo Eleanor, Project: "Investigation of Nursing Content in Baccalureate Nursing Programs", University of Colorado, Boulder, Colorado.

Peterson, Frances K., "The Associate Degree Program", The American Journal of Nursing, Vol. LXIV, May, 1964, pp. 78-81.

Rowe, Harold R. and Flitter, Hessel H., Study on Cost of Nursing Education, Part I, Cost of Basic Diploma Programs, 1964, and "Part II, Cost of Basic Baccalureate and Associate Degree Programs", National League for Nursing, New York, 1965.

Rubenstein, F. T., "A Study of Freshman Nursing Students: Role Conceptions", Sociology Dissertation, University of Pittsburgh, Pittsburgh, Pennsylvania

Simmel, Arnold, Project: "Attitude Development of Student Nurses", Faculty of Medicine, Columbia University, New York.

Spencer, Paul J., Nursing Education Cost Analysis for 1965, Faulkner Hospital, Boston, Massachusetts, January 21, 1965.

Stoops, M., Comparison of Student Nurse Profiles, University of California, Berkeley, California, 1966.

Straub, Kathleen Mary, A Study of Changes in Job Satisfaction of Nurse Practitioners Following an Inservice Education Program, Ph.D. Dissertation, Columbia University.

Wirick, G. C. and Grenholm, G. G., Project: "Cost of Nursing Education in Hospitals", University of Michigan, 1966.

World Health Organization, Technical Report Series, No. 60, "Report of a Nursing Education Working Conference, 1950".

II. D. 3. Career Patterns of Nurses

Adams, G. F. and McIlwraith, P. L., Geriatric Nursing: A Study of the Work of Geriatric Ward Staff, Oxford University Press for the Nuffield Provincial Trust, New York, 1963.

American Nurses Association, Guidelines for the Practice of Nursing on the Rehabilitation Team, New York.

Anderson, Louise C., "The Clinical Nursing Expert", Nursing Outlook, Vol. 14, No. 7, July, 1966, pp. 62-64.

Anderson, Ruth M., "Activity Preferences and Leadership Behavior of Head Nurses", Nursing Research, Vol. 13, No. 2, Fall, 1964.

II. D. 3. CAREER PATTERNS OF NURSES CONTINUED

Bailey, Jack C., "A Comparative Study of the Employment Conditions of Nurses", George Washington University, Washington, D.C., June, 1965.

Barker, Ann E. and Staton, Earl E., "Inactive Nurses", Public Health Reports, Vol. 80, No. 7, July, 1965, pp. 637-645.

Bell, Harriet S., "Practical Nurses in the Operating Room", The American Journal of Nursing, Vol. LII, May, 1952, pp. 581-582.

Beltran, Helen G., et al, Guide for Leadership in Team Nursing, . The League Exchange No. 54, National League for Nursing, New York, 1961.

Boylan, B. R., "The Nurse-Midwife: New Face on the OB Service", Physicians' Management, 6:103-111, 1966.

Cartlier, Vernita L., "O. R. Nursing is a Professional Specialty", Nursing Outlook, Vol. VIII, July, 1960, pp. 376-378.

Dalman, Mrs. J. Evelyn, "Education and Functions of the Occupational Health Nurse", School of Hygiene, Ontario, Canada.

Disoway, Katherine M., "Reappraising the Role of the Practical Nurse", Nursing Outlook, Vol. XII, February, 1964, pp. 40-44.

Gabriel, James E., Factors Influencing Nurses in Selection of Employment: A Survey of an Area with Comparatively Low Paying Community Hospitals Competing with Higher Paying Federal Hospitals for the Registered Nurses Available, Thesis for Master's in Health Care Administration, George Washington University, June, 1965.

Hellman, L. M. and O'Brien, F. B., "Nurse Midwifery - An Experiment in Maternity Care", Obstet. Gynec., 24:343-349, 1964.

Lamb, James A., A Profile Study of the Staff Nurse in a Medium Size Hospital in North Carolina, Master's Thesis, Program in Hospital Administration, Duke University.

Look Magazine, "More than a Nurse; Less than a Doctor", September 6, 1966.

McLemore, S. Dale and Hill, Richard J., Management-Training Effectiveness - A Study of Nurse Managers, Bureau of Business Research, The University of Texas, 1965.

Mannino, Anthony J., "Men in Nursing", American Journal of Nursing, Vol. 51, No. 3, March, 1951.

Ohlson, Virginia M., "Profile of the Public Health Nurse", J.A.M.A., Vol. 198, October 17, 1966.

II. D. 3. CAREER PATTERNS OF NURSES CONTINUED

Pavalko, Ronald M., A Longitudinal Study of Nursing Careers, College of Letters & Science, University of Wisconsin, Madison, Wisconsin.

Reese, Donald E., Project: "Study of Inactive Nurses", Public Health Service, Division of Nursing, Department of Health, Education, and Welfare.

Regional Health Planning of the South San Joaquin Valley, Registered Nurse, Licensed Vocational Nurse Survey, Kern County, Regional Health Planning of the South San Joaquin Valley.

Segal, Bernard, "Male Nurses: A Case Study in Status Contradiction and Prestige Loss", Social Forces, Vol. 41, No. 1, October, 1962, pp. 31-38.

Simmons, Leo W., Research in Nursing, "Military Operating Room Nursing: Selected Papers from 1955 and 1956 Workshop", Walter Reed Army Institute of Research, 1957.

Simms, Laura L., "The Clinical Nursing Specialist, An Approach to Nursing Practice in the Hospital", J.A.M.A., Vol. 198, November 7, 1966.

Testoff, Arthur; Levine, Eugene; Siegel, Stanley E., "Analysis of Part-time Nursing in General Hospitals", Hospitals, Vol. XXXVII, September 1, 1963.

Testoff, Arthur; Levine, Eugene; Siegel, Stanley E., "The Part-time Nurse", The American Journal of Nursing, Vol. LXIV, January, 1964.

Tronnes, Hans F., A Comparative Study of Personality Characteristics Among Selected Nursing Specialties in a Voluntary, Nonprofit, General Acute Hospital, University of Minnesota, 1966.

Turk, Herman and Ingles, Thelma, Clinic Nursing: Explorations in Role Innovation, F. A. Davis Company, 1963.

U.S. Public Health Service, Division of Nursing Resources, Bureau of Medical Services, Study of Part-time Employment of Professional Nurses.

Yett, Donald E., "The Causes and Consequences of Salary Differentials in Nursing", Paper presented at the Western Economic Association Meeting, Berkeley, California, August 26, 1966.

II F Paramedical Personnel

II E 1. Paramedical Personnel: General

Abstracts of Efficiency Studies in The Hospital Service, "Portering Services-General Porters" No. 93, H. M. Stationery Office, London, 1966.

Bailey, Willie V., On-the-job training, Baylor University, San Antonio, Texas.

Bloetjes, Mary K.; Gottlieb, Regina; and Couch, Mary, "A Study of Dietetic Training", Journal of the American Dietetic Association, July, 1961.

Buerci, R. C., "The Increasing Role of Paramedical Personnel", Journal of Medical Education, 40:850-55, 165.

Cadmus, Dr. Robert R., Project: "A Manpower Study of Clinical Laboratory Personnel, Including Medical Technicians", Department of Hospital Administration, University of North Carolina, Chapel Hill, North Carolina.

Cadmus, Dr. Robert R., Cadre Approach to The Training of Hospital Department Head Personnel, Particularly for the Government of Panama, North Carolina Memorial Hospital.

Carr, John L., "Selecting Nurse Aides for Increased Longevity of Employment", Program in Hospital Administration, The University of Minnesota, Minneapolis, Minnesota, 1964.

Chabal, Lillian, National Manpower Survey of Physical Therapists, American Physical Therapy Association, New York, New York.

Connors, Edward J., "Paramedical Education", Hospitals, Journal of the American Hospital Association, April 1, 1964, Vol. 38, pp. 125-128.

Dockhorn, Jean M., A Study of the Use of the Social Work Assistants in the Veterans Administration, Department of Medicine and Surgery, Veterans Administration, Washington, D. C.

Douty, H. M., Salaries and Working Conditions of Social Welfare Manpower in 1960, Division of Wages and Industrial Relations, Bureau of Labor Statistics, Washington, D. C.

Dubin, Dr. Samuel S., Continuing Professional Education Needs of Supervisory Personnel in Engineering and Maintenance Department, Pennsylvania State University, University Park, Pennsylvania.

Dubin, Dr. Samuel S., Continuing Professional Education Needs of Medical Records Librarians, Pennsylvania State University, University Park, Pennsylvania.

II E 1. PARAMEDICAL PERSONNEL : GENERAL CONTINUED

Dubin Dr. Samuel S., Continuing Professional Education Needs of Supervisory Personnel in Dietary Departments", Pennsylvania State University, University Park, Pennsylvania.

Dubin, Dr. Samuel S., Continuing Professional Education Needs of Supervisory Personnel in Clinical and X-ray Laboratories", Pennsylvania State University, University Park, Pennsylvania.

Dubin, Dr. Samuel S., Continuing Professional Education Needs of Supervisory Personnel in Business Offices, Pennsylvania State University, University Park, Pennsylvania.

Fottler, Myron D., Thesis in preparation: "Training of Nonprofessional Manpower in New York City Hospital", Columbia University, New York, New York.

Ginsberg, Frances, "Aides Answer the Call for Help in Surgery, The Modern Hospital, Vol. XC, February, 1958, pp. 71-75.

Hall, James Herrick, Identification and Indexed Topical Analysis of Research Related to Rehabilitation Counselor Education, 1955 through 1958, Southern Illinois University, Carbondale, Illinois, 1960.

Ham, Rudman; Levinson, L.; Chickering, D.; Cokin, M. and Murphy, A., "What Keeps Housekeeping Employees on the Job?", Hospitals, Vol. 40, No. 12, June 16, 1966, pp. 104, 106.

Heckel, R. V.; Kraus, R.; and Beck, Elyse W., "Measurement of attitude change in nursing aides", Psychological Reports, 1963, 13(3), 639-642.

Heinman, Ruth I., Buer, Henry. and Kundsens, Helen L., "Design for Development of Medical Laboratories: Personnel and Practices", The American Journal of Medical Technology, May - June, 1959, pp. 145-165.

Holdgrafer, Sister Mary Eleanor, Factors Affecting Turnover and Stability of Selected Food Service Workers at The University of Minnesota Hospitals, Program in Hospital Administration, University of Minnesota, Minneapolis, Minnesota, March, 1966.

Hospital Administration in Canada, "Housekeeping Training Program Ingredients - Model Patients' Room, Instruction Manual, Orientation Lectures, and Limitless Patience", August, 1964, Vol. 6, No. 8, pp. 32-34.

Kesel, Robert G., "Meaning of Recommendations to Expand the Duties of Auxiliary Personnel", The New York Journal of Dentistry, Vol. XXXII, February, 1962, pp. 134-137.

Kittell, Theodore H., A Study of Selected Background and Personality Characteristics of Sub-Professional Nurses, University of Minnesota. Minneapolis, Minnesota, March 1, 1963.

II. E. 1. PARAMEDICAL PERSONEL: GENERAL CONTINUED

Kott, Maurice G., Ph.D., and Ziegler, Richard C., "Attendant Training Project", Edward R. Jonstone Training and Research Center, Bordentown, New Jersey.

Levine, Morton, Project: "A Manpower Study of Clinical Laboratory Personnel", 1965, University of North Carolina, Chapel Hill, North Carolina.

Levy, L., "Factors Which Facilitate or Impede Transfer of Medical Functions from Physicians to Paramedical Personnel", Journal of Health and Human Behavior, 7:50-54, Spring, 1966.

Lipscomb, Mary and Donaldson, Beatrice, "How Well Do Directors of Dietetics Fulfill Managerial Responsibilities?", Journal of the American Dietetic Association, Vol. 45, No. 3, September, 1964, pp. 218-224.

McCollum, William "Jobs for Medical Laboratory Assistants", Occupational Outlook Quarterly, February, 1966.

McKersie, Robert B. and Brown, Montague, "Nonprofessional Hospital Workers and a Union Organizing Drive", Quarterly Journal of Economics, Chicago, Illinois, Vol. LXXVII, August, 1963, pp. 372-404.

Meyers, Robert S., "Lay Technicians Could Assume Many More Nursing Functions", The Modern Hospital, Vol. XCIV, June, 1960, p. 132.

Moon, Marjorie and Slack, Kathleen M., The First Two Years - A Study of the Work Experience of Some Newly Qualified Medical Social Workers, The Institute of Medical Social Workers, London, 1962.

New York State Education Department, Technicians for the Health Field: A Community College Health Careers Study Program, October 1, 1964 - March 31, 1966.

Richmond, Charlotte, "Help Wanted-Hospital Attendants", Occupational Outlook Quarterly, September, 1965.

Roth, Julius A., "How Nurses Aides Learn Their Jobs", The American Journal of Nursing, Vol. LXII, August, 1962, pp. 55-57.

Spencer, David S., A Comparison of the Utilization of Service Personnel and Ward Clerks-Patient Unit Manager vs. Traditional Organizations, University of Minnesota, Minneapolis, Minnesota, 1966.

Spillane, Edward J., "A Survey Report on Personnel Directors", Hospital Progress, Vol. 47, No. 11, November, 1966, pp. 61-66.

Sprenger, Gordon M., A Study of the Backgrounds and Personalities of Satisfactory and Excellent Nurse Aides, University of Minnesota, Minneapolis, Minnesota, 1961.

II. E. 1. PARAMEDICAL PERSONNEL GENERAL CONTINUED

0
Straughn, Herbert E., A Study of the Inservice Training Program for Specialized Medical Technicians and the Post Military Employment of These Technicians, The University of Pittsburgh, Pittsburgh, Pennsylvania, May, 1965.

U. S. Department of Health, Education and Welfare, Closing the Gap...in Social Work Manpower, Superintendent of Documents, U. S. Government Printing Office, Washington, D. C.

U. S. Department of Health, Education and Welfare, Office of Education, Bureau of Adult and Vocational Education, Suggested Guidelines for Developing a Program for Training Medical Assistants, April, 1963.

U. S. Department of Health, Education and Welfare, Office of Education, Bureau of Adult and Vocational Education, Suggested Guidelines for Developing a Training Program for the Occupational Therapy Assistant, October, 1963.

U. S. Department of Health, Education and Welfare, Office of Education, Bureau of Adult and Vocational Education, Suggested Guidelines for Developing a Training Program for the Physical Therapy Assistant, July, 1964.

U. S. Veterans Administration, Dietetic Service Performance Standards, Operation Letter Number 62-134, Professional Service Letter Numbers 63-28, 63-68, Veterans Administration Department of Medicine and Surgery, 1962-63.

Vogl, A. J., "More Medical Help From Non-M.D.'s?" Medical Economics, 43:57, August 8, 1966.

World Health Organization, Monograph 32., The Training of Sanitary Engineers: Schools and Programmes in Europe and the United States, 1956.

World Health Organization, Technical Report Series TRS 69., "Professional and Technical Education of Medical Auxiliary Personnel", Second Report of the Expert Committee, 1953.

World Health Organization, Technical Report Series TRS 93., "Midwifery Training", First Report of the Expert Committee, 1955.

World Health Organization, Technical Report Series TRS 212, "The Use and Training of Auxiliary Personnel in Medicine, Nursing, Midwifery and Sanitation", Ninth Report of the Expert Committee on PTEMA, 1961.

World Health Organization, Technical Report Series TRS 278, "FAO/WHO Inter-regional Conference on the Post-Graduate Preparation of Health Workers for Health Education", 1964.

II. E. 2 Hospital and Medical Care Administrators

American Public Health Association, "Concepts and Principles", A Guide to Medical Care Administration, Vol. 1, 1965.

American Hospital Association, "Union List of 1964 Masters Reports from Hospital Administration Programs".

Association of University Programs in Hospital Administration, Medical Care Teaching Materials, presented at Medical Care Teaching Conference, Yale University, December 1 - 3, 1966.

Boyum, Kenneth M., A Pilot Study to Compare the Vocational Interest Profiles of Hospital Administration Students and Selected Hospital Administrators, University of Minnesota, Minneapolis, Minnesota, March, 1964.

Brady, Norman A.; Herman J. and Warden, Gail L., "The Unit Manager" Hospital Management, June, 1966, Vol. 101, No. 6, pp. 30-36.

Brown, Terry Allen, Administrative Mobility and its Relation to Hospital Size, Program in Hospital Administration, Duke University, Durham, North Carolina, 1966.

Carner, Donald C., "Administrators' Salaries are Increasing, Study of Hospital Shows", The Modern Hospital, Vol. 107, No. 1, July, 1966, pp. 74-75.

Chester, T. E., "Hospital Administration: An International Survey", International Review of Administrative Sciences, Brussels, Belgium, Vol. 29, No. 2, pp. 141-150.

Clay, Clement C., "A Study of Possible Candidates for Admission to University Programs in Hospital Administration in September, 1959", Division of Medical Care Administration, School of Public Health, New York.

University of Colorado, Department of Sociology, Non-academic Education in Hospital Administration, Boulder, Colorado.

Dolson, Miriam T., "Today's Administrator: Educated, Mobile Executive", The Modern Hospital, Vol. 102, No. 6, June, 1964, pp. 78-81, 144.

Dubin, Dr. Samuel S. and Marlow, Dr. H. LeRoy, "Continuing Professional Education Needs of Hospital Administrators", Pennsylvania State University, University Park, Pennsylvania.

Falk, I. S., Draft Paper: "The Teaching of Medical Care in the Light of the Emerging Pattern of Medical Care", Medical Care Teaching Institute, New Haven, Connecticut, December, 1966.

Gaynes, Neil L., "Survey Shows Administrative Salary Range", Nursing Home Administrator, Vol. 20, No. 2., March-April, 1966, pp. 83-85, 130.

II. E. 2. HOSPITAL AND MEDICAL CARE ADMINISTRATORS CONTINUED

Griffith, J. R. and Rees, E. T., Hinges of Administration: A Survey of the Characteristics of Hospital Administrative and Clerical Staff, Nuffield Provincial Hospitals Trust, England, 1963.

Hamilton, James A., Research on the Training of Hospital Administrators, School of Public Health, University of Minnesota, Minneapolis, Minnesota.

Ingbar, Mary Lee, Economics and the Administration of Medical Care Programs, Graduate School of Public Administration, Harvard University, Cambridge, Massachusetts, 1962.

Likert, Rensis and Kahn, Robert L., "Current Research in Management and Its Application to Administration of Medical Centers," Report of the First Institute of Medical School Administration, 1964, Association of American Medical Colleges.

McLachlan, Gordon, Problems and Progress in Medical Care, 1964, Nuffield Provincial Hospital Trust, England.

New, Peter Kong-ming, A Pilot Study on the Career Patterns of Hospital Administrators, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, Pennsylvania.

Roemer, Milton I., "Education for Medical Care Administration", Hospital Administration, Vol. 10, No. 3, Summer, 1965, pp. 6-18.

Roemer, Milton I., Medical Care Administration: Content, Positions, and Training in the United States, Cornell University, June, 1959, 118 pp.

Roemer, Milton I., "Medical Care Administration in the U. S.: Personnel Needs and Goals", American Journal of Public Health, Vol. 52, No. 1, pp. 8-17, January, 1962.

Roemer, Milton I., "Teaching Medical Care Organization in Programs of Hospital Administration", Hospital Administration, Summer, 1959, pp. 51-59.

Roemer, Milton I., "Teaching of Medical Care Administration: Emerging Issues", Medical Care, Vol. 4, No.1, pp. 60-62.

Roemer, Milton I., "The Nonmedical Health Administrator: His Training and Value", California's Health, Vol. 21, No. 15, February 1, 1964.

Shelton, Hershel W., The Role of The Assistant Administrator - An Empirical Study, University of California, Berkeley, California, May 5, 1966.

II. E. 2. HOSPITAL AND MEDICAL CARE ADMINISTRATORS CONTINUED

United Hospital Fund of New York, "Appraising Performance of Hospital Managers", New York, New York.

Wessen, Albert et.al., "Administrative Science and Medical Care", Washington University and Jewish Hospital of St. Louis Research Project, October, 1966.

II. F. Mental Health Personnel

1. Mental Health Personnel: General

Albee, George W. and Marquerite Dickey, "Manpower Trends in Three Mental Health Professions", The American Psychologist, Vol. 12, No. 2, February 1967, pp. 57-70

Albee, George W., Mental Health Manpower Trends, Basic Books, Inc., New York, 1959, 361 pages.

Atwell, Robert H., "Recent Trends and Current Problems in Mental Health Services" Inquiry, Vol. II, No. 4, December 1965, pp. 3-12

Berger, David G.; Klett, S.L.; Sewall, L.G; and Rice, C.E, "Measuring Psychiatric Hospital Staff Opinions about Patient Care", Archives of General Psychiatry, Vol. 14, April 1966, pp. 428-433.

Blain, Daniel; Potter, Howard; Solomon, Harry, "Manpower Studies with Special Reference to Psychiatrist", American Journal of Psychiatry, Vol. 116, No. 9, March 1960, 6 pages.

Blumberg, M.S., Factors Relating to Demand for Psychiatric Services in California, Stanford Research Institute, Menlo Park, 1965.

Durell, Jack; Shader, R.I.; and Kellam, S.G., "Nursing Staff Attitudes and the Clinical Course of Psychotic Patients", Archives of General Psychiatry, Vol. 14, No. 2, Feb. 1966, pp. 190-202.

Furman; S.S., "Community Mental Health Services in Northern Europe, Great Britain, Netherlands, Denmark and Sweden", U.S. Department of Health, Education and Welfare, Bethesda, Maryland.

Gray H., "Physicians as Psychotherapists", California Medicine, Vol. 93, December 1960, pp. 361-362.

Henry, William E., "Careers in Mental Health", School of Social Science, University of Chicago, Chicago, Illinois.

Hunt, Gerard J., "Distribution and Utilization of Mental Health Manpower in North Carolina", University of North Carolina, Institute for Research in Social Sciences, Planning Report, June, 1965.

Klutch, Murray; Callahan, Patricia and Wood, Donald, Mental Health Manpower (Phase II) "A Compilation of Original Papers and Results of Two Surveys", California State Department of Mental Hygiene, Sacramento, California.

Littlestone, Ralph, Mental Health Manpower (Phase I), "An Annotated Bibliography and Commentary," California State Department of Mental Hygiene, Sacramento, California.

II. F. 1. MENTAL HEALTH PERSONNEL: GENERAL CONTINUED

Fishak, Irene R., An Evaluation of the Medication System on Selected Continuous Care Psychiatric Nursing Units, San Antonio State Hospitals, Baylor University, San Antonio, Texas.

Psathas, George and Arp, Dennis, Survey of Psychiatrists and Psychologists in Private Practice in St. Louis, Health and Welfare Council of Metropolitan St. Louis, November, 1964.

Shriver, Beatrice and Arnhoff, Franklyn, "A Study of the Current Status of Mental Health Personnel", Public Health Service Publication No. 1541, 1966.

Ullmann, Leonard P. and Gurel, Lee, "Size, Staffing and Psychiatric Hospital Effectiveness", Archives of General Psychiatry, October, 1964, Vol. 11, pp. 360-367.

U.S. Department of Health, Education and Welfare, A Selected Bibliography on the Utilization of Mental Health Manpower, March, 1966.

U.S. Department of Health, Education and Welfare, "Highlights from Survey of Psychiatric Aides", Public Health Service Publication No. 1151, April, 1964.

Department of Health, Education and Welfare, Psychologists in Mental Health, September, 1966.

Department of Health, Education and Welfare, The Psychiatric Aide in State Mental Hospitals, Public Health Service Publication, No. 1286, March 1965.

Department of Health, Education and Welfare, "Utilization of Mental Health Manpower", Mental Health Manpower, October, 1966, No. 11.

Department of Labor, Occupations in the Care and Rehabilitation of the Mentally Retarded, U.S. Employment Service, Bureau of Employment Security, Washington, D.C., 1966

World Health Organization, The Role of Public Health Officers and General Practitioners in Mental Health Care, Eleventh Report of the Expert Committee on Mental Health, 1962.

II. F. 2. Mental Health Personnel: Training and Recruitment.

Albee, George W., "The Manpower Crisis in Mental Health", American Journal of Public Health, Vol. 50, No. 12, December, 1960, pp. 1895-1900.

Baer, Walter H., "The Training of Attendants, Psychiatric Aides, and Psychiatric Technicians", American Journal of Psychiatry, Vol. 109, No. 4, October, 1952, pp. 291-295.

Distefano, M.K. and Pryer, M.V., "Basic Issues and Problems in Attendant Training", Mental Hygiene, Vol. 48, No. 4, October, 1964, pp. 653-661.

Douglas, A.M., Social Factors Which Affect Career Choice in Psychiatric Nursing, The Catholic University Press, Washington, D.C., 1961, 20 pages.

Froelich, Robert E., Training the General Practitioner in Care of the Patient with Emotional Illness, University of Missouri, 1964.

Hicks, Martha B., Mental Health Psychiatric Nursing Staff Development, State Board of Health, Jacksonville, Florida.

Kailander, Virginia, Pilot Training Program in Practical Psychiatric Nursing, Minneapolis, Minnesota.

Kemp, Hardy A., Mental Hospital Staff Recruitment, Training, Retention, Larned State Hospital, Larned, Kansas.

O'Gorman, G., "Recruitment and Training of Mental Nurses", Lancet, September 23, 1961, p. 708.

Potter, Howard W.; Klein, Henriette R.; Goodenough, Donald R., "Problems Related to the Personal Costs of Psychiatric and Psychoanalytic Training:", American Journal of Psychiatry, Vol. 113, No. 11, May, 1957, pp. 1013-1039.

Roemer, Milton I., "Nonmedical Administrators for New Mental Health Services", Hospital and Community Psychiatry, pp. 98-101, April, 1966.

Rose, Edward, Evaluation of Summer Work-Study Programs in Mental Health, Department of Sociology, University of Colorado, Boulder, Colorado.

Simon and Shriver, "Impact of the Undergraduate Psychiatry Program on Choice of Specialty: A Survey of 1957 and 1958 Stipend Recipients", Journal of Medical Education, Vol. 39, p. 1114, 1964.

II. F. 2. MENTAL HEALTH PERSONNEL: TRAINING AND RECRUITMENT CONTINUED

U.S. Department Health, Education and Welfare, Survey of Funding and Expenditures for Training of Mental Health Personnel, 1960-1961, January, 1963, p. 149.

Vaughn, R.M.; Teitelbaum, S.; and Kumpan, J.; "A Research in Psychiatric Aide Training", American Journal of Psychiatry, No. 6, Vol. 119, 1962, pp. 555-559.

World Health Organization, Public Health Paper 9, "Teaching of Psychiatry and Mental Health", 1961.

World Health Organization, Technical Report Series 208, "The Undergraduate Teaching of Psychiatry and Mental Health Promotion," Ninth Report of the Expert Committee on Mental Health, 1961.

World Health Organization, Technical Report Series 252, "Training of Psychiatrists:", Twelfth Report of the Expert Committee on Mental Health, 1963.

III. PLANNING AND LEGISLATION

A. Planning

1. Planning General

American Journal of Nursing, "Action for Critical Nursing Problems Proposed: Surgeon General's Study Group," Vol. 63, March 1963.

American Medical Association, "Conference on International Health: Review of International Health Programs," Chicago, 1962.

Andrew, G., "Uses of Data in Planning Community Psychiatric Services," American Journal of Public Health, Vol. 56, No. 3, 1965.

Association of American Medical Colleges, A World Program for Health Manpower: Report of a Study of Medical Education in the Developing Countries, October, 1965.

Baker, Timothy, M.D., "Dynamics of Health Manpower Planning," Medical Care, Vol. 4, No. 4, October-December, 1966.

Bane, F., Physicians for a Growing America, P.H.S. Publication, No. 709, Washington, D. C., October, 1959.

Bishop, Dr. Charles E., Project: "Manpower Research Focussing on the South," North Carolina State University, Raleigh, North Carolina.

Blaug, Mark, "Conflicting Approaches to Educational Planning," Paper presented to the Association of University Teachers of Economics (England), April, 1966.

Brown, J. D. and Harbison, F., High-Talent Manpower for Science and Industry: An Appraisal of Policy at Home and Abroad, Princeton University, Department of Economics and Sociology, Princeton, New Jersey, 1957.

Coggeshall, Lowell T., Planning for Medical Progress Through Education, American Association of Medical Colleges, April, 1965.

Committee on Utilization of Scientific and Engineering Manpower, Toward Better Utilization of Scientific and Engineering Talent: A Program for Action, Washington, D. C., 1964.

Cooper, J. D., "A Non Physician Looks at Medical Utopia," JAMA, 197: 105-07, 1966.

David, Henry, "Manpower Development and Utilization:

III. A. 1. PLANNING GENERAL CONTINUED

A Governmental or a Private Responsibility?" Annals of the American Academy of Political and Social Science, Vol. 325, September, 1959.

Davis, Russell C., Planning Human Resource Development: Educational Models and Schemata, Rand McNally & Co., Chicago, 1966.

Denison, Edward F., "Education, Economic Growth, and Gaps in Information," Journal of Political Economy, Vol. 70, No. 5, 1962.

De Witt, Nicholas and Collaborators, International Survey of Educational Development and Planning, Indiana University, Departments of Economics and Government, Bloomington, Indiana, to be published in 1968.

Dixon, J., "A World Program for Health Manpower," Journal of Medical Education, Vol. 41, No. 2, February, 1966.

Fein, Rashi, "Health Programs and Economic Development," The Economics of Health and Medical Care, Brookings Institution, Washington 26, D. C.

Ginzberg, Eli, "Psychology and Manpower Policy," American Psychologist, Columbia University, New York, New York.

Goerke, Lembcke, and Roemer, Milton, "Medical Education and Community Needs," Journal of Medical Education, Vol. 38, No. 10, October, 1963.

Gordon, Margaret S., Retraining Programs -At Home and Abroad, Institute of Industrial Relations, University of California, Berkeley, 1965.

Health Information Foundation, "Financing Further Progress," Progress in Health Services, 12: No. 1, January-February, 1963.

Herpel, Dr. George L., Project: "Methods for Constructing Small Region Economic Models," Department of Economics, Temple University, Philadelphia, Pennsylvania.

Hill, Lawrence A., "The Changing Roles of Government in Health Affairs-Implications for the Future," University of Michigan, Bureau of Hospital Administration.

Holen, Arlene S., Effect of State Licensing Arrangements in Five Professions on Interstate Labor Mobility and Resource Allocations, M.A. Thesis, Columbia University, New York, 1962.

III. A. 1. PLANNING GENERAL CONTINUED

Holzberg, Jules D., "The Companion Program: Implementing the Manpower Recommendations of the Joint Commission on Mental Illness and Mental Health," American Psychologist, Vol. 18, No. 4, April, 1963.

Hospitals, "Advisory Group Sees 'Critical Problems' Ahead in Nursing: Report to Surgeon General," Vol. 37, March, 1963.

Keyserling, Mary Dublin, Women Workers: Their Special Training Needs, Women's Bureau, U. S. Department of Labor, Washington, D. C.

Lambertson, E., Report of the Surgeon General's Consultant Group on Nursing, August-September, 1963.

Lester, Richard A., Manpower Planning in a Free Society, 1966.

MacDonald, G., "The Development of Health Services in Tropical Countries," Acta. Trop., Basel, 1963.

McGibony, John R., "Hospitals-Retrospect and Prospect," Journal of American Hospital Association, Vol. 38, October 16, 1964.

Parnes, Herbert S. and Kelly, S. C. Jr., Project: "The Preparation and Deployment of High-Level Manpower," Ohio State University.

Osborn, Leslie, "Better, Quicker, and Cheaper Medical Education," Nebraska State Medical Journal, November, 1963.

Pentall, John, "Preparing for Change," The Hospital, Vol. 62, No. 10, October, 1966.

Reder, Melvin W., Project: "Supply and Demand for Medical Personnel," Stanford University, Department of Economics.

Rosa, F., "A Doctor of Newly Developing Countries: Some Principles for Adapting Medical Education and Services to Meet Problems," J. Med. Educ., 39:918-924, 1964.

Ross, Arthur (Ed.), Employment Policy and the Labor Market, University of California, 1965.

Science, "National Manpower Council," Vol. 117, No. 3049, June 5, 1953.

Stewart, W. H., "Providing Physicians for the U. S.-the Quantitative Problem," JAMA, 173:1435-37, 1960.

III. A. 1. PLANNING GENERAL CONTINUED

Striner, Herbert E., Training in the Perspective of Technological Change, Seminar on Manpower Policy and Program, U. S. Department of Labor Manpower Administration, Washington, D. C.

Timmons, Gerald D., "Time for a Change: New Goals in the Distribution of Dental Manpower," The Journal of the American Dental Association, Vol. LXIII, April, 1964.

U. S. Congress, Rehabilitation of the Disabled in Thirty-Seven Countries of the World. Domestic Programs and International Activities in Technical Assistance, Committee on Government Operations, U. S. Senate, Subcommittee on Reorganization and International Organizations, Eighty-Sixth Congress, Second Session, Washington, D. C., 1960.

U. S. Congress, The United States and the World Health Organization. Teamwork for Mankind's Well-Being. Committee on Government Operations, U. S. Senate, Eighty-Sixth Congress, First Session, Washington, D. C., 1959.

U. S. Department of Health, Education, and Welfare, "Job Development and Training for Workers in Health Services," Indicators, August, 1966.

U. S. Department of Health, Education, and Welfare, Physicians for a Growing America, Report of Surgeon General's Consultant Group on Medical Education, October, 1959.

U. S. Department of Health, Education, and Welfare, Toward Quality in Nursing; Needs, and Goals: Report of the Surgeon General's Consultant Group on Nursing, Washington: USPHS, Publication No. 992, 1963.

U. S. Department of Health, Education, and Welfare, Department of Labor-Conference: "Job Development and Training for Workers in Health Services," Proceedings and Background Data Book, February 14-17, 1966.

World Health Organization, Measures for Providing Effective Assistance in Medical Education and Training to Meet Priority Needs of the Newly Emerging Countries: Organizational Study by the WHO Executive Board, November, 1963.

World Health Organization, Public Health Paper 7, "Basic Nursing Education Programs: A Guide to their Planning," 1961.

III. A. 1. PLANNING GENERAL CONTINUED

World Health Organization, Social Questions Relating to the Extension of Health Services," Report for UN Commission for Social Development, Document No. E/CN.5/415.

World Health Organization, Technical Report Series 215, "Planning of Public Health Services," Fourth Report of the Expert Committee on Public Health Administration, 1961.

Young, Dr. Harding B., Current Project: "Problems of Negro Workers and Long-Term Unemployed," Atlanta University, Atlanta, Georgia.

Zagoria, Sam, Seminar on Manpower Policy and Program, U. S. Department of Labor, Manpower Administration, October, 1966.

III. A. 2. Planning: Regional Studies

Adams, E. Merle, Evaluation of a Recruitment Program for the Mental Health Professions in the Western Region, Department of Sociology, University of Colorado, Boulder, Colorado.

Clark, Benjamin F., "Solving the Nurse Shortage in Vermont," Journal of the American Medical Association, Vol. 189, No. 8, August 24, 1964.

Clark, Dr. David H., Current Project: "Manpower Under-Utilization Model for Maine," University of Maine, Orono, Maine.

Clark, Dean A., Hospital and Health Resources in the Four State Region of Idaho, Montana, Nevada, and Wyoming, Western Interstate Commission for Higher Education, Boulder, Colorado, May, 1964.

Davey, Dr. Harold W., Current Project: "Human Resource Problems of the Plain States," Industrial Relations Center, Iowa State University, Ames, Iowa.

Faulkner, James M., Opportunity for Medical Education in Idaho, Montana, Nevada, and Wyoming, Boulder, Colorado, Western Interstate Commission for Higher Education, November, 1964.

Gadson, Dr. James H., Current Project: "Virginia Manpower Losses," Virginia State College at Norfolk, Norfolk, Virginia.

"Manpower Shortages and Active Manpower Policies in Europe," International Labor Review, Vol. 92, No. 1, July, 1965.

Gore, Jack H., The Relative Economic Ability of Idaho, Montana, Nevada, and Wyoming to Support Medical Education, Boulder Colorado, Western Interstate Commission for Higher Education, February, 1964.

Green, Alfred L., Role of the Employment Service in Selected Western European Countries in Implementing an Active Manpower Policy, Bureau of Employment Security, U. S. Department of Labor, Washington, D. C.

Indianapolis Hospital Development Association, Survey of Nursing Resources in Indianapolis Metropolitan Area, Indianapolis, Indiana.

Joint Committee to Study Nursing Needs and Resources in Arizona, "Interim Report," Arizona Nurse, Vol. 18, No. 5, November-December, 1965, and Vol. 19, No. 3, May-June, 1966.

III. A. 2. PLANNING: REGIONAL STUDIES CONTINUED

Kansas Health Facilities Information Services, Inc., A Study of Nursing Needs and Goals in Kansas Through 1975, Publication No. 108.

Kentucky Mental Health Manpower Commission, Recruitment and Retention of Social Workers, Louisville, Kentucky, November, 1965.

Maryland State Planning Commission, Medical Education and Research Need in Maryland, Publication No. 117, January, 1962.

Michigan Department of Public Health, Medical Manpower Needs, February, 1967.

Michigan League for Nursing, Nursing Needs and Resources in Michigan-Today and Tomorrow, June, 1966.

Pair, Nona Tiller, Nursing Resources in Idaho, Montana, Nevada, and Wyoming, Western Interstate Commission for Higher Education, Boulder, Colorado, 1964.

Parkhurst, Dr. Kenneth L., Current Project: "Formulation of a Regional Manpower Development Program for the Upper Peninsula of Michigan," Northern Michigan University, Marquette, Michigan.

Pelton, Walter J. and Bothwell, Ruth D., "The Dental Profession in the Midwest," U. S. Public Health Service, Spring, 1950.

Pendall, R. J. and Sanford, Manpower in Maryland's Hospitals-Report and Recommendations on a Growing Crisis, Hospital Council of Maryland, Research Bulletin No. 7, July, 1966.

Richwagen, William C., Regional Planning and Coordination for Selected Programs of Allied Health Education, University of Iowa, Iowa City, Iowa.

Spiegel, Allen D., Planning In-Service Training Programs for Mental Health (in the New England Region), The Medical Foundation, Inc., Boston, Massachusetts.

Stein, Dr. Bruno, Current Project: "Local Manpower Data Programs," New York University, New York, New York.

Stieber, Jack, Manpower Adjustments to Automation and Technological Change in Western Europe, Michigan State University, School of Labor and Industrial Relations, 1965.

III. A. 2. PLANNING: REGIONAL STUDIES CONTINUED

Taylor, Carl E., Research in Health Manpower Planning for Selected Less-Developed Countries, Johns Hopkins University, Baltimore, Maryland.

Toronto: Committee for Survey of Hospital Needs in Metropolitan Toronto, Medical and Dental Professions and Hospitals, March, 1964, Part 15, August, 1963, Part 16.

Western Interstate Commission for Higher Education, The West's Medical Manpower Needs, Boulder, Colorado, 1959.

Western Interstate Commission on Higher Education, Tomorrow's Physician, Boulder Colorado, 1964.

III. B. Legislation

Allied Health Professions Personnel Training Act of 1966. "Hearings Before the Committee on Interstate and Foreign Commerce, House of Representatives," Second Session, March 29-31, 1966 and June 13, 1966.

Allied Health Professions Act of 1966. "Health Professions Educational Assistance Amendments," U. S. Department of Health, Education, and Welfare, Indicators, November, 15, 1965.

Employment Act of 1946. "Twentieth Anniversary of the Employment Act of 1946, an Economic Symposium," U. S. Congress Joint Economic Committee, 1966.

Hill-Burton Program, Feldstein, Paul J. and German, Jeremiah, J., "The Hill-Burton Program: a Re-examination," University of Michigan, Ann Arbor.

Hill-Burton Program, "Hospital and Medical Facilities Modernization Amendments of 1966," U. S. Congress, S.3009.

Housing and Urban Development Act of 1966. U. S. Congress, House Committee on Banking and Currency.

International Health and Medical Research Act of 1959, Hearings before the Committee on Labor and Public Welfare, U. S. Senate, Eighty-Sixth Congress, Washington, D. C., 1959.

Manpower Development and Training Act of 1962, As Amended, (42 U. S. Congress 2571-2620), U. S. Government Printing Office.

Manpower Development and Training Act of 1962, As Amended, "A Brief Explanation of the Amendments to the MDTA of 1962," U. S. Congress.

Manpower Development and Training Act of 1962, As Amended, "Projects Approved Under Sections 204, 231, and 241 for Fiscal Year of 1966, July 1, 1965, June 30, 1966, U. S. Department of Health, Education, and Welfare.

III. B. LEGISLATION CONTINUED

Manpower Development and Training Act of 1962, As Amended, "Reports of the Secretary of Labor on Manpower and Research and Training Under the MDTA," Washington, March 1965 and March 1966.

The Nurse Training Act of 1964, "Suggestions for Major Provisions to be Included in a Nursing Practice Act," American Nurses Association Committee on Legislation, 1954 and 1964.

The Nurse Training Act of 1964, "Conference on Legislation," American Nurses Association, March 17-19, 1965.

The Nurse Training Act of 1964, "The Nurse Training Act of 1964," Indicators, October, 1964.

The Nurse Training Act of 1964, Yett, Donald E., "The Nursing Shortage and the Nurse Training Act," Hospital Topics, June, 1966.

The Nurse Training Act of 1964, "The Nursing Shortage and the Nurse Training Act of 1964," Industrial and Labor Relations Review, Vol. 19, No. 2, January, 1966.

Public Health Service Act of 1966, "Reorganization Plan No. 3 of 1966 (Public Health Service)," Hearings, June 8, 1966, U. S. Congress, House Committee on Government Operations.

Public Health Service Act of 1966, "Amendments to Public Health Service Act of 1966," U. S. Congress, Senate Committee on Labor and Public Welfare.

Vocational Rehabilitation Act Amendments of 1965, Public Law 89-333, 89th Congress, November 8, 1965.

IV. MIGRATION OF HEALTH PERSONNEL

American Council of Education, "Senate Subcommittee Holds Hearings on Problems Produced by Brain Drain," Bulletin on International Education, Vol. 5, No. 2, March 23, 1967.

Annals of the American Academy of Political and Social Science, The New Immigration, September, 1966.

Abel-Smith, Brian, and Gales, Kathleen, British Doctors at Home and Abroad, London, June 1964.

Berry, R. Albert and Soligo, Ronald, Some Welfare Aspects of International Migration, Center Discussion Paper, No. 8, July, 1966. Economic Growth Center, Yale University.

Dedijer, Stevan, "Migration of Scientists: A Worldwide Phenomenon and Problem", Nature, Vol. 201, No. 4, March 7, 1964.

Dedijer, Stevan, "The Brain Drain", Strausburg, August 12, 1965

Dedijer, Stevan, "Why Did Daedalus Leave?", Science, Vol. 133, June 30, 1964.

Ferguson, Donald C., The Iranian Medical Graduate in America, 1965; Draft Paper, School of Public Health, Johns Hopkins University.

Ferguson, Donald C., The Turkish Medical Graduate in America, 1965, School of Public Health, Johns Hopkins University.

Grubel, Herbert B., "Nonreturning Foreign Students and the Cost of Student Exchange", International Educational and Cultural Exchange, Spring, 1966.

Grubel, Herbert B., "The Brain Drain: A U.S. Dilemma," Science, Vol. 154, December 16, 1966.

Grubel, H. and Scott, A.D., "The Immigration of Scientists and Engineers to the U.S. 1949-1961", Journal of Political Economy, Vol. 74, No. 4, August, 1966.

Grubel, Herbert B. and Scott, Anthony, "The International Flow of Human Capital", American Economic Review, Vol. 56, No. 2, May, 1966.

Halpern, Burton, "Israel's Talent Drain", The Nation, May 10, 1965

Holtmann, A.G., "A Note on Public Education and Spillovers Through Migration", Journal of Political Economy, October, 1966.

"Foreign Grads Called Only Solution to Shortage of MDs", The House Physicians Reporter, 6:8, April, 1966.

IV. MIGRATION OF HEALTH PERSONNEL CONTINUED

Hunt, G. Halsey, "The Braindrain in Medicine", Trustee, July, 1966.

Hyde, H, "The U.S. Trade Balance in Medicine", International Development Review, V: 23-24, June, 1963.

International Labor Office Automation Program, "International Differences in Factors Affecting Labor Mobility," Geneva, 1965.

Johnson, Harry G., "The Economics of the Braindrain: The Canadian Case", Minerva, Spring, 1965.

"The Council on Medical Education of The American Medical Association", Journal of The American Medical Association, Vol. 196, June 6, 1966.

"Medical Licensure Statistics", JAMA, Vol. 196, June 6, 1966.

Journal of Medical Education, "Datagrams", "Import of Medical Manpower" Vol. 39, No. 11, November, 1964.

Mills, Thomas J., "Scientific Personnel and the Professions", The Annals of the American Academy, September, 1966.

Mondale, Walter, "The Braindrain from Developing Countries", Congressional Record, Vol. 112, No. 146, Wednesday, August 31, 1966.

Mondale, Walter, "Migration of Talented Professional People to the U.S.", Congressional Record, September 9, 1966.

Mushkin, Selma J., Financing Public Hospitals and Health Services, Council of State Government, Washington, 1966.

National Science Foundation, Reviews of Data on Science Resources: Scientists and Engineers from Abroad, Fiscal Years 1962 and 1963, Vol. 1, No. 5, July, 1965.

National Science Foundation, Scientific Manpower from Abroad: United States Scientist and Engineers of Foreign Birth and Training, NSF Publication 62--24.

New York State, "Licensing of Nurses from other Countries", Law and Procedure, 1966.

Ogura, Kioshi, "Foreign Doctors in the United States", Mental Hygiene, Vol. 50, July 1966.

Organization for Economic Co-operation and Development, "Wages and Labor Mobility-Supplement No. 1-Abstracts of Selected Articles", Economic Studies, Paris, 1966.

IV. MIGRATION OF HEALTH PERSONNEL CONTINUED

Pan American Health Organization, Migration of Health Personnel, Scientists, and Engineers from Latin America, September, 1966

Pan American Health Organization, Migration of Latin American Physicians to the United States, May, 1966.

Pankhurst, K.W., "Migration Between Canada and the United States", The Annals of the American Academy.

Perkins, James A., "Foreign Aid and the Braindrain", Foreign Affairs, July, 1966.

The Royal Society, Emigration of Scientists from the United Kingdom, London, February, 1963.

Seale, J.R., "Medical Emigration: A Study in the Inadequacy of Official Statistics", Lessons from Central Forecasting, 1965.

Shearer, John C., "In Defense of Traditional Views of the 'Brain Drain' Problem", International Educational and Cultural Exchange, U.S. Advisory Commission on International, Education, and Cultural Affairs, Fall '66

Shearer, John C., "Intra-and International Movements of High Level Human Resources", Draft Paper, December, 1965, Pennsylvania State University.

Shuler, Cyril O., The Fair Labor Standards Act and Non-Federal Non-Profit Hospitals in South Carolina-A Study of Cost Impact, American University, Charlotte, North Carolina.

Sjaastad, Larry A., "The Costs and Returns of Human Migration", Journal of Political Economy, Supplement, October, 1962, Vol. 70, No. 5., Part 2.

Tarver, James D., Occupational Migration Differentials, Oklahoma State University, December, 1964.

Thomas, Brinley, Editor, Economics of International Migration, Proceedings of Conference of International Economics Association, London, 1958.

Thomas, Brinley, International Migration and Economic Development: A Trend Report and Bibliography, 1961.

Thomas, Brinley, Migration and Economic Growth, Cambridge University Press, 1954.

U.S. Congress, Statements Before the Senate Judiciary Subcommittee on Immigration and Naturalization, March 6-10, 1967.

IV. MIGRATION OF HEALTH PERSONNEL CONTINUED

U.S. Council on International Educational and Cultural Affairs, The International Migration of Talent and Skills, October, 1966.

U.S. Council on International Educational and Cultural Affairs, The Problems of the Non-Returning Exchange Visitor, April, 1965.

U.S. Department of Labor, Manpower Administration, Manpower and Immigration, Manpower Report, No. 4, revised July, 1965.

U.S. Immigration and Naturalization Service, U.S. Department of Justice, Annual Report of the Immigration and Naturalization Service, 1965.

Walsh, John, "British Doctors Head for U.S. in Large Numbers", Science, Vol. 154, October 28, 1966.

Wilson, James A., A Questionnaire for British Professionals Resident in America, University of Pittsburgh, Graduate School of Business, Pittsburgh, Pennsylvania.

Wilson, James A., Migration from Developed Countries; The Case of Britain", Pan American Health Organization-Advisory Committee on Medical Research, Washington, June, 1966.

Wilson, James A., Migration of British Scientists to North America, 1952 to Present, University of Pittsburgh, Graduate School of Business, Pittsburgh, Pennsylvania, 1964.

Wilson, James A., "The Emigration of British Scientists", Minerva, Vol. 5, No. 1, Autumn 1966, London.

Wolfe, Dael, "Brain Drain", Editorial, Science, 25, November, 1966, Vol. 154, No. 3752.

V. STAFFING AND UTILIZATION OF PERSONNEL

A. Staffing and Utilization: General Studies

Abdellah, Faye G., and Levine, Eugene, Effect of Nurse Staffing on Satisfactions with Nursing Care, American Hospital Association, 1958.

Baker, Kenneth Michael, The Utilization of Part-Time Professional Nurses by University Hospital, University of Michigan, 1964.

Baptist Hospital, Departmental Productivity Incentive Plans, Pensacola, Florida.

Bash, Paul, Study of Nursing Care Hours, University of Wisconsin Hospitals, Madison, Wisconsin.

British Hospital Journal and Social Service Review, "Ward Staffing at West Cumberland." Vol. LXXV, No. 3932, August 27, 1965, pp. 1640-1642.

Bryant, W. D., and Miller, Stephen J., Minimal Patient Care and Staffing for Nursing Service, a Progress Report of the Minimal Nursing Service Staffing Experiment. Community Studies, Inc., Kansas City, Mo.

California Department of Public Health, Bureau of Hospitals, Studies of Travel Time of Patient-Credited Medical Specialists and Relation of Hospital Size to Staff Composition Among General Hospitals in Santa Clara County, California, December 27, 1965.

Christman, Luther P., The Selective Perceptions Resulting from Training for a Vertical Division of Labor and the Effect on Organization Cohesion, Michigan State University, East Lansing, Michigan, 1965.

Commission for Administrative Services in Hospitals, A Study of Nursing Time Requirements for Patients of Various Age Groups, Los Angeles, California, 1966.

Commission for Administrative Services in Hospitals, Housekeeping: Staff Utilization and Control Program Orientation Report, Los Angeles, California, April, 1965.

Community Systems Foundation, Job Evaluation Manual, Ionia County Memorial Hospital, June, 1964.

Connelly, J. J. and Stratton, S. P., New Jersey Hospital Association Payroll Personnel System Specifications, System Development Corporation, June, 1966.

V. A. STAFFING AND UTILIZATION: GENERAL STUDIES CONTINUED

Davis, L. E. and Robinson, G. H., Estimates of Nursing Man Hours by Disease and Hospital Age, Human Factors in Technology Research Group, University of California, Berkeley, California, April, 1964.

Davis, M. and Saunders, R., "Scheduling of Student Nurses with the Aid of a Computer," The Hospital, Vol. 62, No. 9, September, 1966.

Debra, Judson, Nathan, Jr., The Effects of the Diploma School of Nursing on Staffing, Duke University, Durham, North Carolina.

Edwards, Col. Sam A., Computerized Simulation of Hospital Nurse Staffing, Fort Sam Houston, Houston, Texas.

Edwards, Col. Sam A., Develop and Test Effectiveness of Programmed Instruction for Medical Records Clerks, Brooke Army Medical Center, Fort Sam Houston, Texas.

Emerizan, A. D. Joseph, Housekeeping Labor Time Models for Medical and Surgical Nursing Centers, School of Business Administration, University of Connecticut, Storrs, Connecticut.

Burton-On Trent Hospital Management Committee, Organizaton of a Plated Meals and Waitress Service for Patients, 1964.

Feyerherm, A. M. and Kirk, W. R., "Effect of Census Variation on Nursing Activity Patterns," Hospitals, Vol. 38, No. 8, April, 16, 1964.

Forest, Betty Lucille, Utilization of Associate Degree Nursing Graduates in General Hospitals, Teachers College, Columbia University, 1965.

Freeman, John R. and Smalley, H. E., "Determinants of Hospital Supply Decisions," Nursing Research, Summer, 1965, Vol. 14, No. 3.

Garett, S. A. G., Stephenson, R. L., Holland, W. W., and Roth, I. Z., "The Need for Intensive Nursing Care," British Journal of Preventive Social Medicine, Vol. 20, No. 1, 1966.

Gernes, Ann and Sanders, Charles M., "Trained Dietary Aides Implement New Menu System," Hospitals, Vol. 38, No. 24, December, 16, 1964.

Gross, Malvern J., Preliminary Report on Potential Improvements Resulting from the Genesee Hospital Demonstration Project, Rochester, New York, February 1, 1965.

Guest, Jacqueline, A Management Study of a Surgical and a Medical Nursing Unit, Graduate School of Public Administration, New York University.

Gunter, Laurie et. al., "A Study of Three Types of Nursing Care Assignments," Nursing Research, Vol. 13, No. 1, Winter, 1964.

V. A. STAFFING AND UTILIZATION: GENERAL STUDIES CONTINUED

Haas, Robert F., A Study to Determine the Adequacy of the Staffing of the Nursing Service at Southton Convalescent Sanatorium, Baylor University, June, 1964.

Hawkins, James L., The Ward Manager System: A Case Study of the Organization of Hospital Nursing Care, Purdue University, Lafayette, June, 1964.

Heller, Fred W., A Pilot Study to Generate Information on Special Nursing Care Unit, University of Minnesota, Minneapolis, Minnesota.

Ihle, Luther M., "Staffing the E.R.", Hospital Progress, Vol. 47, No. 6.

Jeffery, I.J. and Lowe, S.M., Patient-Nurse Dependency: Exploratory Study, Operational Research Unit, Special Report No. 11, 1963, New Zealand Government, Wellington, New Zealand.

Kennedy, Charles L., A Study of the Effect of the Organization of Nursing Hours on Direct Patient Care and Productive Activity on a Nursing Unit, Thesis for the Master of Hospital Administration, The University of Michigan.

Kent, Jean W. and Ostenso, Grace L., "Productivity Relationships of Hospital Dietary Departments:", Journal of the American Dietetic Association, Vol. 47, No. 2, August, 1965.

Kurtz, Richard A. and Saathoff, Donald E., Functional Analysis--A Study of Function Performance by Personnel in Seven Small Hospitals, University of Nebraska, December, 1961.

LaMotte, T.S., A Comparative Study of Certain Aspects of Nursing Service on a Circular and an Angular Nursing Unit, University of Minnesota, Minneapolis, Minnesota, 1964.

Lenz, Philomene Elizabeth, A Time Study and Activity Analysis of Four Night Supervisors in Four Selected Hospitals and a Comparison of these Activities, National League for Nursing, 1960.

Levinen, Eugène; Siegel, Stanley; and Puente, Joseph "de la", "Diversity of Nurse Staffing Among General Hospitals:", Journal of The American Hospital Association, 35;42, May 1, 1961.

Livengood, Lindsay, "Planned Shifts Save Nurses and Dollars", The Modern Hospital, Vol. 104, No. 2, February, 1965.

McKenna, J.V., The Service Manager System: Nurse Efficacy and Cost--A Progress Report, June 1, 1965--May 31, 1966.

Marteney, Annabell L. and Ohlson, Margaret A., "Work Sampling of a Dietary Staff", Journal of the American Dietetic Association, Vol. 45, No. 3, September, 1964.

V. A. STAFFING AND UTILIZATION: GENERAL STUDIES CONTINUED

Matoren, Gary M., "A Study of the Pharmacy Service Department of Hospitals, City of New York", American Journal of Hospital Pharmacy, Vol. 23, June, 1966.

Michaels, Robert G. and Nelson, Roberta J., The Use of Work Teams in Hospital Housekeeping Departments, Program in Hospital Administration, School of Public Health, University of Minnesota, October, 1963.

Michigan State Medical Society, Hospital Utilization Review Manual, June, 1966.

Miller, Stephen J. and Bryant, W. D., "How Minimal Can Nurse Staffing Be?", The Modern Hospital, Vol. 102, No. 3, September, 1964.

Miller, Stephen J. and Bryant, W. D., A Division of Nursing Labor: Experiments in Staffing a Municipal Hospital, Community Studies, Inc. Kansas City, Missouri, 1965.

Montag, Geraldine, M.; McKinley, Marjorie M.; and Klinschmidt, Arthur C., "Predetermined Motion Times-A Tool in Food Production Management," Journal of the American Dietetic Association, Vol. 45, No. 3.

Moon, Wayne R., A Study of Patient Classification System, Program in Hospital Administration, University of Michigan, 1964.

Moore, Jerry L., Developing an Effective Management Tool for the Internal Distribution of Manpower Resources in a Thousand-Bed United States Air Force Hospital, Iowa State University, Iowa City, Iowa, June, 1965.

National League for Nursing, Department of Hospital Nursing, Bibliography on Staffing the Hospital Nursing Service, September, 1961.

Nelson, Edmund K., Pilot Study to Correlate Nursing Time Requirements with Degrees of Illness of Nursing Home Patients, Program in Hospital Administration, University of Minnesota, Minneapolis.

New, Peter King-ming; Nite, Gladys; and Callahan, Josephine, Nursing Service and Patient Care: A Staffing Experiment, Community Studies, Inc., November, 1959.

Ostenso, Grace L., and Donaldson, Beatrice, "Effective Use of Hospital Dietary Labor Resources", Hospitals, Vol. 40, No. 14, July 16, 1966.

Parks, George M., "Work Sampling At Reduced Cost", Hospitals, Vol. 40, No. 13, July 1, 1966.

V. B. Staffing and Utilization: Operations Research Studies.

Bartscht, Karl G., An Analytical Approach to Nursing Scheduling, Community Systems Foundation, Ann Arbor, Michigan.

Bartscht, Karl G., Pontiac General Hospital Work Improvement Reports, Pontiac General Hospital, April 15, 1962.

Bartscht, Karl G.; Bayha, Franklin, and Rothenbuhler, Ervin F., "Time Analyzed for Alternative Food Flow Systems", Hospitals, Vol. 40, No. 6, March 16, 1966.

Chicago Hospital Council, Program of Special Studies In Hospital Management, Clinical Laboratory Study; A Work Measurement Study of Procedures in Hospital Clinical Laboratories (In Two Parts), 1965.

Community Systems Foundation, Nursing Service Staffing and Scheduling Requirements for Medical-Surgical Unit, Blodgett Memorial Hospital, Project GRBL 4, March, 1964.

Connor, Robert J., "A Work Sampling Study of Variations in Nursing Work Load", Hospitals, Vol. 35, No. 9, May, 1951.

Connor, Robert J., "Effective Use of Nursing Resources", Hospitals, Vol. XXXV, May 1, 1961.

Crane, Keith H. and MacLeod, Vernon, Analysis of Nursing Personnel Utilization on Patient Care Units, Pennock Hospital, Hastings, Michigan.

Crook, David, Analysis of Staffing Requirements for Centralized Patient Food Service, Community Systems Foundation, Ann Arbor, Michigan.

Davis, Louis E., Hospital Admission Scheduling Control, College of Engineering, University of California, Berkeley, 1965.

Davis, Louis E., Hospital Elective Admission Scheduling Decision Rules, University of California, Berkeley, 1965.

Delamar, W.T., "Comprehensive Listing of Projects of HMSS Members", Hospital Management Systems Society, Chicago, Illinois.

Fetter, Robert B. and Thompson, John D., "Patient's Waiting Time and Doctor's Idle Time in the Outpatient Setting", Health Services Research, Vol. 1, No. 1, Summer, 1966.

Friedland, Richard, Medical Records-Outpatient Clinic, Community Systems Foundation, Ann Arbor, Michigan

Goldman, Jay et al, Nursing Staffing and Organization for Proposed Post-Surgical Care Unit, Department of Industrial Engineering, Jewish Hospital of St. Louis, 1962.

V. B. STAFFING AND UTILIZATION: OPERATIONS RESEARCH STUDIES CONTINUED

Harris, David H. and Hopp, William Michael, Productive-Staffing Analysis: Laundry, Community Systems Foundation.

Hopp, William Michael, Analysis of the Medical Records Department, Highland Park General Hospital, Highland Park, Michigan.

Community System Foundation, Guideline for Cyclical Scheduling, Ann Arbor, Michigan.

Iowa, State University of, Nurse Utilization Project Staff, An Investigation of the Relation Between Nursing Activity and Patient Welfare, 1960.

Jelinek, Richard C., Nursing, The Development of An Activity Model, Thesis for a Ph.D. in Industrial Engineering, The Univeristy of Michigan, October, 1964.

Leeds Regional Hospital Board, Work Measurement as a Basis for Calculating Nursing Establishments, An Analytical Study, May, 1963.

Ludwig, Patric, Scheduling of Laundry Personnel, Community Systems Foundation, Ann Arbor, Michigan.

MacLeod, Vernon, Housekeeping Department Report, Community Systems Foundation, Ann Arbor, Michigan.

Robinson, Edward P., "Determining Nursing Staffing Patterns for an Intensive Care Unit", Hospital Topics, October, November, December, 1960.

Rothenbuhler, Ervin F., Development of Methodology for Measuring Hospital Pharmacy Staffing Requirements in U.S. Public Health Service General Hospitals, Winnipeg, Manitoba, Canada, August 10, 1963.

Rothenbuhler, Ervin F. and Bartscht, Karl G., "Determining Dietary Staff in Hospitals-Methodology", Journal of the American Dietetic Association, Vol. 47, No. 1, July, 1965.

Steiner, Mathew W., Analysis of Laundry, St. Mary's Hospital, Grand Rapids, Michigan, Project No. GR-Sm-5, Community Systems Foundation, Ann Arbor, Michigan, 1963.

Wolfe, Harvey, A Multiple Assignment Model for Staffing Nursing Units, Operations Research Division, The Johns Hopkins Hospital, Baltimore, Maryland.

V. B. STAFFING AND UTILIZATION: OPERATIONS RESEARCH STUDIES CONTINUED

Wolfe, Harvey, Optimal Length of Training for a Female Nursing Aide, Operational Research Division, The Johns Hopkins Hospital, Baltimore, Maryland.

Young, John P., A Method for Allocation of Nursing Personnel to Meet Inpatient Care Needs, Operations Research Division, Johns Hopkins Hospital, October, 1962, Baltimore, Maryland.

VI. Health Economics

Abel-Smith, Brian and Titmuss, R. M., The Cost of the National Health Service in England and Wales, Cambridge University Press, Cambridge, England, 1956.

Arrow, Kenneth J., "Uncertainty and the Welfare Economics of Medical Care", American Economic Review, 53, No. 5, December, 1963, pp. 941-73.

Bailey, R., Project: "Economics of Scale in Outpatient Medical Organizations", University of California, Berkeley, California, 1966.

Barlow, R., Project: "The Economic Effects of Malaria Eradication", University of Michigan, Ann Arbor.

Berry, Ralph, Competition and Efficiency in the Market for Hospital Services: the Structure of the American Hospital Industry, Economics dissertation, 1965, Harvard University, Cambridge, Massachusetts.

Blumberg, Mark S., Forecasting Psychiatric Bed Needs for California, University of California, Berkeley, California.

Blumberg, Mark S. and Drew, Jacqueline, "On Determining the Quality of Nursing Care in Hospitals or Methods for Assessing Nursing Care Quality", Hospitals, Vol. 37, No. 1, 1963.

Blumberg, Mark S., SRI Reports on Health Economics, an Annotated Bibliography of Research Conducted by Mark S. Blumberg, 1964, available from Office of Vice President, University of California, Berkeley, California.

Blumberg, Mark S., "The Effects of Hospital Size and Specialization", Draft, November 19, 1963, Office of Vice President, University of California, Berkeley, California.

Blumberg, Mark S., "What Tasks Should Hospitals Perform?", The Modern Hospital, Vol. 101, No. 5, November, 1963.

Boulding, Kenneth E., "The Concept of Need for Health Services", Department of Economics, University of Michigan, Ann Arbor, Michigan.

Cohen, Harold A., Hospital Costs and Pricing in a Short-Term General Hospital, Dissertation in preparation, Department of Economics, Cornell University, Ithaca, New York.

Cooper, Barbara S. and Rice, Dorothy, "The Value of Human Life", paper presented at American Public Health Association Annual Meeting, November 1, 1966.

Dryden, Myles Muir, The Economics of General Hospitals with Emphasis on Hospital Costs, Graduate School of Business and Public Administration, Cornell University, Ithaca, New York, 1961.

VI. HEALTH ECONOMICS CONTINUED

Eilers, R. D., Project: "Cost Control and Medical Care", University of Pennsylvania, 1966.

Feldstein, M. S., "Hospital Bed Scarcity: An Analysis of the Effects of Inter-Regional Differences", Economica, November, 1965, 32, 393-409.

Feldstein, M. S., "Hospital Cost Variation and Casemix Differences", Medical Care, April-June, 1965, 3, 95-103.

Feldstein, M. S., "Improving the Use of Hospital Maternity Beds", Operations Research Quarterly, July, 1966, Part II.

Feldstein, Paul J., An Empirical Investigation of the Marginal Cost of Hospital Services, Graduate Program in Hospital Administration, University of Chicago, 1961.

Feldstein, Paul J., "Research on the Demand for Health Services", Milbank Memorial Quarterly, July, 1966, Part II.

Feldstein, Paul J., and Littmann, David, The Demand for Dental Care, University of Michigan, Ann Arbor, Paper, March 24, 1967.

Feldstein, Paul J., and Carr, W. J., "The Relationship of Cost to Size of Hospital", (forthcoming), Health Services Research.

Fuchs, V. R., "The Contribution of Health Services to the American Economy", Milbank Memorial Quarterly, Vol. XLVI, No. 4., October, 1966, Part II.

German, Jeremiah, "Some Uses and Limitations of the Consumer Price Index", Inquiry, Vol. 1, No. 3., July, 1964.

Ginsberg, Eli; Hiestand, Dale; Reubens, Beatrice G., The Pluralistic Economy, McGraw-Hill, 1965.

Greenfield, Harry I., "Medical Care in the United States: An Economic Workup", Paper delivered at meeting of the American Association for the Advancement of Science, Cleveland, Ohio, December 26, 1963.

Gross, Malvern J., Analysis of the Cost of Information Handling in Hospitals, Rochester Regional Hospital Council, Rochester, New York, September 21, 1964.

Hinchey, Samuel B., Thesis in preparation: "An Economic Analysis of the Hospital", University of Missouri, Columbia, Missouri.

Kendrick, John W., and Rowley, Jennifer, Total Investment in the United States, University of Connecticut, Department of Economics, Storrs, Connecticut, 1966.

VI. HEALTH ECONOMICS CONTINUED

Kessel, Reuben A., "Price Discrimination in Medicine", Journal of Law and Economics, October, 1958, p. 20-53.

Klarman, Herbert E., Hospital Care in New York City: The Roles of Voluntary and Municipal Hospitals, Johns Hopkins University, Baltimore.

Klarman, Herbert E., "Socioeconomic Impact of Heart Disease", Federation of American Societies for Experimental Biology, The Heart and Circulation, Vol. II, Washington, 1965, pp. 693-707.

Klarman, Herbert E., The Economics of Health, New York and London Columbia University Press, 1965.

Klarman, Herbert E., "The Economics of Hospital Service", Harvard Business Review, 29, No. 5, September, 1951, pp. 71-89.

Klarman, Herbert E., "The Effects of Prepaid Group Practice on Hospital Use", Public Health Reports, Vol. 78, No. 11, November, 1963.

Klarman, Herbert E., "The Increased Cost of Hospital Care", The Economics of Health and Medical Care, Bureau of Public Health Economics and Department of Economics, The University of Michigan, 1964, pp. 227-54.

Larmore, Mary L., "An Economic Investigation of a Production Function for Health in the U. S. ", Economics Dissertation in preparation, Northwestern University, Evanston, Illinois.

Littmann, David, Model of Demand for Medical Care in Low Income Neighborhoods, M. S. Thesis, M.I.T., February, 1966.

McCaffree, K. M., Comparative Costs and Alternative Institutional Arrangements in the Treatment of the Mentally Ill. Paper read for American Public Health Association November 1, 1966, University of Washington, Seattle, Washington.

McCaffree, K. M., "The Cost of Mental Health Care Under Changing Treatment Methods", American Journal of Public Health, July, 1966, pp. 1013-25.

McCaffree, K. M., The Economic Basis for the Development of Community Mental Health Programs, Paper read before the meeting of the Western Economic Association, Berkeley, August 26, 1966.

McNerney, Water J., Study of Hospital and Medical Economics, Blue Cross Association, Chicago, Illinois.

Merriam, Ida C., "Social Welfare Expenditure, 1964-65", Social Security Bulletin, 1965.

VI. HEALTH ECONOMICS CONTINUED

University of Michigan, The Economics of Health and Medical Care, Proceedings of Conference May 10-12, 1962, sponsored by the Bureau of Public Health Economics and Department of Economics, Ann Arbor.

Muller, Charlotte, "Economic Analysis of Medical Care in the United States", American Journal of Public Health, 51: No. 1, January, 1961.

Musgrave, Richard A., Economics of Health, Proceedings of a Conference on the Role of Economics and the Economist in Research into Problems in Health Services, U. S. Department of Health, Education and Welfare, Public Health Service.

Mushkin, Selma J., "Health as an Investment", Journal of Political Economy, Vol. 60, No. 5, Part 2, October, 1962, Supplement.

Mushkin, Selma J., "Toward a Definition of Health Economics", Public Health Reports, Vol. 73, No. 9, September, 1958.

Peck, Richard H., The Competitive Price System: Its Role in the Nursing Market, Duke University, Durham, North Carolina.

Reed, Louis S. and Hanft, Ruth S., "National Health Expenditures, 1950-64", Social Security Bulletin, 1966.

Rice, D., Economic Costs of Cardiovascular Disease and Cancer, 1962, U. S. Public Health Service Health Economics, Ser. No. 5, Washington, 1965.

Rice, D., Estimating Cost of Illness, Paper read before the meeting of the American Public Health Association, Chicago, October 18, 1965.

Rice, D., The High Cost of Premature Death, Paper read before the meeting of the American Public Health Association, San Francisco, November 1, 1966.

Kong, Kyun Ro, A Statistical Study of Factors Affecting the Unit Cost of Short-Term Hospital Care, Ph.D. Dissertation, Yale University, 1966.

Robertson, Robert L., Pilot Study of Economic Returns from Health Services, Department of Economics and Sociology, Mount Holyoke College, South Hadley, Massachusetts.

Roemer, Milton I., "Bed Supply and Hospital Utilization: A Natural Experiment", Hospitals, Vol. 35, No. 21, November 1, 1961.

Rosch, Georges, Bibliographie des études d'économie médicale et medico-sociales, C.R.E.D.O.C., Paris, May, 1965.

Rosenthal, Gerald, "Productivity, Price and Income Behavior in the Physicians' Services Market", Medical Care, October - December, 1965.

VI. HEALTH ECONOMICS CONTINUED

Rottenberg, Simon, "The Economics of Occupational Licensing", Aspects of Labor Economics, National Bureau of Economic Research, 1963.

Schneider, Jerry, "Measuring the Locational Efficiency of the Urban Hospital", Regional Science Research Institute discussion paper series No. 11, January, 1967, University of California, Berkeley.

Seale, J. R., "A General Theory of National Expenditure on Medical Care", The Lancet, No. 7, 102, October 10, 1959.

Smalley, Harold E. and Freeman, J. R., "Determinants of Hospital Supply Decisions", Nursing Research, Vol. 14, No. 3., Summer, 1965.

Stimson, David H., Decision Making and Resource Allocation in a Public Health Agency, Economics Dissertation, University of California, Berkeley, 1965.

U. S. Department of Health, Education and Welfare, Office of Assistant Secretary for Program Coordination, Application of Benefit-Cost Analysis to Motor Vehicle Accidents, August, 1966.

U. S. Department of Health, Education and Welfare, Chart Book of Basic Health Economics Data, February, 1964.

Weisbrod, Burton, "Anticipating the Health Needs of Americans: Some Economic Projections", The Annals of the American Academy of Political and Social Science, Philadelphia, Vol. 337, September, 1961.

Weisbrod, Burton A. and Fiesler, Robert J., "Hospitalization Insurance and Hospital Utilization", American Economic Review, Vol. 51, No. 1, March, 1961.

Wirick, Grover and Barlow, Robin, The Economic and Social Determinants of the Demand for Health Services, Proceedings of the Conference on the Economics of Health and Medical Care, The University of Michigan, May 10-12, 1962.

Wiseman, Jack, Cost-Benefit Analysis and Health Service Policy, London School of Economics and Political Science, London, England.

World Health Organization, Monograph 7, The Cost of Sickness and the Price of Health, 1951.

World Health Organization, Public Health Paper 17, Paying of Health Service: A Study of the Costs and Sources of Finance in Six Countries, 1963.

VII. Research Into Health Manpower

A. Research Into Health Manpower General

Blishen, B. R., Social Research in the Field of Health, University of British Columbia, Vancouver, B. C., Canada.

Blumberg, M. S., "Subjective Notes on Hospital Research", Draft October, 1962, Office of Vice President, University of California, Berkeley.

Hiestand, Dale, "Research into Manpower for Health Services", Milbank Memorial Fund Quarterly, Health Services Research II, Vol. XLIV, No. 4, October, 1966, Part 2.

Hiestand, Dale, Research on Manpower for the Health Services, Columbia University, Graduate School of Business, New York, New York.

Judek, Stanislaw, Comments on Dr. Dale L. Hiestand's Paper: "Research Into Manpower for Health Services", University of Ottawa, Ontario, Canada.

Kahler, Carol, Project for Experimental Curriculum in Health Organization Research, St. Louis University, St. Louis, Missouri.

Kissick, William L., "A Review for Health Services Research Papers Project of 'Research into Manpower for Health Services' by Dale L. Heistand", Department of Health, Education and Welfare, Washington, D. C.

McGibony, J. R., "Federal Support for Research in Hospital and Health Services", Journal of Medical Education, Vol. 39, 1964.

The Milbank Memorial Fund Quarterly, "Health Services Research I", Vol. XLIV, No. 3, July, 1966, Part 2.

The Milbank Memorial Fund Quarterly, "Health Services Research II", Vol. XLIV, No. 4, October, 1966, Part 2.

Montgomery, Joel O., Hospital Administrative Research, Thesis for the Masters in Hospital Administration, Medical College of Virginia, May, 1964.

Moore, F. R., ed., Proceedings of Health Information Retrieval Conference, University of Southern California, School of Medicine, San Jose, California, October 7-9, 1959.

Morton, J. E., Analytical Potential of the Current Population Survey for Manpower and Employment Research, The W. E. Upjohn Institute for Employment Research, Kalamazoo, Michigan, December, 1965.

Revans, Reginald W., "Research into Hospital Management and Organization", The Milbank Memorial Fund Quarterly, Health Services Research I, Vol. XLIV, No. 3, July, 1966, Part 2.

VII. A. RESEARCH INTO HEALTH MANPOWER CONTINUED

St. Louis University, A Doctoral Program in Health Organization Research, 1958.

St. Louis University, Conference on the Techniques of Research.... Dynamics of Organization, with Emphasis on Health Agencies and Hospitals, 1960.

Sanazaro, Paul J., "An Agenda for Research in Medical Education", JAMA, September 19, 1966, Vol. 197, No. 12.

Sanazaro, Paul J., "Research in Medical Education: Exploratory Analysis of a Blackbox", Annals of the New York Academy of Sciences, Vol. 128, Part 2, September 27, 1965.

Scandinavian Study Group, "Health Services Research in Scandinavia", The Milbank Memorial Fund Quarterly, Health Services Research II, Vol. XLIV, No. 4, October, 1966, Part 2.

Scott, W. Richard, "Some Implications of Organization Theory for Research on Health Services", The Milbank Memorial Fund Quarterly, Health Services Research II, Vol. XLIV, No. 4, October, 1966, Part 2.

Simmons, Leo W., and Henderson, Virginia, "A Survey and Assessment of Research in Nursing", The Yearbook of Modern Nursing, New York, G. P. Putnam's Sons, 1956.

Somers, A. R., Hospital Manpower: An Exploratory Report on Research, Paper prepared for the Industrial Relations Section, Princeton University, 1966.

U. S. Congress, "Hearings Before a Subcommittee on Government Operations", House of Representatives, 87th Congress, First Session, August 1 and 2, 1961, Health Research and Training.

U. S. Department of Health, Education and Welfare, A Mental Health Manpower Studies Program, National Institute of Mental Health, National Institutes of Health, Bethesda, Maryland, 1963.

U. S. Department of Health, Education and Welfare, National Institutes of Health, Resources Analysis Section, Manpower for Medical Research: Requirements and Resources, 1965-1970, February, 1962.

U. S. Department of Health, Education and Welfare, Research Grants Index, Vols. I and II, Fiscal, 1965.

U. S. Department of Health, Education and Welfare, National Institutes of Health, Resources Analysis Branch, NIH Studies or Projects in Scientific Manpower or Education in Process, March 31, 1966.

VII.A. RESEARCH INTO HEALTH MANPOWER CONTINUED

U. S. Department of Health, Education and Welfare, Resources for Medical Research, Nine reports issued from August, 1962 - May, 1966.

U. S. Department of Labor, Manpower Administration, Manpower Research Programs, Washington, 1966.

U. S. Department of Labor, Manpower Administration, Manpower Research Projects, Through June 30, 1966.

Yett, Donald, Project for Experimental Curriculum in Health Services Research, 1960.

VII. B. Methodology

1. Methodology: Economics

Auster, R., Leveson, I., and Saracheck, D., "The Production of Health, An Exploratory Study", Study in progress as part of the National Bureau of Economic Research.

Backman, George W., A Method for Measuring Physician Requirements, with Appraisal of Former Methods, The Brookings Institution, Washington, D. C., 1955.

Dunlop, J. T., "Technical and Scientific Personnel: Methods of Assessing Supply and Demand", Geneva International Labor Review, Vol. LXXXI, No. 1.

Fabricant, Solomon, Measurement of Technological Change, Seminar on Manpower Policy and Program, U. S. Department of Labor's Manpower Administration, Washington, D. C.

Feldstein, M. S., Economic Analysis for Health Service Efficiency (forthcoming).

Feldstein, Paul J., "The Tools and Concepts of the Economist Useful for the Study of Medical Care", Paper, December, 1966, University of Michigan, Ann Arbor.

Ferber, Robert, and Ford, Neil, "The Collection of Job Vacancy Data Within a Labor Turnover Framework", in Arthur M. Ross (ed) Employment Policy and the Labor Market, University of California Press, 1965.

Folk, H., and Yett, D. E., Methods of Estimating Occupational Attrition, Working paper 6510, Washington University, St. Louis, 1965.

Gordon, R. A. Dr., Conference on Methods of Projecting Manpower Supply and Demand, June 25-26, 1964, The University of California, Berkeley.

Hollister, R. G., "The Economics of Manpower Forecasting", International Labor Review, Vol. LXXIX, No. 4, April, 1964.

Klaus, Hufner, "The History of the Measurement of Human Capital", Department of Economics, Max-Planck Institute of Educational Research, Berlin.

Ihnen, Loren Dr. and Carroll, Adger B., Current Project: "The Costs and Returns of Industrial Education: A Pilot Study", North Carolina State University.

Klarman, H. E., Present Status of Cost-Benefit Analysis in the Health Field, Paper read before the meeting of the American Public Health Association, San Francisco, November 1, 1966.

VII. B1. METHODOLOGY: ECONOMICS CONTINUED

McCaffree, Methodology of Economics and the Economics of Mental Health, Study in progress at University of Washington, 1966.

Moriyama, Iwao M., Conceptual Problems in the Measurement of Health, National Center for Health Statistics, U. S. Public Health Service, Washington, D. C.

National Bureau of Economic Research, The Measurement and Interpretation of Job Vacancies, New York, 1966, Columbia University Press.

Reder, M. W., "Economic Theory and Nonprofit Enterprise-Some Problems in the Economics of Hospitals", American Economics Review, Vol. LV, No. 2, May, 1965.

Ross, Arthur, Theory and Measurement of Labor Shortages, Paper given at Manpower Symposium at Princeton, May 12, 1966.

Scitovsky, A. A., "Study of a New Approach to a Medical Care Cost Index", Study in progress at the Palo Alto Medical Research Foundation.

Scoville, James G., "The Development and Relevance of U. S. Occupational Data", Industrial and Labor Relations, Review, Vol. XIV, October, 1965.

Weisbrod, Burton A., "Some Problems of Pricing and Resource Allocation in a Non-profit Industry-The Hospitals", The Journal of Business of the University of Chicago, Vol. XXXVIII, No. 1, January, 1965.

Wirick, G. C., A Multiple Equation Model of the Demand for Health Care, Working Paper, University of Michigan, 1965.

Yett, D. E., "Alternative Methods of Estimating the Costs of Producing Dental Services", Project in progress at the University of Southern California.

Yett, D. E., "An Economic Study of the Hospital Labor Market", in Daniel Howland, The Development of a Methodology for the Evaluation of Patient Care, 1960.

VII. B. 2. Methodology: Operations Research

Ave'Lallemant, Carl, "Work Measurement: First Step to Better Manpower Managements", Hospitals, Vol. 39, No. 12, June, 1965.

Bartscht, Karl G., et.al., Development of an Effective Methodology for Determining Staffing Requirements in Hospitals

- Project Report No. 1, Introduction, 1964.
- Project Report No. 2, Bibliography, June, 1964.
- Project Report No. 3, Dietary Methodology Manual, June, 1964.
- Project Report No. 4, Laundry Methodology Manual, June, 1964.
- Project Report No. 5, Pharmacy, June, 1964.
- Project Report No. 6, Evaluating Test Results, September, 1965.
- Project Report No. 7, Hospital Systems Research Group, March, 1965.
- Project Report No. 11, Admitting Methodology Manual, July, 1966.
- Project Report No. 12-A, Housekeeping Methodology Manual, July, 1966.
- Project Report No. 12-B, Housekeeping Methodology Manual, July, 1966.
- Project Report No. 13, Medical Records Methodology Manual, July, 1966.
- Project Report No. 14, Radiology Methodology Manual, July, 1966.

Bartscht, Karl G.; Grimes, Richard M.; and Rothenbuhler, Ervin, "Linen Production Methods Analyzed in the Laundry", Hospitals, Vol. 40, No. 6, March 16, 1966.

Bartscht, Karl G. and Rothenbuhler, Ervin F., "Man-Minute Computations Form the Basis for New Staffing Methodology", Hospitals, Vol. 40, March 16, 1966.

Bartscht, Karl G.; Estrella, Manuel, and Rothenbuhler, Ervin F., "Range of Required Skills Detailed in Study of the Pharmacy Function", Hospitals, Vol. 40, March 16, 1966.

Edgecumbe, Robert H., "The CASH Approach to Hospital Management Engineering", Hospitals, Vol. 39, No. 6, March, 1965.

Ernst and Ernst, Report on Work Sampling and Personnel Utilization, Duke Endowment Management Control Program, October, 1961.

VII. B. 2. METHODOLOGY: OPERATIONS RESEARCH CONTINUED

Flagle, Charles D., Operations Research in the Health Services, Presented at First Joint National Meeting, The Operations Research Society and the Institute of Management Sciences, San Francisco, California, November, 1961.

Fry, J., "Operations Research in General Clinical Practice", Journal of Chronic Diseases, Vol. 17, No. 9, 1964.

Gaut, John, "Work Sampling", Medical Record News, Vol. 35, No. 2, April, 1964.

Goldman, Jay, Work Design for Patient Care, Department of Industrial Engineering, Jewish Hospital of Saint Louis, 1960.

Horvath, William J., "British Experience with Operations Research in the Health Services", Journal of Chronic Diseases, Vol. 17, No. 9, Pergamon Press, London, September, 1964.

Howland, Daniel, "A Hospital System Model", Nursing Research, Vol. 12, No. 4, Fall, 1963.

James, Irene, et.al., Operational Research in Nursing, Oxford University Press for Nuffield Provincial Hospitals Trust, London, 1964.

Nadler, Gerald and Kancharla, G., "Progress Functions and Stochastic Models for New Activities in Hospitals", Work Study and Management, (England), August, 1964.

Nuffield Provincial Hospitals Trust, England, Towards a Measure of Medical Care, Operational Research in the Health Services, A Symposium, 1962.

Ortiz, C. Jorge de Jesus, "Some Linear Statistical Models for the Selection of Medical Students", Operations Research Division, The Johns Hopkins Hospital, 1964.

Robinson, Gary L., Nursing Unit Activities: A Computerized-Work Sampling Methodology, Yale University, New Haven, Connecticut.

Smalley, Harold E., Hospital Management Systems Analyst Training Program, Georgia Institute of Technology, Atlanta, Georgia.

Stanford, Elinor D., How to Study Supervisor Activities in a Hospital Nursing Service, Publication No. 496, 1957.

The Systems Research Group, Ohio State University, Economic Factors in Hospital Systems Analysis.

Torgerson, Paul E., "An Example of Work Sampling in the Hospital", Journal of Industrial Engineering, May-June, 1959,

VII. B. 2. METHODOLOGY: OPERATIONS RESEARCH CONTINUED

U. S. Department of Health, Education and Welfare, How to Study Nursing Activities in a Patient Unit-A Manual to Aid Hospitals in Making Use of Personnel, U. S. Public Health Service, Publication No. 270.

U. S. Department of Health, Education and Welfare, Tentative Methodology Manual for Determining Staffing Requirements in U. S. Public Health Service General Hospitals, June, 1961.

Wolfe, Harvey, A Multiple Assignment Model for Staffing Nursing Units, Operations Research Division, The Johns Hopkins Hospital.

Wolfe, Harvey and Young, John P., "Staffing the Nursing Unit" - Part I: "Controlled Variable Staffing"; Part II: "The Multiple Assignment Technique", Part 1 - Nursing Research, 1965, Vol. 14, No. 3, Part II - Nursing Research, Vol. 14, No. 4, 1965.

Young, John P., The Role of Operations Research in Hospitals, Operations Research Division, Johns Hopkins University.

APPENDIX A

CATALOGUE OF PERTINENT TEXT MATERIALS

In response to a request for a list of pertinent instructional materials for health manpower researchers, we have assembled a group of reading lists provided by various professors from their courses. Listed here are the basic manpower texts in both economics and sociology, as well as important health manpower studies. We have included the lists in their original form, instead of condensing and summarizing them, since we felt it would be interesting to be able to see the different emphases in the courses and to note which studies are considered most important by the men giving the courses.

ILIR
University of Illinois

Professor Stoikov
Spring 1967

LIR 490

Seminar on Investment in Manpower

The seminar will cover activities which influence future monetary and psychic income by improving the resources in people. The investments covered include schooling, on-the-job training, medical care, migration, and the search for information on prices and incomes--with main emphasis on education and health. A last section covers educational planning.

The following is a tentative list of readings to be covered in the Seminar. All the items will not necessarily be assigned.

I. Cost-Benefit Analysis and "Public Goods."

1. Kenneth J. Arrow, "Criteria for Social Investment," Water Resources Research, 1, No. 1, 1965, pp. 1-8.
2. A. R. Prest and R. Turvey, "Cost-Benefit Analysis: A Survey," The Economic Journal, 75 (December 1965), 683-735.
3. Cost-Benefit Analysis of Social Projects: Report of a Meeting of Experts, U.N. Research Institute for Social Development, Report #7, Geneva, 1966.
4. Francis M. Bator, The Question of Government Spending, Chapters 6 and 7, New York, 1960, pp. 76-112.
5. Mary Jean Bowman, "Educational Shortage and Excess," The Canadian Journal of Economics and Political Science, 29 (Nov. 1963), pp. 446-461.
6. Arnold C. Harberger, "Investment in Men Versus Investment in Machines: The Case of India," in C. Arnold Anderson and Mary Jean Bowman, eds., Education and Economic Development, Chicago, 1965, pp. 11-50.

II. Investment in Human Capital--Theory and Concepts

1. Theodore W. Schultz, "Reflections on Investment in Man," JPE, 70 (Supplement: October 1962), pp. 1-8.
2. Gary S. Becker, Human Capital, Chapter I, II, and III, Columbia U. Press, 1963, pp. 1-66.
3. B. F. Kiker, "The Historical Roots of the Concept of Human Capital," JPE, 74 (October 1966), pp. 481-499.
4. J. Bonner and D. S. Lees, "Consumption and Investment," JPE, 71 (Feb. 1963), pp. 64-75.
5. Burton A. Weisbrod, "The Valuation of Human Capital," JPE, 69 (October 1961), pp. 425-436.

6. Theodore W. Schultz, "Investment in Human Capital," AER, 51 (March 1961), pp. 1-17.
7. Mary Jean Bowman, "Human Capital: Concepts and Measures," in Selma Mushkin, ed., Economics of Higher Education, op. cit., pp. 69-92.

III. Education as Investment

1. William G. Bowen, Economic Aspects of Education: Three Essays, Industrial Relations Section, Princeton University, 1964. (Essay I appears also in Economic Aspects of Higher Education, OECD, 1964, pp. 177-200.)
2. Gary S. Becker, Human Capital, Chapters IV-VIII, Columbia U. Press, 1964, pp. 69-159.
3. M. Blaug, "The Rate of Return on Investment in Education in Great Britain," The Manchester School of Economic and Social Studies, 33 (September 1965), pp. 205-261.
4. Burton A. Weisbrod, "Education and Investment in Human Capital," JPE, 70 (Supplement: October 1962), pp. 106-123.
5. Mary Jean Bowman, "Converging Concerns of Economists and Educators," Comparative Education Review, 6 (October 1962), pp. 111-119.
6. Mary Jean Bowman, "Social Returns to Education," International Social Science Journal, 14, No. 4, 1964, pp. 647-59.
7. W. Lee Hansen, "Total and Private Rates of Return to Investment in Schooling," JPE, 71 (April 1963), pp. 128-140.
8. James Morgan and Martin David, "Education and Income," QJE, 77 (August 1963), pp. 423-437.
9. Werner Z. Hirsch and Elbert W. Segelhorst, "Incremental Income Benefits of Public Education," The Review of Economics and Statistics, 47 (November 1965), pp. 392-99.
10. Burton A. Weisbrod, "Preventing High School Dropouts," in Robert Dorfman, ed., Measuring Benefits of Government Investments, The Brookings Institution, 1965, pp. 117-171.
11. Beverly Duncan, "Dropouts and the Unemployed," JPE, 73 (April 1965), pp. 121-134.
12. Burton A. Weisbrod, External Benefits of Public Education: An Economic Analysis, Industrial Relations Section, Princeton University, 1964.
13. William J. Swift and Burton A. Weisbrod, "On the Monetary Value of Education's Intergeneration Effects," JPE, 73 (December 1965), pp. 643-649.

14. Selma Mushkin, ed., Economics of Higher Education, United States Office of Education (Bulletin 1962, No. 5), G.P.O., 1962.
15. Andre Daniere, Higher Education in the American Economy, Random House, New York, 1964 (Paper \$1.95).
16. International Economic Association, Conference on the Economics of Education, London: Macmillan, 1966. (Selected readings)
17. Alice M. Rivlin, "Research in the Economics of Higher Education: Progress and Problems," in (11) above.
18. Herman P. Miller, "Lifetime Income and Economic Growth," AER, 55 (Sept. 1965), pp. 834-844.

IV. On-the-Job Training and Training Programs as Investment

1. Jacob Mincer, "On-the-Job Training: Costs, Returns, and Some Implications," JPE, 70 (Supplement: October 1962), pp. 50-73.
2. Burton A. Weisbrod, "Conceptual Issues in Evaluating Training Programs," NLR, 89 (October 1966), pp. 1091-7.
3. Gerald S. Somers, "Retraining: An Evaluation of Gains and Costs," in Arthur M. Ross, ed., Employment Policy and the Labor Market, U of California Press, 1965, pp. 271-298.
4. M. E. Borus, "A Benefit Cost Analysis of the Economic Effectiveness of Retraining the Unemployed," Yale Economic Essays, 4 (Fall 1964).
5. David A. Page, "Retraining Under the Manpower Development Act: A Cost-Benefit Analysis," in John D. Montgomery and Arthur Smithies, Public Policy, vol. 13 (1964), pp. 257-67.
6. Gerald G. Somers and Ernest W. Stromsdorfer, "A Benefit-Cost Analysis of Manpower Retraining," Proceedings of the 17th Annual Meeting of IRRA, 1965, pp. 172-185.
7. Fritz Machlup, "Training on the Job," in Fritz Machlup, The Production and Distribution of Knowledge in the United States, Princeton U Press, 1962, pp. 57-64.

V. Health and Population Control as Investments

1. Selma J. Mushkin, "Health as an Investment," JPE, 70 (Supplement: October 1962), pp. 129-157.
2. Herbert E. Klarman, "Syphilis Control Programs," in Robert Dorfman, ed., Measuring Benefits of Government Investments, The Brookings Institution, 1965, pp. 367-414.

- ✓3. The Economics of Health and Medical Care, The University of Michigan, 1964.

Part 2: W. Lee Hansen, "'Shortages' and Investment in Health Manpower," pp. 75-91.

Part 5. (Investment in Health): Articles by Mushkin and Weisbrod, Rashi Fein, and Mark Perlman, pp. 257-305. (Mushkin and Weisbrod paper appears also in Kyklos, 16 (Fasc. 4), 1963, pp. 583-598,

4. J. Wiseman, "Cost-Benefit Analysis and Health Service Policy," Scottish Journal of Political Economy, 10 (Feb. 1963), pp. 128-145.
5. Stephen Enke, "The Economic Aspects of Slowing Population Growth," The Economic Journal, 76 (March 1966), pp. 44-56.
6. Robin Barlow, "The Economic Effects of Malaria Eradication," AER Proceedings, May 1967.
7. Peter Newman, Malaria Eradication and Population Growth, Bureau of Public Health Economics Research Series No. 10, The University of Michigan, 1965.
8. Kenneth J. Arrow, "Uncertainty and the Welfare Economics of Medical Care," Am. Ec. Rev., 53 (December 1963), pp. 941-973.

For economists: medical-care industry considered as a market, comparison with competitive norm.

- ✓9. Herbert E. Klarman, The Economics of Health, Columbia U Press, 1965.
- ✓10. Burton A. Weisbrod, Economics of Public Health: Measuring the Economic Impact of Diseases, Philadelphia, 1961.
11. C. Rimlinger and R. Steele, "An Economic Interpretation of the Spatial Distribution of Physicians. . .," SEJ, 30 (July 1963), pp. 1-12

VI. Search for Information as an Investment

1. George Stigler, "The Economics of Information," JPE, 69 (June 1961), pp. 213.
2. George Stigler, "Information in the Labor Market," JPE, 70 (Supplement: October, 1962), pp. 94-105.
3. Simon Rottenberg, "The International Exchange of Knowledge," in C. Arnold Anderson and Mary Jean Bowman, eds., Education and Economic Development, Chicago, 1965, pp. 281-290.
4. Fritz Machlup, The Production and Distribution of Knowledge in the United States, Princeton, 1962.

VII. Migration and Labor Mobility as Investment

1. Larry A. Sjaastad, "The Costs and Returns of Human Migration," JPE, 70 (Supplement: October 1962), pp. 80-93.
2. Burton A. Weisbrod, "Geographical Spillover Effects and the Allocation of Resources to Education," in Margolis, ed., Urban Public Expenditures.
3. Burton A. Weisbrod, "An Expected-Income Measure of Economic Welfare," JPE, 70 (August 1962), pp. 355-367. (Part IV. Application to Analysis of Population Migration.)

VIII. Education and Other Human Capital and Economic Growth

1. C. Arnold Anderson and Mary Jean Bowman, eds., Education and Economic Development, Selected chapters, Chicago, 1965. (#6 "From Guilds to Infant Training Industries," M.J.B.)
2. The Residual Factor and Economic Growth, OECD, 1964, Chapter I (Denison and Comments), pp. 13-100.
- 2a Edward F. Denison, The Sources of Economic Growth in the United States, Supplementary Paper No. 13, Committee for Economic Development, 1962, Chapters 1-3, 13-24.
3. Moses Abramovitz, "Economic Growth in the United States: A Review Article," AER, 52 (Sept. 1952), pp. 762-782.
4. Richard S. Eckaus, "Education and Economic Growth," in Selma Mushkin, ed., (11) section III.
5. Mary Jean Bowman, "Schultz, Denison, and the Contribution of 'Eds' to National Income Growth," JPE, 72 (October 1964), pp. 450-464.
6. Angus Maddison, Foreign Skills in Economic Development, OECD, Paris, 1965.
7. Zvi Griliches, "Research Expenditures, Education, and the Aggregate Agricultural Production Function," AER, 54 (December 1964), pp. 961-974.
8. Seymour E. Harris, ed., Economic Aspects of Higher Education, OECD 1964.
9. M. J. Bowman, V. E. Komarov, M. Debeauvais and J. Vaizey, eds., Readings on Education and Economic Development, UNESCO, 1967.
10. M. J. Bowman, "Human Inequalities in Southern Underdevelopment," SEJ, 32, No. 1, Part 2 (July 1965), pp. 73-102.
11. Charles Nash Myers, Education and National Development in Mexico, Industrial Relations Section, Princeton U, 1965.
12. Mary Jean Bowman, Resources and People in East Kentucky: Problems and Potentials of a Lagging Economy, Johns Hopkins Press, 1963. Chapter 10-13, pp. 180-285.

IX. Educational Planning

1. Don Adams, ed., Educational Planning, Syracuse U., 1964.
2. Economic and Social Aspects of Educational Planning, UNESCO, 1964.
3. Herbert S. Parnes, ed., Planning Education for Economic and Social Development, OECD, 1963.
4. Mark Blaug, "An Economic Interpretation of the Private Demand for Education," Economica, May 1966, pp. 166-182.
5. R. G. Hollister, "The Economics of Manpower Forecasting," International Labour Review, 89 (April 1964), pp. 371-397.
6. W. Lee Hansen, "Human Capital Requirements for Educational Expansion: Teacher Shortage and Teacher Supply," in C. Arnold Anderson and Mary Jean Bowman, eds., Education and Economic Development, Chicago, 1965, pp. 63-87.
7. Adam Curle, Planning for Education in Pakistan: A Personal Case Study, Harvard University Press, 1966.
8. C. E. Beeby, The Quality of Education in Developing Countries, Harvard University Press, 1966.
9. Bruce W. Wilkinson, Studies in the Economics of Education, Occasional Paper #4, Economics and Research Branch, Department of Labour, Canada, July 1965.
10. Jan Tinbergen and H. C. Bos, Econometric Models of Education, OECD, 1964. (Also appearing with comments but without applications in The Residual Factor and Economic Growth, Chapter III, OECD, 1964, pp. 147-197.)
11. Gottfried Bombach, "Long-Term Requirements for Qualified Economic Growth," in Economic Aspects of Higher Education, OECD, 1964, pp. 201-221.
12. Herbert S. Parnes, Forecasting Educational Needs for Economic and Social Development, OECD, 1962.
13. William H. Knowles, "Manpower and Education in Puerto Rico," in Frederick Harbison and Charles A. Myers, eds., Manpower and Education, New York, 1965, pp. 108-139.
14. George B. Baldwin, "Iran's Experience with Manpower Planning: Concepts, Techniques, and Lessons," ibid., pp. 140-172.
15. P. R. G. Layard and J. C. Saigal, "Educational and Occupational Characteristics of Manpower: An International Comparison," British Journal of Industrial Relations, IV (July 1966), pp. 222-266.

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Economics 444

Reference: President's Committee to Appraise Employment and Unemployment Statistics, Measuring Employment and Unemployment, GPO, Washington, D.C. 1962, 412 p.

Assignments

- Chapter I. The Background, pp. 30-41
- Chapter II. Concepts and Definitions, pp. 42-72
- Chapter III. A Review of the System of Labor Market Data, pp. 73-102
- Chapter IV. A Comparison of Estimates from Different Sources, pp. 103-132
- Chapter IX. Presenting Labor Force Information to the Public, pp. 206-217
- Chapter X. Comparisons of Unemployment Here and Abroad, pp. 218-226
- Chapter VIII. Job Vacancy and Occupational Data, pp. 199-205

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Subject: Concepts and Measurement of the Labor Force

President's Committee to Appraise Employment and Unemployment Statistics, Measuring Employment and Unemployment, (Gordon Report) GPO, Washington, D.C., 1962, 412 p.

U. S. Joint Economic Committee, 89th Congress, 2d Session, Subcommittee on Economic Statistics, Job Vacancy Statistics, Hearings, May 17, 18, 1966, GDO, Washington, D.C., 1966, 215 p.

U. S. Joint Economic Committee, 89th Congress, 2d Session, Subcommittee on Economic Statistics, Job Vacancy Statistics, Report of the Subcommittee, Joint Committee Print, GPO, Washington, D.C., 1966, 6 p.

National Bureau of Economic Research, The Measurement and Interpretation of Job Vacancies, 1966, 595 p.

Arthur M. Ross, "Theory and Measurement of Labor Shortages," paper presented at the Manpower Symposium, Princeton University, May 12, 1966, U. S. Bureau of Labor Statistics, (mimeo) 25 p.

Adolf Sturmmthal, "Fall Employment and Inflation: What Europe Learned," Think, Vol. 32, No. 4, July-August, 1966, pp. 8-14.

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Economics 444

Reference: Job Vacancy Statistics, Hearings before the Subcommittee on Economics Statistics, Joint Economic Committee, 89th Congress, 2d Session, May 17 and 18, 1966, GPO, Washington, D.C., 1966, 215 p.

Assignments

Statement and/or discussion by:

Frank Cassell, Director, U. S. Employment Service, pp. 6-12

Arthur H. Burns, Director of National Bureau of Economic Research, pp. 16 (mid page) to 19

Arthur M. Ross, U. S. Commissioner of Labor Statistics, pp. 27-37

Vladimir D. Chavrid, Director, Office of Manpower Analysis and Utilization, U. S. Employment Service, pp. 65-68

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UNIVERSITY OF ILLINOIS
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Subject: Selected Source Materials in Manpower Resources and Policy

1. Manpower Report of the President (annual since 1962).
2. Report of the Secretary of Labor on Manpower Research and Training Under the MDTA (annual since 1962).
3. Annual Report of the Secretary of Health, Education and Welfare on Training Activities Under the MDTA (annual since 1962).
4. Technology and the American Economy. Report of the National Commission on Technology, Automation and Economic Progress. February 1966.
5. Weekly News Summary of the War on Poverty. Office of Economic Opportunity (includes bibliography).
6. Monthly Labor Review.
7. Employment and Earnings and Monthly Report on the Labor Force. U. S. Department of Labor.
8. Employment Service Review (monthly). Employment Service, U. S. Department of Labor.
9. Area Trends in Employment and Unemployment. (monthly) U. S. Department of Labor.
10. Economic Report of the President and Annual Report of the Council of Economic Advisers.
11. Occupational Outlook Handbook. (Annual) U. S. Department of Labor.
12. Dictionary of Occupational Titles. 2 vols. U. S. Department of Labor.
13. Manpower Evaluation Reports, Office of Manpower Research and Evaluation, U. S. Department of Labor. (Irregular)
14. Other Special Manpower Reports as:
Manpower Implications of Automation. U. S. Department of Labor (September 1965).

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Subject: Selected Readings in National Manpower Policy

U. S. Congress, 89th, 2nd Session, Joint Economic Committee,
Twentieth Anniversary of the Employment Act of 1946: An
Economic Symposium, February 23, 1966, 150 pp.

Grover W. Ensley, "Opening Statement",
pp. 3-5.

Roy Blough, "The Employment Act Objectives -
After 20 Years", pp. 5-19.

Council of Economic Advisers, President's Annual Reports.

Report of January 1965: "Toward a More Productive
Use of Our Labor Force", pp. 122-133.

Report of January 1966: "Strengthening Human
Resources", pp. 94-100.

Manpower Reports of the President (and the Annual Manpower
Report of the Secretary of Labor under MDTA)

1963: "Message of the President on Manpower
Policy", pp. xi-xvi.

1964: "Preparation for Work", pp. 65-76.

1965: "Vocational Education", pp. 97-109
"Geographical Mobility: Some Implications",
pp. 145-147, 158.

1966: "The President's Message", pp. xi-xix.
"Introduction and Review", pp. 1-7.
"Youth Programs", pp. 96-110.
"Central Role of Education", pp. 111-118
"Farm Workers", pp. 119-146.

Employment Policy and the Labor Market (Arthur M. Ross, ed.)
University of California Press, 1965, 406 pp.

Gerald G. Somers, "Retraining: An Evaluation of
Gains and Costs", Ch. 9, pp. 271-298.

George Strauss, "Apprenticeship: An Evaluation of
the Need", Ch. 10, pp. 299-332.

Paul Jacobs, "Unemployment as a Way of Life", Ch. 13,
pp. 381-400.

Richard A. Lester, Manpower Planning in a Free Society.

Ch. 5, "Planning on the Demand Side", pp. 108-134.

Ch. 6, "Planning Adjustments in Supply", pp. 135-171.

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Economics 444

Subject: Selected Federal Statutes Directly or Indirectly Related to National
Manpower Policy

1930-1940

Wagner-Peyser Act of 1933

Established the United States Employment Service
and affiliated state services

National Apprenticeship Act of 1937 (Fitzgerald Act)

Federal assistance to states to establish standards
and promote participation in union-management
apprenticeship training programs

Social Security Act of 1935

Income maintenance programs including OASI (Old
Age Survivors Insurance), OAA (Old Age Assistance),
UC (Unemployment Compensation), Welfare Services
including ADC (Aid to Dependent Children), AB
Aid to the Blind), etc.

The Work Relief and Public Works Statutes 1933-1939

Included were: WPA Works Progress Administration
FERA Federal Emergency Relief Administration
PWA Public Works Administration
CCC Civilian Conservation Corps
NYA National Youth Administration

1940-1950

Serviceman's Readjustment Act of 1944 (G. I. Bill)

Financial aid to complete education; priority use of
federal-state employment service in finding a job.

Employment Act of 1946

National commitment to maintain high level
employment. Established the Council of Economic
Advisers and required an annual Economic Report of
the President.

1950-1960

National Science Foundation Act of 1950

Established National Science Foundation to promote scientific research and development

Mexican Farm Labor Act of 1951

Established Regulations of and standards for temporary Mexican laborers (braceros)

Immigration and Naturalization Act of 1952

Established regulations for immigrants seeking temporary or permanent entry

Vocational Rehabilitation Act of 1954

Federal aid to states to rehabilitate persons with physical handicaps

National Defense Education Act of 1958

1960-

Area and Regional Development

Area Redevelopment Act of 1961
Public Works Acceleration Act of 1962
Appalachian Regional Development Act of 1964
Economic Development Act of 1965

Trade Adjustment Unemployed

Trade Adjustment Act of 1962

General Education

Higher Education Act of 1963
National Defense Education Act (1958)
Amendments of 1963
Higher Education Act Amendments of 1965
Elementary and Secondary Education Act of 1965

Vocational Education

Vocational Education Act of 1963

Equal Employment Opportunity

Equal Pay Act of 1963
Civil Rights Act of 1964 (Section VII)
Older American Act of 1965

Farm Labor Policy

Mexican Farm Labor Act of 1951 (expired December 31, 1964)

Immigration Policy

Immigration Act of 1965

Vocational Rehabilitation

Vocational Rehabilitation Act (1954) Amendments, 1965

Community Action Programs for Disadvantaged Persons

Economic Opportunity Act of 1964

Economic Opportunity Act Amendments of 1965

Training Programs for the Unemployed, Underemployed, Undertrained

Area Redevelopment Act of 1961 - Training Provisions

Manpower Development and Training Act of 1962

"	"	"	"	Amendments of 1963
"	"	"	"	" " 1965
"	"	"	"	" " 1966

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Subject: Future Manpower Requirements

U. S. Bureau of Labor Statistics, America's Industrial
and Occupational Manpower Requirements, 1964-1975,
January 1, 1966, 181 pp.

"Occupational Requirements, 1964-1975",
pp. 127-128.

"Factors Affecting Occupational Employment
Patterns", Part IV, pp. 169-174.

"Projected Changes in Occupational Require-
ments as They Relate to Selected Subgroups
of Workers", Part V, pp. 175-180.

UNIVERSITY OF ILLINOIS
DEPARTMENT OF ECONOMICS

Economics 441

Subject: National Manpower Policy

Collateral Readings

I. The Great Policy Debate: The Aggregate Demand vs. the Structural View

A. The Aggregate Demand Deficiency View

Walter Heller, Hearings, Senate Subcommittee on Employment and Manpower, Nation's Manpower Revolution, 88th Congress, 1st Session, Part 5, 1963, pp. 1751-1769.

Reprinted in Annual Report of the Council of Economic Advisers, 1964, pp. 165, 194, and in Men without Work (Stanley Lebergott, ed.) 1964, pp. 68-93.

Otto Eckstein, in Joint Hearings, 1965 Manpower Report of the President, Senate Subcommittee on Education and Manpower and House Committee on Education and Labor, April 27-30, 1965, pp. 252-258.

B. The Structural Deficiency View

Charles Killingsworth in Hearings, U. S. Senate Subcommittee on Education and Manpower, Nation's Manpower Revolution, 88th Congress, 1st Session, Part 5, 1963, pp. 1461-1483.

Reprinted substantially in Men without Work (Stanley Lebergott, ed.), 1964, pp. 55-67.

"Unemployment after the Tax Cut" in Joint Hearings, 1965 Manpower Report of the President, Senate Subcommittee on Education and Manpower and House Committee on Education and Labor, April 27-30, 1965, pp. 248-252. Also presented substantially unchanged in Unemployment in a Prosperous Economy (William G. Bowen, Frederick Harbison, eds.) Princeton Manpower Symposium, 1965, pp. 82-92.

C. Evaluation and Analysis

Eleanor G. Gilpatrick, Structural Unemployment and Aggregate Demand, The Johns Hopkins Press, 1966, 280 pp.

William G. Bowen, "Unemployment in the United States: Quantitative Dimensions," in Unemployment in a Prosperous Economy, (William G. Bowen and Frederick Harbison, eds.) Princeton, Manpower Symposium, 1965, pp. 15-44.

Stanley Lebergott, "Unemployment: A Perspective," in Men Without Work, (Stanley Lebergott, ed.), pp. 1-54.

Paul W. McCracken, "Unemployment in an Expanding Economy, The Long View," The Michigan Business Review, July 1964 (reprinted as educational monograph by Educational Division, National Association of Manufacturers, 1965.)

Gardner Ackley, Policies for the Promotion of Economic Growth, Seminar on Manpower Policy and Program, U. S. Department of Labor, January 1966, 33 pp.

Seymour Wolfbein, Employment, Unemployment and Public Policy, pp. 5-18, 31-68.

Arthur F. Burns, "The Problem of Unemployment," Fairless Memorial Lecture, Carnegie Institute of Technology, November 2, 1965.

Arthur M. Okun, "The Role of Aggregate Demand in Alleviating Unemployment," in Unemployment in a Prosperous Economy (William G. Bowen and Frederick Harbison, eds.) Princeton Manpower Symposium 1965, pp. 67-81.

Yale Brozen, "Why Do We Have an Unemployment Problem?," in Men without Work (Stanley Lebergott, ed.) 1964, pp. 94-104.

The Battle Against Unemployment (Arthur M. Okun, ed.), 1965

Alvin H. Hansen, "The Case for High-Pressure Economics," pp. 53-60.

Henry C. Wallich, "The Case Against High Pressure Economics," pp. 61-64.

Council of Economic Advisers, "The Workings of the Multiplier," pp. 88-96.

Milton Friedman, "Weak Links in the Multiplier Chain," pp. 97-102.

Maurice H. Stans, "The Need for Balanced Federal Budgets," pp. 111-117.

Wilfried Lewis, Jr., "The Limitations of Public Works," pp. 118-125.

Hyman P. Minsky, "The Role of Employment Policy," in Poverty in America (Margaret Chandler, ed.), pp. 175-200.

II. High Level Employment and the Employment Act of 1946

U. S. Congress, 89th Congress, 2nd Session, Joint Economic Committee, Twentieth Anniversary of the Employment Act of 1946, February 23, 1966, 150 p.

National Industrial Conference Board, The Council of Economic Advisers: Retrospect or Prospect, Studies in Business Economics, No. 38, 1954.

Edward S. Flash, Economic Advice and Presidential Leadership, Columbia University Press, 1965, 382 p. (Ch. VII "Tax Reduction and the New Tradition," pp. 217-275).

Stephen Kemp Bailey, Congress Makes a Law, Columbia University Press, (The Story Behind the Employment Act of 1946), 1950, 282 p.

III. Role of Federal Manpower Training Programs

Princeton Manpower Symposium (William G. Bowen and Frederick H. Harbison, eds.) Unemployment in a Prosperous Economy, May 1965.

Garth L. Mangum, "The Role of Job Creation Programs," pp. 107-205.

Curtis Aller, "The Role of Government Sponsored Training and Retraining Programs," pp. 126-141.

Alice Revlin, "Critical Issues in the Development of Vocational Education," pp. 153-166.

Garth L. Mangum, "Manpower Policy in Perspective," in Joint Hearings, U.S. Congress, 89th, 1st Session, Senate Committee on Labor and Public Welfare, Subcommittee on Education and Labor, and House Committee on Education and Labor, and House Committee on Education and Labor, 1965 Manpower Report of the President, April 27-30, 1965, pp. 252-258.

John B. Parrish, "Next Steps in Manpower Policy" (mimeo).

Council of Economic Advisers.

Annual Report, 1965: "Toward a More Productive Use of Our Labor Force," pp. 122-131.

Annual Report, 1966: "Strengthening Human Resources," pp. 94-100.

Manpower Reports of the President.

1963: pp. xi-xvi and 3-8.

1966: pp. ii-xix

Men Without Work (Stanley Lebergott, ed.)

Sar Levitan, "Training Programs for the Unemployed,"
pp. 147-152.

Gerald G. Somers, "Retraining the Unemployed: A Preliminary
Survey," pp. 152-160.

John D. Pomfret, "New Opportunities for Depressed Areas,"
pp. 161-165.

IV. Selected Other Readings

David C. McClelland, "Does Education Accelerate Economic
Growth?," Economic Development and Cultural Change,
Spring, 1966.

Larry D. Singell, "Some Private and Social Aspects of the
Labor Mobility of Young Workers," The Quarterly Review
of Economics and Business, Vol. 6, No. 1, Spring, 1966,
pp. 19-27.

Ida Russakoff, "Retraining in the United States: Problems
and Progress," International Labor Review, Vol. 92, No. 5,
November 1965, pp. 410-425.

Lindsay R. Harmon, "The Supply of Brains," International
Science and Technology, February 1966, pp. 80-84.

Ruth Barry and Beverly Ann Wolf, Epitaph for Vocational Guidance,
1962.

Henry David, Manpower Planning for a Democratic Society,
Columbia University Press, 1960.

JEP/wla
7/19/66

UNIVERSITY OF ILLINOIS
DEPARTMENT OF ECONOMICS

Economics 441

References: Unemployment in a Prosperous Economy

A report of the Princeton Manpower Symposium,
May 13-14, 1965. The Industrial Relations
Section. Princeton University, 1965, 173 pp.

- Ch. 2 "Unemployment in the United States: Quantitative Dimensions"
by William G. Bowen, pp. 15-44.
- Ch. 4 "The Role of Aggregate Demand in Alleviating Unemployment"
by Arthur M. Okun, pp. 67-81.
- Ch. 5 "Unemployment After the Tax Cut" by Charles C. Killingsworth,
pp. 82-92.
- Ch. 8 "The Role of 'Job Creation' Programs" by Garth L. Mangum, pp. 107-125.
- Ch. 9 "The Role of Government-Sponsored Training and Retraining Programs,"
by Curtis C. Aller, pp. 126-141.
- Ch. 10. "Industry's Role in Job Creation and Training," by Wm. G. Caples,
pp. 142-152.
- Ch. 11 "Critical Issues in the Development of Vocational Education,"
by Alice M. Rivlin, pp. 153-166.

Economics of Human Resources

Texts: Investment in Human Beings, Journal of Political Economy, Supplement, October, 1962.
Richard Lester, Manpower Planning in a Free Society, Princeton Press,
Manpower Report of the President, 1966.
Examination: April 21, 4-6 P.M.

I. Overview

A. General

S. Lebergott, Manpower in Economic Growth, Ch. 2 and 3 (skim)
R. Lester, Manpower Planning, pp. 3-22

B. Labor Market

H. Parnes, "The Labor Force and The Labor Market," in Heneman et.al.,
Employment Relations Research, pp. 13-33 (private copies)

C. Human Capital

T. Schultz, "Reflection on Investment in Man," JPE Supplement, pp.1-8,
W. Bowen, Economic Aspects of Education, Essay #1, pp. 3-33.
Richard Eckhaus, "Investment in Human Capital: A Comment," Journal
of Political Economy, October 1963.

D. Manpower in Economic Growth

Edward Denison, Sources of Economic Growth in the United States, CED
Paper #13, 1962, pp. 47-79 and 201-212.

II. Occupational Choice

A. General

M. Friedman and S. Kuznets, Income From Independent Professional
Practice, Ch. 3 and 4.
R. Lester, Manpower Planning, pp. 23-42.

B. Entry and Discrimination

S. Roitenbirg, "Economics of Occupational Licensing," in Universities,
National Bureau, Aspects of Labor Economics.
G. Becker, Economics of Discrimination, University of Chicago Press.
D. Herstand, Economic Growth and Employment of Minorities, Columbia,
1964, pp. 109-119.

III. Labor Force Participation

G. Bancroft, "Labor Force Growth and Job Opportunities," (private copies)
S. Lebergott, Manpower and Economic Growth (Review pp. 32-38).
W. Bowen and T. A. Finnegan, "Labor Force Participation and Unemployment,"
in Employment Policy and the Labor Market, Ross (ed.), pp. 115-145.

IV. Shortages in Labor Markets

Blank and Stigler, The Demand and Supply of Scientific Personnel, NBER, pp. 19-33.

W. L. Hansen, "The Shortage of Engineers," in Review of Economics and Statistics, 1961, pp. 251-256.

V. Surpluses in Labor MarketsVI. Mobility and Information in Labor Markets

A. Mobility

J. Lansing, et. al., The Geographic Mobility of Labor: A Summary Report.

L. Sjaastad, "Costs and Returns of Human Migration," in JPE Supplement.

C. Kindleberger, "Emigration and Economic Growth," Banca Nazionale de Lavoro Quarterly Review, September 1965, pp. 235-254.

H. Grubel and A. Scott, "The International Flow of Human Capital," Proceedings of American Economic Association, May 1966.

Walter Oi, "Labor as a Quasi Fixed Factor," Journal of Political Economy, December, 1962.

B. Information

G. Stigler, "Information in the Labor Market," in JPE Supplement, pp. 94-104.

A. Rees, Proceedings of the American Economic Association, May 1966.

R. Lester, Manpower Planning, pp. 45-84.

VII. Education and Training

A. General

W. L. Hansen, "Total Private Rates of Return to Investment in School," Journal of Political Economy.

B. Weisbrod in Measuring the Benefits of Government Investment, Dorfman (ed.), Brookings, 1965, pp. 117-149.

G. Becker, Human Capital, pp. 69-90 and 104-113.

B. Weisbrod, "Education and Investment in Human Capital," JPE Supplement, pp. 106-127.

H. Brazer and M. David, "The Social and Economic Determinants of the Demand for Education," in Economics of Higher Education, Mushken (ed.), pp. 21-42.

B. Training and Retraining

J. Mincer, "On the Job Training: Costs Returns and Some Implications," JPE Supplement, pp. 50-79.

C. Friedman, "Education of New York City School Teachers: An Economic Analysis," Industrial and Labor Relations Review, October 1964, pp. 20-31.

Gerald Somers, "Retraining and Evaluation of Gains and Costs," in Employment Policy and the Labor Market in Ross (ed.), pp. 271-298.

VIII. Migration and Investment in Education

B. Weisbrod, External Benefits of Public Education, Princeton University, 1964.

IX. Education and Economic Development

Harbison and Myers, Education, Manpower and Economic Growth, pp. 15-48 and 173-187.

X. Manpower and Education Policies

A. General

Review of Economics and Statistics, August 1960 Supplement, "Priming and the Student Body: A Summary," pp. 29-39.

M. Friedman, "The Role of Government in Education," in Economics and the Public Interest, Solo (ed.), pp. 123-144.

R. Lester, Manpower Planning, pp. 108-171.

R. Lester, Manpower Planning, pp. 172-191.

E. W. Bakke, "An Integrated Positive Manpower Policy," in Employment Policy and the Labor Market, Ross (ed.), pp. 358-378.

B. A Related Question - Military Manpower Policy

W. L. Hansen and B. Weisbrod, Economics of the Draft (unpublished) 1967. Pentagon Report (to be distributed).

Department of Economics
University of Wisconsin
Fall 1966

Professor Hansen
Economics 550

Books for Economics 550

1. (Required) G. S. Becker, Human Capital, Princeton University Press, 1964.
2. (Recommended) M. Blaug, Economics of Education: A Selected Annotated Bibliography, Pergamon Press, 1966.
3. (Required) Andre Daniere, Higher Education in the American Economy, Random House, 1964 (out of print).
4. (Required) S. Mushkin, Economics of Higher Education, Government Printing Office, 1962.
5. (Required) D. Novick (ed.), Program Budgeting, U.S. Government Printing Office, 1965.
6. (Recommended) E. A. G. Robinson & J. E. Vaizey, The Economics of Education, St. Martin's Press, 1966.
7. (Required) E. G. West, Education and the State, Institute for Economic Affairs, Eaton House, 66A Eaton House, London S.W.1, 1965.
8. (Required) Journal of Political Economy, Supplement, October 1962, National Bureau of Economic Research, N. Y., 1962.

Department of Economics
University of Wisconsin

Economics 550
W. Lee Hansen
Fall 1966

Books on Reserve in Library

<u>Call Number</u>	<u>Author</u>	<u>Title</u>
	*Anderson, C. A. & M. J. Bowman (eds.)	<u>Education and Economic Development</u> Aldine Press, 1965.
HC 110.15 B4 RB Econ B381	Becker, G. S.	<u>Human Capital</u> , Princeton University Press, 1964.
	*Blaug, Mark	<u>Economics of Education: A Selected</u> <u>Annotated Bibliography</u> , Pergamon Press, 1966
AP P9575 R RB Econ B6737	Bowen, William G.	<u>Economic Aspects of Education</u> , (Princeton, Industrial Relations Section, 1964).
	*Bowman, M. J., et.al. (eds)	<u>Readings on Education and Economic</u> <u>Development</u> , UNESCO (forthcoming 1966)
HJ 257. B8	Buchanan, J. M. (ed.)	<u>Public Finances: Needs, Sources, and</u> <u>Utilization</u> , Princeton University Press, 1961.
HJ 2052 C58	Comiez, Maynard	<u>A Capital Budget Statement for the U.S.</u> <u>Government</u> , Brookings, 1966.
		<u>Conference on Studies in Income & Wealth,</u> <u>Output, Input, and Productivity Measure-</u> <u>ment</u> , National Bureau of Economic Research (Princeton, 1961)
LB 2342 D33	Daniere, A.	<u>Higher Education in the American Economy</u> , Random House, 1964
HC 106 D48 RB Econ. D4168	*Denison, E. F.	<u>The Sources of Economic Growth in the</u> <u>U.S. and the Alternatives before Us.</u> Committee for Economic Development, Supplementary Paper No. 13, N. Y. CED, 1962.
HN 58 D6	*Dorfman, R.	<u>Measuring Benefits of Government</u> <u>Investments</u> , Brookings, Washington, D.C. 1965.
		<u>Economics of Health and Medical Care</u> , University of Michigan Press, 1964.
HB 539 F54	Fisher, Irving	<u>The Theory of Interest.</u>
HJ 4652 G6	Goode, R.	<u>The Individual Income Tax</u> , Brookings.
	Harris, S. E.	<u>The Market for College Graduates</u> , Harvard University Press, 1949.

<u>Call Number</u>	<u>Author</u>	<u>Title</u>
	Hirsch, Werner Z. (ed.)	<u>Elements of Regional Accounts</u> , (Johns Hopkins Press, 1964).
HD 1694 A5 H5	Hirshleifer, DeHaven, & Milleman	<u>Water Supply</u> , University of Chicago Press, 1960.
		<u>Journal of Political Economy, Supplement</u> October, 1962.
RA 410 K5	Klarman, H.	<u>Economics of Health</u> , Columbia University Press, 1965.
A2 505 M3	*Machlup, F.	<u>The Production and Distribution of Knowledge in the U.S.</u> Princeton University Press, 1962.
HB 171 M37	Marshall, A.	<u>Principles of Economics</u> (MacMillan, 8th ed.)
HD 1694 A5 M35	*McKean, R.	<u>Efficiency in Government through Systems Analysis</u> , Wiley 1958.
HC 110 15MS	Miller, Herman	<u>Income of the American People</u> , Wiley 1955.
	Morgan, J. <u>et.al.</u>	<u>Income and Welfare in the U.S.</u> , McGraw-Hill, 1962.
HJ 141 M8	Musgrave, R. A.	<u>The Theory of Public Finance</u> , McGraw-Hill, 1959.
LB 2342 M79	Mushkin, S. (ed.)	<u>Economics of Higher Education</u> , U.S. Government Printing Office, 1962.
LB 5 N25	National Society for Study of Ed. Yearbook	<u>Social Forces Influencing American Education, The Sixtieth Yearbook of the National Society for the Study of Education</u> , ed. N. B. Henry. Chicago: University of Chicago Press, 1961. Part II, see paper by T. W. Schultz.
HJ 2052 N6	*Novick, David (ed.)	<u>Program Budgeting</u> , Harvard 1965.
HB 3730.07	*OECD (Organization for Economic Coop. & Development	<u>The Residual Factor and Economic Growth</u> , Paris 1964.
	*Robinson, E.A.G. & John E. Vaizey (ed.)	<u>The Economics of Education</u> , St. Martin's Press, 1966.
HB 601 R83	Ruggles, R. & Ruggles, N.	<u>National Income Accounts and Income Analysis</u> , (McGraw Hill, 1956).
	Schultz, T. W.	<u>Economic Value of Education</u> (Columbia 1963)

<u>Call Number</u>	<u>Author</u>	<u>Title</u>
HB 601 S74	Studenski, Paul	<u>The Income of Nations, Part II</u> (NYU Press, 1958);
HC 110 15 A554	U.S. Dept. of Commerce	<u>U.S. Income and Output 1958,</u> Government Printing Office
	U.S. Dept. of Commerce	<u>National Income 1954, Government</u> Printing Office.
	U.S. Public Health Service	<u>Economic Benefits from Public Health</u>
HB 885 U58		Universities - National Bureau Committee for Economic Research, <u>Demographic and</u> <u>Economic Change in Developed Countries,</u> National Bureau for Economic Research 1960.
RA 410 W4	Weisbrod, B. A.	<u>Economics of Public Health,</u> Phila. University of Pennsylvania Press, 1961.
LB 41 W45	Weisbrod, B. A.	<u>External Benefits of Public Education,</u> Princeton: Industrial Relations Section, Princeton University Press 1964.
	West, E. G.	<u>Education and the State,</u> The Institute of Economic Affairs, 1965. London.
HJ 2051 W485	Wildowsky, A.	<u>The Politics of the Budgetary Process,</u> Little Brown, 1964.

Research Paper Assignment

Each person is to prepare a research paper as part of the assigned work in the course. Given that this whole subject is just opening up, there is great room for original (as well as quasi-original) work, either in opening up new topics or probing more deeply into others that may have received some attention.

The paper you are to do is to be divided into two parts, though these are not independent of each other. The first part will examine a particular plan, activity, program, or problem in terms of its impact on the national income accounts. This will involve a full recasting of the accounts within a broader human investment framework. For this the general orientation and procedures will be discussed in class. The second part of the paper will examine the same topic within some general cost-benefit, decision-making framework. Added details will be given in class. The objective of the paper is to force you to work with an analytical framework, to trace out the implications of changes in programs, activities, etc., and to then try to see what kind of empirical work you can do on it.

To help insure that you do not end up in a blind alley or completely ruin your Christmas holiday, and to insure the development of a reasonably good paper, the following procedures will be adopted.

1. By October 12 you are to submit a 3-page typewritten statement in two copies, indicating the topic you plan to explore, how you intend to proceed, and what you hope to learn. Included should be a brief bibliography of relevant studies. Within a week, or thereabouts, I will return one copy of your paper with comments. You can then continue your work, taking account of my comments, additional work of your own, etc.

2. By November 21st you are to submit a 10-page typewritten statement (2 copies) in which you indicate how your ideas are developing, what work you have underway, what remaining problems you foresee, and what the nature of your conclusions are likely to be. Obviously, your work should be well underway by this time. Within the following week I will return your papers with comments.

3. By January 4th you are to submit two typewritten copies of your completed paper. The paper's length is to be in the 15-25 page range. In matters of style, presentation, footnotes, and the like, you are advised to consult one of the standard manuals.

To insure that papers are turned in according to schedule all along the way, I offer a positive inducement. At each stage of the process the penalty for lateness will be of the following form:

$$P = a + b^t$$

where P is the penalty, a and b are constants of now-undisclosed value, and t denotes the number of days of "lateness." I hope that all will avail themselves of this "carrot."

The weight of the paper in determining the final grade will be on the order of 50 percent.

Suggested Research Paper Topics

1. Surgeon General's Report on Smoking
2. Report of Commission on Heart, Stroke, and Cancer
3. National Academy of Sciences on Quality of Environment
4. White House Report on Civil Rights
5. Automobile safety legislation
6. Acceleration of efforts to promote birth control
7. Improved labor market-job information
8. Economic effects of manpower-planning--projections
9. University post-high school provision of free education (two years)
10. Expansion of Head Start program to cover all children
11. Effects of new GI Bill
12. Obsolescence of education and training skills
13. Monetary valuation of activities of housewives
14. Malaria eradication
15. Effects of increased longevity
16. Generalized treatment of program budgeting
17. Redistributive aspects of government programs--expenditures on human investment
18. Redistributive aspects of government programs--transfer payments
19. Economics of military draft
20. Economics of national service
21. Investment in research--basis and applied in medical area
22. Expenditures on dissemination of research knowledge
23. Adult education and training
24. Guaranteed annual incomes or negative income tax vs. retraining, etc.
25. Safety and accident prevention
26. Promotion of mental health
27. Financing of education, via loans, scholarships, etc.
28. Community social welfare programs
29. Vocational education (high school, college, or professional level)
30. Academic education (any or all levels)
31. Morbidity
32. Discrimination

Supplementary Bibliography 1General Bibliography Relevant to Research Paper

- D.S. Lees and J. Bonner, "Consumption and Investment," JPE, Feb. 1963.
- U.S. Department of Health, Education, and Welfare, Economics of Higher Education, Selma Mushkin (ed.), see Mary Jean Bowman, "Human Capital: Concepts and Measures."
- Fritz Machlup, The Production and Distribution of Knowledge in the U.S., Chaps. 1 and 9.
- Werner Z. Hirsch, Elements of Regional Accounts, particularly paper by Perloff and Leven.
- R. Ruggles and Ruggles, National Income Accounts and Income Analysis, Chaps. 1, 2, 5, and 6 (if you are not familiar with material).
- American Economic Association, Readings in Income Distribution, see S. Kuznets, "National Income," pp. 3-43.
- Paul Studenski, The Income of Nations, Part II, esp. chaps. 11-14.
- U.S. Department of Commerce, National Income 1954.
- _____, U.S. Income and Output 1958.

I. Introductory and Background MaterialGeneral

- T. W. Schultz, "Investment in Man: An Economist's View," Social Service Review, June 1959.
- _____. "Investment in Human Capital," AER, March 1961, & Dec. 1961.
- _____. "Reflections on Investment in Man," JPE Suppl., Oct. 1962.
- M. J. Bowman, "The Human Investment Revolution in Economic Thought," Sociology of Education, Spring 1966.

Economic Growth Emphasis

- R. Solow, "Aggregate Production Functions and Technological Change," RES, 1957, August.
- J. W. Kendrick, Productivity Trends in the U.S., pp. 3-110 (skim).
- E. F. Denison, The Sources of Economic Growth in the U.S.... Chaps. 1-4
- Z. Griliches, "The Sources of Measured Productivity Growth: U.S. Agriculture 1940-60," JPE, August 1963.
- R. Nelson, "Aggregate Production Functions," AER, Sept 1964.

Income Distribution Emphasis

- S. Lebergott, "The Shape of Income Distribution," AER, June 1959.
- J. Mincer, "Investment in Human Capital and Personal Income Distribution," JPE, August, 1958.
- M. P. Miller, "Annual and Lifetime Income in Relation to Education: 1939-59," AER, December 1960.

II. Investment in Human Capital---Theory and Concepts

Gary S. Becker, Human Capital, Chapters I and II.

D. S. Lees and J. Bonner, "Consumption and Investment," JPE, February 1963.

U.S. Department of Health, Education, and Welfare, Economics of Higher Education, Selma Mushkin (ed.), see Mary Jean Bowman, "Human Capital Concepts and Measures."

For some general background on the mathematics of the rate of return or present value calculations, see J. Hirshleifer, et. al., Water Supply Chap. VII (you might also read pp. 114-118 of Chap. VI); also Ezra Solomon, The Management of Corporate Capital, papers in Part II.

III. Cost-Benefit Analysis--Program Budgeting

- A. R. Prest and R. Turvey, "Cost-Benefit Analysis: A Survey," Economic Journal, December 1965.
- J. M. Buchanan (ed.), Public Finances: Needs, Sources, and Utilization; see "Introduction" and Otto Eckstein, "A Survey of the Theory of Public Expenditure Criteria."
- D. Novick, Program Budgeting, Chaps. 1, 2, and 9.
- R. Dorfman, Measuring the Benefits of Government Investments, "Introduction" and paper by B. A. Weisbrod, "Preventing High School Dropouts."
- R. McKean, Efficiency in Government Through Systems Analysis, see Parts I, II, & III.
- J. Hirshleifer, et. al., Water Supply, Chap. VI.
- C. J. Hitch and R. N. McKean, The Economics of Defense in the Nuclear Age.
- A. Wildavsky, The Politics of the Budgetary Process (paper).
- M. Peck and F. Scherer, The Weapons Acquisition Process.

For several representative studies, see:

- Z. Griliches, "Research Costs and Social Returns: Hybrid Corn and Related Innovations," JPE, Oct. 1958.
- B. A. Weisbrod, Economics of Public Health.
- W. L. Hansen, "Total and Private Rates of Return to Investment in Schooling," JPE, April 1963.
- T. W. Schultz, The Economic Organization of Agriculture, pp. 114-122.

IV. Population Quantity and Quality.

- D. S. Lees and J. Bonner, "Consumption and Investment," JPE February 1963.
- G. S. Becker, "An Economic Analysis of Fertility," in Universities-NBER Conference, Demographic and Economic Change in Developed Countries.
- S. Enke, "The Gains to India from Population Control: Some Money Measures and Incentive Schemes," Rev. Econ. & Stat., May 1960; also Econ Dev and Cult Change, July 1960 and July 1962.
- S. Enke, "The Economic Aspects of Slowing Population Growth," Economic Journal, March 1966.
- R. A. Easterlin, "On the Relation of Economic Factors to Recent and Projected Fertility Changes," Demography, Vol. 3, No. 1, 1966.
- R. A. Easterlin, "The American Baby Boom in Historical Perspective," American Economic Review, Dec. 1961.

V. Economics of Health

J. Enoch Powell, "Health and Wealth," Proceedings of the Royal Society of Medicine, Vol. 35, (Jan. 1962), pp. 1-6.

Luther Terry, Public Health Reports, 1964.

Selma Mushkin, "Towards a Definition of Health Economics," Public Health Reports, and Frank Collings, "Economic Costs of Disease and Injury," Public Health Reports, Vol. 74 (Sept. 1959), pp. 795-809. , JPE Supplement.

C. Linnenberg, "How Shall We Measure Economic Benefits from Public Health Services," in U.S. Public Health Service, Economic Benefits from Public Health Services, pp. 1-12.

Klarman, H., "Measuring the Benefits of a Health Program--the Control of Syphilis," Government Investment Expenditures, (Brookings, 1965).

B. Weisbrod, Economics of Public Health.

Report of President's Commission on Heart, Stroke, and Cancer, Vol. II, Sections on Costs and Benefits, and Conference on Economics of Medical Research.

H. Klarman, Economics of Health (1965), see bibliography.

R. Fein, Economics of Mental Illness.

The Economics of Health and Medical Care (Univ. of Mich., 1964), esp. last chap. by Rothenberg.

VI. Information, Mobility, Training

Stigler, G., "The Economics of Information," JPE, June 1961.

"Information in the Labor Market," JPE Suppl.

Mincer, J., "On-the-Job Training: Costs, Returns, and Some Implications," JPE Suppl.

Sjaastad, L., "The Costs and Returns of Human Migration," JPE Suppl.

VII. Other

Weisbrod, B., "Education and Investment in Human Capital," JPE Suppl.

Denison, E., "Education, Economic Growth, and Gaps in Information," JPE Suppl.

Hansen, W. L. "Shortages and Investment in Health Manpower," in The Economics of Health and Medical Care (U. of Mich. 1964).

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Course Description

ECONOMICS 303ECONOMICS 303MANPOWER AND LABOR PROBLEMSPrerequisites:

Economics 101 or 102 or consent of the instructor.

Subject Matter:

The subject matter of this course is to be changed substantially starting in the fall of 1966, as the following revised description indicates:

A critical examination of manpower development and labor relations problems in the U.S. economy. Topics will include the analysis of trends in occupational composition and employment of the labor force; the American system of collective bargaining and its impact on the economy; the objectives of national labor relations policy and government intervention in strikes; processes of human resource development and investments in education and training; and critical decisions in the evolution of national manpower and education policy. Both practical and theoretical aspects of major issues are stressed.

Aims:

The aim of this course is to provide students with conceptual frameworks for analysis of public policy with respect to unions, collective bargaining, labor disputes, manpower training and retraining, and general investment in education in the United States.

Methods:

Two lectures and one preceptorial per week. A short analytical report on a specific labor or manpower problem (based on assigned reading) is required in lieu of the first hour of the final examination. Mid-term test -- 1 hour; final exam 2 hours.

Other Features:

Approximately one-fifth of the lectures will be delivered by guests, including corporation executives, union officials, and government officials.

March 1966

ECONOMICS 303

Part I. Manpower and Education1st WeekLectures:

- Sept. 20 Introduction and plan of the course.
- Sept. 22 Critical issues and central concepts in development and utilization of human resources and the structuring of the labor force.

Assignment:

1. Peirce, William S. and William G. Bowen, "The United States Labor Force," in Labor and the National Economy, edited by William G. Bowen, pp. 14-21.
2. U.S. President, Manpower Report of the President, 1966, pp. 1-47.
3. Harbison, Frederick H. and C.A. Myers, Education, Manpower and Economic Growth, Chs. 1-2, pp. 1-21.

No Precepts.2nd WeekLectures:

- Sept. 27 The U.S. Labor Force and factors bearing upon labor force participation.
- Sept. 29 The "returns" on investment in education and the economic value of education in modern societies.

Assignment:

1. Bowen, William G., Economic Aspects of Education, Chapter I, "Assessing the Economic Contribution of Education: An Appraisal of Alternative Approaches," pp. 3-38.
2. Schultz, Theodore W., The Economic Value of Education, pp. 1-70.

or

2nd Week (continued)

Becker, Gary S., Human Capital, Chapters I-III,
pp. 1-66. (Optional)

3. Harbison, Frederick H. and C.A. Myers, Education, Manpower and Economic Growth Ch. 3, pp. 23-48.

Precept Topic:

Cost-benefit analysis of investment in education.

3rd Week

Lectures:

- Oct. 4 Manpower and Educational Problems in the Newly Developing Countries.
- Oct. 6 Some thorny issues and critical choices in development of education in the United States.

Assignment:

1. Harbison, Frederick H. and C.A. Myers, Education, Manpower and Economic Growth, Chs. 4, 5, 6 and 7, pp. 49-172.
2. Gardner, John W., "National Goals in Education," in Goals for Americans, Report of the President's Commission on National Goals, pp. 81-100.
3. Fortune, November 1964 "Knowledge: The Biggest Growth Industry of Them All," pp. 128-131, 267-268, 270. Reprint.
(skim for major ideas and look at charts)

Precept Topic:

Critical issues in development of education.

4th Week

Lectures:

- Oct. 11 The development of employed manpower -- issues and problems in on-the-job training.
- Oct. 13 Providing jobs and training for "hard-to-employ".

4th Week (continued)Assignment:

1. Bowen, William G., "Unemployment in the United States: Quantitative Dimensions," in Unemployment in a Prosperous Economy, edited by W.G. Bowen and F. Harbison, pp. 15-44.
2. Somers, Gerald G., The Experience with Retraining and Relocation, 26 pp.
3. Kershaw, Joseph A., "The Need for Better Planning and Coordination in Manpower," in Critical Issues in Employment Policy, edited by Frederick Harbison and Joseph Mooney, 162 pp.
4. Jacobs, Paul, "A View from the Other Side: Unemployment as Part of Identity," in Unemployment in a Prosperous Economy, edited by W.G. Bowen and F. Harbison, pp. 45-63.
5. Mangum, Garth L., "The Role of 'Job Creation' Programs," in Unemployment in a Prosperous Economy, edited by W.G. Bowen and F. Harbison, pp. 107-125.
6. Aller, Curtis C., "The Role of Government-Sponsored Training and Retraining Programs," in Unemployment in a Prosperous Economy, edited by W.G. Bowen and F. Harbison, pp. 126-141.
7. Caples, William G., "Industry's Role in Job Creation and Training," in Unemployment in a Prosperous Economy, edited by W.G. Bowen and F. Harbison, pp. 142-152.
8. Rivlin, Alice M. "Critical Issues in the Development of Vocational Education," in Unemployment in a Prosperous Economy, edited by W.G. Bowen and F. Harbison, pp. 153-166.

Precept Topic:

Selective manpower policies -- choices and impacts.

5th WeekLectures:

- Oct. 18 The development of high-level manpower -- managerial, engineering and scientific personnel.
- Oct. 20 Aggregate demand, levels of employment and the profiles of manpower problems.

Assignment:

1. Brown, J. Douglas and Frederick Harbison, High-Talent Manpower for Science and Industry, Part II, "Considerations in the Development of an American Policy," pp. 11-59.
2. National Academy of Sciences, Committee on Utilization of Scientific and Engineering Manpower, Toward Better Utilization of Scientific and Engineering Talent, Chapter II, "Needs and Resources," pp. 3-10.
3. Okun, Arthur M., "The Role of Aggregate Demand in Alleviating Unemployment," in Unemployment in a Prosperous Economy, edited by W.G. Bowen and F. Harbison, pp. 67-81.
4. Killingsworth, Charles C., "Unemployment after the Tax Cut," in Unemployment in a Prosperous Economy, edited by W.G. Bowen and F. Harbison, pp. 82-91.
5. Musgrave, Richard A., "Demand vs. Structural Unemployment," in Unemployment in a Prosperous Economy, edited by W.G. Bowen and F. Harbison, pp. 92-97.

Precept Topic:

Economic forces and their influence on manpower problems.

6th WeekLectures:

- Oct. 25 Issues in National Manpower Policy I
- Oct. 27 Issues in National Manpower Policy II

Assignment:

1. Clark Subcommittee, "Comprehensive Employment and Manpower Policy," in Labor: Readings on Major Issues, edited by Richard A. Lester, pp. 548-581.
2. Lester, Richard A., Manpower Planning in a Free Society, Chapters 6, 7, and 9, pp. 135-191, 207-212.
3. Harbison, Frederick, Critical Issues in Manpower Policy and Practice, Reprint, 14 pp.

Precept Topic:

Choices in evolving manpower policy.

Part II. Collective Bargaining Systems

7th Week

Lectures:

- | | |
|--------|---|
| Nov. 1 | Theories of labor movements and collective relations. |
| Nov. 3 | The American system of organized labor I. |

Assignment:

1. Taft, Philip, Theories of the Labor Movement, Reprint, 38 pp.
2. Dunlop, John T., Industrial Relations Systems, Chapter 1, pp. 1-32 and Chapters 8-9, pp. 307-379.
3. Harbison, Frederick and John R. Coleman, Goals and Strategy in Collective Bargaining, Chapter 1, pp. 1-19.

Precept Topic:

Concepts of unionism and collective bargaining.

8th Week

Lectures:

- Nov. 8 The American system of organized labor II.
- Nov. 10 The concept of collective bargaining and systems of industrial relations.

Assignment:

1. Barbash, Jack, The Practice of Unionism, Chapters 1-3, pp. 1-44.
2. Lester, Richard A., As Unions Mature, Chapters I-X, pp. 3-127.

Precept Topic:

Structure, function and orientation of unions.

9th Week

Lectures:

- Nov. 15 "Non-economic issues" in collective bargaining.
- Nov. 17 Wage determination in collective bargaining.

Assignment:

1. Harbison, F. and J.R. Coleman, Goals and Strategy in Collective Bargaining, Chapters 2-5, pp. 22-144.
2. Additional reference to be assigned.

Precept Topic:

Issues in collective bargaining.

10th Week

November 22 -- .Hour Test

No Lectures

No Assignment

No Precepts

11th WeekLectures:

- Nov. 29 Collective bargaining and technological change.
- Dec. 1 The impacts of collective bargaining.

Assignment:

1. Simons, Henry C., "Some Reflections on Syndicalism," in Labor: Readings on Major Issues, edited by R.A. Lester, pp. 200-209.
2. Friedman, Milton, "Labor Unions and Economic Policy," in Labor and the National Economy, edited by W.G. Bowen, pp. 22-34.
3. Harbison and Coleman, Goals and Strategy in Collective Bargaining, Chapter 6, pp. 145-163.
4. Rees, Albert, "Restraint and National Wage Policy," in Labor and the National Economy, edited by W.G. Bowen, pp. 95-105.
5. Solow, Robert, "The Case Against the Case Against the Guide Lines," in Critical Issues in Employment Policy, edited by Frederick Harbison and Joseph Mooney, 162 pp.
6. Lester, Richard A., As Unions Mature, Chapter XI, pp. 127-140.

Precept Topic:

The impact of collective bargaining on the economy.

12th WeekLectures:

- Dec. 6 National labor relations policy -- bargaining rights of employees in the private and the public sector.
- Dec. 8 National labor relations policy -- strikes affecting the public safety, health and welfare.

Assignment:

1. Dunlop, John T., "Consensus and National Labor Policy," in Labor: Readings on Major Issues, edited by R.A. Lester, pp. 482-495.
2. Shultz, George P., "Strikes: the Private Stake and the Public Interest," in Labor: Readings on Major Issues, edited by R.A. Lester, pp. 460-470.
3. Raskin, A.H., "The Government's Role When Bargaining Breaks Down," in Labor: Readings on Major Issues, edited by R.A. Lester, pp. 471-481.
4. Harbison, F. and Robert C. Spencer, "The Politics of Collective Bargaining: the Post-War Record in Steel," Reprint, 15 pp.
5. Lester, R.A., As Unions Mature, Chapter XII, pp. 141-155.
6. New York State, Governor's Committee on Public Employee Relations, Final Report, pp. 6-54.

Precept Topic:

Critique of U.S. national labor relations policy.

13th Week

Lecture:

Dec. 13 Summary and synthesis.

Assignment:

1. Ackley, Gardner, "Automation: Threat and Promise," in Labor: Readings on Major Issues, edited by Richard A. Lester, pp. 340-344.
2. Sultan, Paul and Paul Prasow, "The Skill Impact of Automation," in Labor: Readings on Major Issues, edited by R.A. Lester, pp. 345-364.
3. Gomberg, William, "The Work Rule Problem and Property Rights in the Job," in Labor: Readings on Major Issues, edited by R.A. Lester, pp. 365-368.

13th Week (continued)

4. National Commission on Technology, Automation, and Economic Progress, Technology and the American Economy, Volume 1, pp. 1-113.

Precept Topic:

Discussion of special projects.

Human Capital and Education

1. Becker, Gary. Human Capital (New York: Nation Bureau of Economic Research, 1964) Ch. I, II and III.
2. Weisbrod, Burton. "Education and Investment in Human Capital", The Journal of Political Economy, Vol. LXX (Supplement: Oct. 1962), pp. 106-122.
3. Mincer, Jacob. "On-the-Job Training Costs, Returns, and Some Implications," The Journal of Political Economy, VLXX (Supplement: Oct. 1962), pp. 50-79.
4. Blaug, M. "An Economic Interpretation of the Private Demand for Education," Economica (May 1966), pp. 166-182.

Human Capital and Externalities

1. Weisbrod, Burton. External Benefits of Public Education (Princeton: Industrial Relations Section, Princeton University, 1964).
2. Williams, Alan. "The Optimal Provision of Public Goods in a System of Local Government," The Journal of Political Economy, Vol. LXXIV (February 1966), pp. 18-33.
3. Buchanan, J. M. and Kafogles, M. L. "A Note on Public Goods Supply," The American Economic Review, Vol. LIII (June 1963), pp. 403-412.
4. Holtmann, A. "A Note of Public Education and Spillovers Through Migration," The Journal of Political Economy (Oct. 1966).

Professional Labor Markets

1. Blank, David and Stigler, George. The Demand and Supply of Scientific Personnel, (New York: National Bureau of Economic Research, 1957), pp. 1-32.
2. Hanson, W. Lee. "The 'Shortage' of Engineers," The Review of Economics and Statistics, Vol. XLIII (August 1961), pp. 251-256.
3. Arrow, K. and Capron, W. "Dynamic Shortages and Price Rises: The Engineer-Scientist Case," Quarterly Journal of Economics (May 1959)
4. Holtman, A. G. "The Supply of Elementary and Secondary School Teachers, and the Principle of Net Advantage" (Mimeo)

Wayne State University
A. G. Holtmann
Econ 0742

Fall, 1966

Professional Labor Markets (Continued)

5. Rayock, E. "The Supply of Physicians' Services," Industrial and Labor Relations Review (January 1964), pp. 221-238.
6. Hansen, W. Lee. "'Shortage' and Investment in Health Manpower," The Economics of Health and Medical Care (Ann Arbor: University of Michigan Press, 1964).
7. Holtmann, A. G. "Another Look at the Supply of Physicians," Industrial and Labor Relations Review (April 1965).
8. Stigler, George. "Information in the Labor Market," J.P.E. VLXX (Supplement: October 1962), pp. 94-105.

Poverty

1. Shoup, Carl. "Investment Through Consumption," Public Finance (), pp.
2. Baumol, W. "Urban Services: Interactions of Public and Private Decisions," (Ed.) Schaller, Howard. Expenditure Decisions in the Urban Community (Washington, D.C.: Resources for the Future, 1963) pp. 1-19.
3. Gallaway, L. E. "The Foundations of the 'War on Poverty,'" Vol. LV (March 1965), pp. 122-130.

Discrimination

1. Becker, Gary. The Economics of Discrimination (The University of Chicago Press), pp. 1-42.
2. Batchelder, A. B. "Decline in the Relative Income of Negro Men," Quarterly Journal of Economics (November 1964), pp. 525-48.
3. _____, _____. "Poverty: The Special Case of the Negro," The American Economic Review: Papers and Proceedings (May 1965), pp. 530-39.

AGH:ah
9/19/66

NEW YORK UNIVERSITY
DEPARTMENT OF SOCIOLOGY

Professor Smigel

Sociology of Occupations

- Adams, Stuart. "Regional Differences in Vertical Mobility in a High Status Occupation," American Sociological Review, 1950, 15.
- Anderson, N. The Hobo: Sociology of the Homeless Man. Chicago: 1923.
- Becker, Howard S. "The Career of the Chicago Public Schoolteacher," American Journal of Sociology, Vol. LVII, 5.
- _____. "The Professional Dance Musician and His Audience," AJS, LVII.
- Becker, Howard S. and A. L. Strauss. "Careers, Personality and Adult Specialization," AJS, LXII, 1956.
- Becker, Howard S. and L. J. Carper. "The Elements of Identification with an Occupation," ASR, 21 (3), June, 1956, 341-348.
- Blaustein, A. P., et al. The American Lawyer. Chicago: U. of Chicago Press, 1954.
- Brown, Ester L. Lawyers, Law Schools, and the Public Service. New York: Russell Sage Foundation, 1948.
- _____. Nursing as a Profession. New York: Russell Sage Foundation, 1946.
- _____. Social Work as a Profession. New York: Russell Sage Foundation, 1942.
- Caplow, Theodore. The Sociology of Work. New York: McGraw-Hill. (paper)
- Caplow, Theodore, and Reece McGee. The Academic Marketplace. New York: 1958.
- Carlin, Jerome E. Lawyers' Ethics. New York: Russell Sage Foundation, 1966.
- _____. Lawyers on Their Own. New Brunswick: Rutgers Univ. Press, 1962.
- Carr-Saunders, A. M., and P. A. Wilson. The Professions. Oxford: 1933.
- Chinoy, Ely. Automobile Workers and the American Dream. Garden City: Doubleday, 1955.
- Chinoy, Ely. "The Tradition of Opportunity and the Aspirations of Automobile Workers," AJS, LVII, 5:453-459, 1952.
- Clark, Robert E. "The Relationship of Schizophrenia to Occupational Income and Occupational Prestige," ASR, June, 1948, 13, 3:325-330.
- Cottrell, Fred W. The Railroader. Stanford University Press, 1940.
- Cressey, P. G. The Taxi-Dance Hall. Chicago, 1932.
- Daedalus, "The Professions," Fall, 1963, Journal of the American Academy of Arts Science.

- Dalton, Melville. "Informal Factors in Career Achievement," AJS, LVI:407-415, 1951.
- Davis, F. (ed.). The Nursing Profession. New York: John Wiley and Sons, 1966.
- Derber, Milton (ed.). The Aged and Society: A Symposium on the Problems of an Aging Population. Champaign, Illinois: Industrial Relations Research Assoc.
- Donovan, Frances R. The Woman Who Waits. Boston: R. G. Badger, 1920.
- Durkheim, Emile. The Division of Labor in Society. The Free Press, 1948.
- Foote, Nelson N. "The Professionalization of Labor in Detroit," AJS, 58, 1953.
- Form, William H. "Toward an Occupational Social Psychology," Journal of Social Psychology, 1946, 24.
- Form, William H. and Delbert C. Miller. "Occupational Career Patterns as a Sociological Instrument," AJS, 1949, 54.
- Freidson, Eliot L. "Client Control and Medical Practice," AJS, 65 (4), January, 1960, 374-382.
- _____. Patients' Views of Medical Practice. New York: Russell Sage Foundation, 1961.
- Ginzberg, Eli. The Labor Leader. New York: MacMillan Co., 1948.
- _____. Occupational Choice. New York: Columbia University Press, 1951.
- Goode, William J. "Community Within a Community: The Professions," ASR, 22, 1957.
- Gouldner, Alvin W. "Attitudes of 'Progressive' Trade-Union Leaders," ASR, 16, 6, 1951.
- Hall, Oswald. "The Stages of a Medical Career," AJS, 1948, 53.
- _____. "Types of Medical Careers," AJS, Vol. LV, 3.
- Hatt, Paul. "Occupation and Social Stratification," AJS, Vol. LV, 6.
- Havemann, Ernest, and Pat S. West. They Went to College. New York: Harcourt Brace and Company, 1952.
- Hayner, Norman S. "Taming the Lumberjack," ASR, April, 1945, Vol. 10, 2.
- Hauser, Philip M. "The Labor Force as a Field of Interest for the Sociologist," ASR, 16, No. 4, 1951.
- Henry, William E. "The Business Executive: The Psychodynamics of a Social Role," AJS, Vol. LIV, 4.
- Hollingshead, August B. "Climbing the Academic Ladder," ASR, 1940, 5.

- Hughes, Everett C. Man and His Work. Glencoe: The Free Press, 1958.
- _____. "Mistakes at Work," Canadian Journal of Eco. 2, Pol. Sci., 1951,
320-327.
- _____. "The Sociological Study of Work: An Editorial Forward,"
AJS, LVII, 1952, 5:423-426.
- _____. "The Study of Occupations," in Sociology Today, (eds.)
Merton, Broom, Cottrell. New York: Basic Books, 1959.
- Hughes, Everett C., et al. 20,000 Nurses Tell Their Story. New York: 1958.
- Huntington, Mary J. "Sociology of Professions, 1945-55," in H. L. Zetterberg (ed.),
Sociology in the United States, UNESCO, 1956.
- Jaffee, A. S. and Charles D. Stewart. Manpower Resources and Utilization. New York:
John Wiley and Sons, Inc., 1951.
- Janowitz, Morris. The Professional Soldier. Glencoe: The Free Press, 1960.
- Kriesberg, Louis. "The Retail Furrier: Concepts of Security and Success," AJS,
LVII, 5.
- McCormack, T. H. "The Druggists' Dilemma: Problems of a Marginal Occupation,"
AJS, LXI, 1956.
- Merton, Robert K. "Bureaucratic Structure and Personality," Social Forces, 1940, 18.
- Merton, Robert K., et al. The Student Physician. Cambridge: Harvard University
Press, 1957, 207-241.
- Miller, O., and W. Form. Industrial Sociology. New York: Harper and Brothers.
Chapters XV, XVI, XVII, XVIII, XIX, XX.
- Mills, C. Wright. The New Men of Power: America's Labor Leaders. New York:
Harcourt, Brace & Co., 1948.
- _____. The Power Elite. New York: 1956.
- _____. White Collar. New York: Oxford University Press, 1951.
- Nimkoff, M. "Opportunities for Prestige in Six Professions," ASR, 8.
- _____. Occupational Factors and Marriage.
- O'Gorman, Hubert J. Lawyers and Matrimonial Cases. Glencoe: The Free Press, 1963.
- Parsons, Talcott. "Social Structure and Dynamic Process: The Case of Modern Medical
Practice," in The Social System (Ch. IX). Glencoe: The Free Press.
- _____. Essays in Sociological Theory. The Professions and Social
Structure, 185-199.

- Reissman, Leonard, and John H. Rohrer. Change and Dilemma in the Nursing Profession. New York: Putnam's, 1957.
- Riesman, David. "Toward an Anthropological Science of Law and the Legal Profession," AJS, LVII, 1951.
- Roe, Anne. The Psychology of Occupations. New York: John Wiley and Sons, 1956.
- Rosenberg, M. Occupations and Values. Glencoe: The Free Press, 1957.
- Rosten, Leo C. The Washington Correspondents. New York: Harcourt Brace & Co., 1937.
- Ruschmeyer, D. "Doctors and Lawyers: A Comment on the Theory of the Professions," The Canadian Review of Sociology and Anthropology, No. 1, 17-30.
- Smigel, Erwin O. "Trends in Occupational Sociology in the United States: A Survey of Postwar Research," ASR, 19, August, 1954.
- _____. The Wall Street Lawyer. The Free Press, 1964.
- Smigel, Erwin O., et al. "Occupational Sociology: A Reexamination," Sociology and Social Research, Vol. 47, No. 4, July, 1963.
- Smith, M. "An Empirical Scale of Prestige Status of Occupations," ASR, 8.
- Sorensen, Clark C. Vocational and Professional Monographs. Bellman Publishing Company, 1947.
- Spann, John Richard (ed.). The Ministry. New York: Abingdon-Cokesbury Press, 1949.
- Strodtbeck, Fred, and M. B. Sussman. "Overtime: The City and the One Year Guaranty," AJS, 61, 1956.
- Sutherland, Edwin H. The Professional Thief. Chicago: University of Chicago Press, 1937.
- Vollmer, H. M., and Donald L. Mills. Professionalization. Prentice-Hall Inc., 1956.
- Waller, W., The Sociology of Teaching. New York: 1932.
- Wardell, Walter. "A Marginal Professional Role: The Chiropractor," Social Forces, Vol. 30, 3.
- Warner, W. L., and J. C. Abegglen. Big Business Leaders in America. New York: 1955.
- Weinberg, Kirson, and Henry Arnod. "The Occupational Culture of the Boxer," AJS, LVII
- Wilensky, Harold. Intellectuals in Labor Unions: Organizational Pressures on Professional Roles. Glencoe: The Free Press, 1956.
- _____. "The Professionalization of Every One," AJS, LXX, Sept., 137-58.
- Wilson, Logan. The Academic Man. New York: Oxford University Press, 1942.
- Wood, Arthur L. "Professional Ethics Among Criminal Lawyers," Social Problems, 70-83.

PRINCETON UNIVERSITY

Department of Sociology

Sociology 540 - Sociology of Work and the Professions
Fall Term 1966-67

Notes

Two books will be assigned and should be purchased:

Vollmer and Mills (eds.), Professionalization, prentice-Hall, 1966
Moore, Conduct of the Corporation. Vintage paperback V-316.

Books and reprints in this calendar are on reserve in the Sociology Graduate Study Room. Many of the reprints have been issued by Bobbs-Merrill and carry the designation "B-M" and a number on this calendar. Students wishing to use their own sets of reprints may order directly from Bobbs-Merrill, 1720 East 38th Street, Indianapolis 6, Indiana, at 25 cents for each reprint.

No examination is scheduled in this course. Each student is expected to do the additional reading and/or field research necessary for the preparation of a course paper of journal article length (15-30 typewritten pages). This paper will be due on or before January 19, 1967.

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September 22 - Occupations and Their Dimensions

Durkheim, preface to 2nd edition of "The Division of Labor," in Vollmer and Mills (eds.), Professionalization, pp. 46-49.
Weber, "The Essentials of Bureaucratic Organization," in Merton et al. (eds.), Reader in Bureaucracy, pp. 18-26 (7560.636)
Schneider, Industrial Sociology, Chapters 1-2 (HM 211.835)

September 29 - Administrative Structures

Moore, Industrial Relations, Chapter IV (HD 6961.M79)
Moore, Conduct of the Corporation, Chapters 2-6 (HD 2741.M78)
Dubin, Human Relations in Administration, Chapters 6, 10-12, 15-18 (HD 6971.D85)
Whyte, Organization Man, Chapters 6-10 (HM 136.W62)
Harbison and Myers, Management in the Industrial World, Chapters 1-3 (HD 21.P94)
Blau, Bureaucracy in Modern Society, Chapters 1, 2, 4 (HM 1.S93)

October 6 - Managerial Types

Moore, Industrial Relations, Chapters V-VI (HD 6961.M79)
Moore, Conduct of the Corporation, Chapters 11-13 (HD 2741.M78)
Dubin, Human Relations in Administration, Chapters 7-9 (HD 6971.D85)
Argyris, Executive Leadership (HD 21.A69)
Sutton et al., American Business Creed, Chapters 1, 5, 15, 16 (HF 5351.A51)
Dalton, Men Who Manage, Chapter 6 (HD 21.D17)

October 13 - The Worker's Environment

- Moore, Industrial Relations, Chapters IX-X, XII (HD 6961.M79)
 Dubin, Human Relations in Administration, Chapter 19 (HD 6971.D85)
 Kornhauser et al., Industrial Conflict, Chapter 26 (HD 5306.K84)
 Walker and Guest, The Man on the Assembly Line, (HD 6331.W15)

October 20 - The Criteria of Professionalism

- Bucher and Strauss, "Professions in Process," in Professionalization,
 pp. 185-195.
 Goode, "Community Within a Community: The Professions,"
 B-M Reprint #S-99
 Kornhauser, Scientists in Industry, Chapter 1 (8016.536)
 Parsons, "The Professions and Social Structure," B-M Reprint #S-219
 Merton, Some Thoughts on the Professions (HT 687.M55)
 Hughes, "Professions," and Barber, "Some Problems in the Sociology of the
 Professions," both in Lynn, The Professions in America (HD 8038.U5D13)
 Wilensky, "The Professionalization of Everyone?" American Journal of
 Sociology, Vol. 70, No. 2, September 1964. pp. 137-158.

October 27 - Professionalization of Occupational Positions

- Barber, "Is American Business Becoming Professionalized?" in Tiryakian
 (ed.), Sociological Theory ... (HM 51.T51)
 Hughes, Men and Their Work, Chapters 10, 11, 13 (HF 5381.H88)
 Parsons, "Some Problems Confronting Sociology as a Profession," in Lipset
 and Smelser (eds.), Sociology (HM 51.L66)
 Beer and Lewis, "Aspects of the Professionalization of Science" and Kimball,
 "Journalism: Art, Craft, or Profession?" both in Lynn, The Professions in
 America (HD 8038.U5D13)

November 3 - Professional Socialization

- Becker and Straus, "Careers, Personality, and Adult Socialization,"
 B-M Reprint #S-11
 Dornbush, "The Military Academy as an Assimilating Institution,"
 B-M Reprint #S-73
 Hall, "The Stages of a Medical Career," in Professionalization, pp. 87-97
 Hughes, Men and Their Work, Chapter 9 (HF 5381.H88)
 Merton et al., The Student Physician (8957.636)
 Wilson, The Academic Man, Chapters II-III (6574.975)
 Wolfle, America's Resources of Specialized Talent, Chapters III-VI (HB258.C73)
 Hazard "Reflections on Four Studies of the Legal Profession," in Law and
 Society (reprints on reserve in Sociology Graduate Study Room)

Also--read papers not previously assigned in Lynn, The Professions in
 America (articles by Freund, Means, Gustafson, Wittlin, Huntington,
 Zinberg, Alonso, Conway, Soderberg, and Fitch). (HD 8038.U5D13)

November 10 - The Professional and His Clients

- Carr-Saunders and Wilson, The Professions, pp. 418-71. (HT 687.C23)
 Freidson, "Client Control and Medical Practice," B-M Reprint #S-87
 Hughes, Men and Their Work, Chapter 8 (HF 5381.H88)
 Merton and Barber, "Sociological Ambivalence," in Tiryakian (ed.).
Sociological Theory (HM 51.T51)
 Parsons and Fox, "Illness, Therapy, and the Modern Urban American
 Family" B-M Reprint #S-221
 Parsons, The Social System, Chapter X (HM 51.P29)

November 17 - The Professional and His Peers: Standards

- "Ethical Standards and Professional Conduct," in Annals of the American
 Academy of Political and Social Science, January 1955 (H1.A4)
 Carr-Saunders and Wilson, The Professions, pp. 394-418. (HT 687.C23)
 Carlin, Lawyer's Ethics, New York: Russell Sage Foundation, 1966.

December 1 - The Professional and His Peers: Jurisdiction

- Smigel, "The Impact of Recruitment on the Organization of the Large Law
 Firm," B-M Reprint #S-273
 Refer back to Lynn, The Professions in America (HD 8038 U. 5 D13)

December 8 - The Professional and His Employer

- Caplow and McGee, The Academic Market Place (6572.235)
 Field, "Structured Strain in the Role of the Soviet Physician,"
 B-M Reprint #S-83
 Kornhauser, Scientists in Industry (8016.536)
 Merton, "Role of the Intellectual in Public Bureaucracy," in his Social
 Theory and Social Structure, rev. ed., Chapter VII (HM51.M55)
 Moore, Conduct of the Corporation, Chapters 9, 13, 18 (HD 2741.M78)
 Wilson, The Academic Man, Chapter IV (6574.975)
 Wilson, "Disjunctive Professes in an Academic Milieu," in Tiryakian (ed.),
Sociological Theory (HM 51.T51)

December 12 - The Professional as Administrator

Refer back to relevant sections of:

- Kornhauser, Scientists in Industry (8016.536)
 Wilson, The Academic Man (6574.975)

January 19, 1967

TERM PAPERS TO BE HANDED IN

SYLLABUS

Sociology 448 (G)

SOCIOLOGY OF OCCUPATIONS

I. NATURE OF THE COURSE

This course deals with the nature, functions, and significance of occupational groupings in modern society; the relationships of work and occupation to other aspects of life; the significance of work for the various forms of social organization; and the impact of change on individual occupations and occupational categories.

II. KEY REFERENCES--BOOKS

- Berger, Peter L. (ed). The Human Shape of Work
 Blau, Peter M. Bureaucracy in Modern Society
 Borow, Henry. Man in a World at Work
 Caplow, Theodore. The Sociology of Work
 Dubin, Robert. Human Relations in Administration (2nd. ed.)
 Dubin, Robert. The World of Work
 Gross, Edward. Work and Society
 Hughes, Everett C. Men and Their Work
 Lewis, Ray and A. Maude. Professional People
 Lipset, S. M. and R. Bendix. Social Mobility in Industrial Society
 Miller, D. C. and W. H. Form. Industrial Sociology
 Mills, C. W. White Collar
 Moore, Wilbert E. Industrial Relations and the Social Order (1951 ed.)
 Nosow, Sigmund and W. H. Form (eds.). Man, Work and Society (Text)
 Whyte, William H. The Organization Man

III. TOPICS AND ASSIGNMENTS

1. Introduction: Occupations as an Area of Sociological Study.

Text, Ch. I and pp. 58-63.

Berger, Ch. 6.

Everett C. Hughes, "The Study of Occupations," in Robert K. Merton and others (eds.), Sociology Today, Ch. 20.

2. The Division of Labor and the Work Environment.

Text, Ch. IV.

Borow, Ch. 7.

Caplow, Introduction and Ch. 1.

Dubin, The World of Work, Ch. 8.

Mills, Introduction and Ch. 4.

Peter F. Drucker, "The Employee Society," A. J. S., LVIII (Jan., 1953), pp.358-63.

James B. McKee, "Status and Power in the Industrial Community: A Comment on Drucker's Thesis," A.J.S., LVIII (Jan., 1953), pp. 364-70.

Dubin, Human Relations in Administration (2nd. ed.), Ch. 7.

Blau, Ch. 2.

Whyte, Ch. 1.

3. Work: Ideologies and Meaning.

Text, Ch. II and pp. 407-410.

Borow, Ch. 2.

Whyte, Ch. 2.

Mills, Ch. 10.

Miller and Form, Ch. 16.

Hughes, Ch. 3.

Elizabeth L. Lyman, "Occupational Differences in the Value Attached to Work," A.J.S., LXI (Sept., 1955), pp. 138-144.

4. Occupational Status and Prestige.

Text, Ch. VIII.

Mills, Ch. 11.

Gross, Ch. 4.

Robert W. Hodge, Paul M. Siegel, and Peter H. Rossi, "Occupational Prestige in the United States, 1925-63," A.J.S., LXX (Nov., 1964), pp. 286-302.

Alex Inkeles and Peter H. Rossi, "National Comparisons of Occupational Prestige," A.J.S., LXI (Jan., 1956), pp. 329-39.

Albeno P. Garbin and Frederick L. Bates, "Occupational Prestige: An Empirical Study of Its Correlates," Social Forces, 40 (December, 1951), pp. 131-36.

Roland J. Pellegrin and Frederick L. Bates, "Congruity and Incongruity of Status Attributes Within Occupations and Work Positions," Social Forces, 38 (Oct., 1959), pp. 23-28.

5. Occupational Choices, Aspirations, Socialization.

Text, pp. 297-306.

Caplow, Ch.9.

Leonard Reissman, "Levels of Aspiration and Social Class," A.S.R., 18 (June 1953), pp. 233-42.

Roland J. Pellegrin and Charles H. Coates, "Executives and Supervisors: Contrasting Definitions of Career Success," Administrative Science Quarterly, I (March, 1957), pp. 506-17.

Harry K. Schwarzweller, "Values and Occupational Choice," S.F., 39 (Dec., 1960), 126-35.

William H. Sewell and Others, "Social Status and Educational and Occupational Aspirations," A.S.R., 22 (Feb., 1957), pp. 67-73.

Howard S. Becker and James W. Carper, "The Development of Identification with an Occupation," A.J.S., LXI (Jan., 1956), pp. 289-98.

Howard S. Becker and Anselm Strauss, "Careers, Personality and Adult Socialization," A.J.S., LXII (Nov., 1956), pp. 253-63.

6. Occupational Mobility.

Text, Ch. X and pp. 307-317.

Elton F. Jackson and Harry J. Crockett, Jr., "Occupational Mobility in the United States: A Point Estimate and Trend Comparison," A.S.R., 29 (Feb., 1964), pp. 5-15.

Caplow, Chs. 3 and 4.

Mills, Ch. 12.

Lipset and Bendix, Ch. 2.

Ely Chinoy, "Social Mobility Trends in the United States," A.S.R., 20 (April, 1955), pp. 180-86.

Charles H. Coates and Roland J. Pellegrin, "Executives and Supervisors: A Situational Theory of Differential Occupational Mobility," Social Forces, 35 (Dec., 1956), pp. 121-26.

7. Occupational Worlds: Blue Collar and White Collar

Text, pp. 69-82, 188-196.

Berger, Ch. 2.

Borow, Ch. 6.

Caplow, Chs. 5 and 6.

Moore, Ch. 10.

Dubin, The World of Work, Ch. 11.

Mills, pp. ix-xx and Chs. 8 and 9.

8. Occupational Worlds: Managerial, Technical, and Professional Occupations.

Text, pp. 63-87 and Ch. VII.

Berger, Ch. 3.

Dubin, Human Relations in Administration, pp. 166-73, 229-33.

Moore, pp. 128-35.

Mills, Chs. 6 and 7.

Hughes, Ch. 10.

Harold L. Wilensky, "The Professionalization of Everyone," A.J.S., LXX (Sept., 1964), pp. 137-158.

Rue Bucher and Anselm Strauss, "Professions in Process," A.J.S., LXVI (Jan., 1961), pp. 325-34.

William J. Goode, "Community Within a Community: The Professions," A.S.R., 22 (April, 1957), pp. 194-200.

9. Some Social Implications of Occupational Statuses.

Text, Ch. XV.

Caplow, Ch. 11.

William A. Glaser, "Doctors and Politics," A.J.S., LXVI (Nov., 1960), pp. 230-45.

Harold L. Wilensky, "Orderly Careers and Social Participation: The Impact of Work History on Social Integration in the Middle Mass," A.S.R., 26 (August, 1961), pp. 521-39.

W. F. Cottrell, "Of Time and the Railroader," A.S.R., 4 (April, 1939), pp. 190-98.

Walter I. Wardwell, "The Extra-Professional Role of the Lawyer," A.J.S., LXI (Jan., 1956), pp. 304-7.

Duncan MacRae, Jr., "Occupations and the Congressional Vote, 1940-1950," A.S.R., 20 (June, 1955), pp. 332-40.

Richard F. Hamilton, "Affluence and the Worker: The German Case," A.J.S., LXXI (Sept., 1965), pp. 144-52.

University of Washington
 Sociology 468
 Reading Assignments - Summer, 1966
 Instructor: Wager

The required books for this course are: Albert J. Reiss, et al., Occupations and Social Status (Free Press of Gencoe); Morris Rosenberg, Occupations and Values (The Free Press). The Reader referred to below is S. Nosow and W. Form, Man, Work, and Society (Basic Books).

I. Work and Occupational Structure

A. The Changing Patterns and Social Significance of Work

Reader, Chapter 2

Wilensky, Harold L., "Work, Careers, and Social Integration," International Social Science Journal, 12 (Fall, 1960), pp. 543-560.

Wilensky, Harold L., "The Uneven Distribution of Leisure: The Impact of Economic Growth on 'Free Time,'" Social Problems, 3 (January, 1956); also in Erwin O. Smigel (ed.), Work and Leisure, pp. 107-145.

Faunce, William A., "Automation and the Division of Labor," Social Problems, 13 (Fall, 1965), pp. 149-159.

Mann, Floyd C., "Psychological and Organizational Impacts," in John T. Dunlop (ed.), Automation and Technological Change, (1962), pp. 43-65.

Berger, Bennett M., "The Sociology of Leisure: Some Suggestions," Industrial Relations, 1 (February, 1962); also in Smigel (ed.), Work and Leisure, pp. 21-40.

B. Labor Markets and Normative Systems

Reader, Chapter 5, pp. 112-117; Nosow; Bell.

Caplow, Theodore, The Sociology of Work, Chapter 7, pp. 142-180.

C. The Assessment of the Occupational Structure: Theoretical Issues and Methodological Problems

Hauser, Philip M., "The Labor Force as a Field of Interest for the Sociologist," ASR, XVI (August, 1951), pp. 530-538.

Reader, Chapter 4.

Hauser, Philip M., "The Labor Force and Gainful Workers Concept, Measurement, and Comparability," AJS, LIV (January, 1949), pp. 338-355.

Gross, Edward, "The Occupational Category in Research," ASR XXIV (October, 1959), pp. 640-649.

Caplow, Theodore, The Sociology of Work, Chapter 3, pp. 59-81.

Morris, R. T. and Murphy, Raymond, "The Situs Dimension in Occupational Structure," ASR, XXIV (April, 1959), pp. 231-239.

Murphy, Raymond and Morris, R. T., "Occupational Situs, Subjective Class Identification, and Political Identification," ASR, XXVI (June, 1961).

Inkeles, Alex and Rossi, Peter H., "National Comparisons of Occupational Prestige," AJS, LXI (January, 1956), pp. 329-339.

Reiss, Albert J., Jr., et al., Occupations and Social Status (entire book).

Recommended:

Gusfield, Joseph R., and Schwartz, Michael, "The Meanings of Occupational Prestige," ASR, XXVIII, 2 (April, 1963), pp. 265-271.

McTanish, Donald G., "A Method for More Reliably Coding Detailed Occupations into Duncan's Socio-Economic Categories," ASR, XXIX (June, 1964), pp. 402-406.

Hodge, Robert W., Siegel, Paul M., and Rossi, Peter H., "Occupational Prestige in the United States, 1925-1963," AJS, LXX (November, 1964), pp. 286-302.

Garbin, A. P., and Bates Frederick L., "Occupational Prestige and Its Correlates: A Re-Examination," Social Forces, 44 (March, 1966), pp. 295-302.

D. Occupational Mobility

Lipset, S., and Bendix, R., Social Mobility in Industrial Society, Chapters 2, 3, 10.

Reader, Chapter 10, pp. 333-336; Warner and Abegglen; Rogoff; Chinoy; Lipset and Rogoff.

Jackson, Elton F., and Crockett, Harry J., Jr., "Occupational Mobility in the United States: A Point Estimate and Trend Comparison," ASR XXIX (February, 1964), pp. 5-15.

Blau, Peter, "Social Mobility and Interpersonal Relations," ASR, XXI (June, 1956), pp. 290-295.

Wilensky, Harold and Edwards, H., "The Skidder: Ideological Adjustments of Downward Mobile Workers," ASR, 24 (April, 1959), pp. 215-231.

Litwak, Eugene, "Occupational Mobility and Extended Family Cohesion," ASR, 25 (February, 1960), pp. 9-21.

Hollingshead, A. B., Ellis, R., and Kirby, E., "Social Mobility and Mental Illness," ASR, XIX (October, 1954), pp. 577-584.

Recommended:

Goldner, Fred H., "Demotion in Industrial Management," ASR, 30 (October, 1965), pp. 714-724.

Tumin, M. M., and Feldman, A. S., "Theory and Measurement of Occupational Mobility," ASR, 22 (June, 1957), pp. 281-288.

Parnes, Herbert S., Research on Labor Mobility: An Appraisal of Research Findings in the United States, Chapters 1, 3, pp. 1-61.

II. Occupational Socialization and Career Development

A. Career: General Treatises

Hughes, Everett C., "Institutional Office and the Person," AJS, XLIII (November, 1937), pp. 404-413.

Becker, Howard S. and Strauss, Anselm L., "Careers, Personality, and Adult Socialization," AJS, LXII (November, 1956), pp. 253-263.

Becker, Howard S. and Carper, J. N., "The Development of Identification With an Occupation," AJS, LI (January, 1956), pp. 289-298.

Benoit-Smullyan, Emile, "Status, Status Types, and Status Interrelations," ASR, 9 (April, 1944), pp. 151-161.

Reader, Chapter 9, Wilensky.

B. Pre-Occupational Commitments and Occupational Choice

Blau, Peter M., "The Flow of Occupational Supply and Recruitment," ASR, 30 (August, 1965), pp. 475-490.

Blau, Peter M., et al., "Occupational Choice: A Conceptual Framework," Industrial and Labor Relations Review, 9 (July, 1956), pp. 533-541.

Katz, Fred E. and Martin, Harry W., "Career Choice Processes," Social Forces, 41 (December, 1962), pp. 149-154.

Rosenberg, Morris, Occupations and Values (entire book).

Rogoff, Natalie, "The Decision to Study Medicine," in Merton, et al., The Student Physician, pp. 109-129.

Recommended:

Nye, F. Ivan and Hoffman, Lois W. (eds.), The Employed Mother in America, Part I, "Why They Work," (includes Chapters 1, 2, 3).

Smith, Robert J., Ramsey, Charles E., and Castillo, Gelia, "Parental Authority and Job Choice: Sex Differences in Three Cultures," AJS, LXIX (September, 1963), pp. 143-149.

C. Similarities and Differences of Socialization into Professional Careers

Brim, Orville G., Jr., and Wheeler, Stanton, Socialization after Childhood: Two Essays. Focus especially on Wheeler's "The Structure of Formally Organized Socialization Settings," pp. 51-113.

Thielens, Wagner, "Some Comparisons of Entrants to Medical and Law School," in Merton, et al., The Student Physician, pp. 131-152.

Meile, Richard J., Performance and Adjustment of First Year Law Students, (Unpublished Ph.D. Dissertation, University of Washington, 1961), pp. 152-164.

Lortie, Dan C., "Laymen to Lawmen: Law School, Careers, and Professional Socialization," Harvard Educational Review, 29 (Fall, 1959), pp. 352-369. (Special Issue on Sociology and Education)

Smigel, Erwin O., "The Impact of Recruitment on the Organization of the Large Law Firm," ASR, 25 (February, 1960), pp. 56-65.

Ladinsky, Jack, "Careers of Lawyers, Law Practice, and Legal Institutions," ASR, XXVIII (February, 1963), pp. 47-54.

Reisman, David, "Law and Sociology: Recruitment, Training, and Collegueship," Stanford Law Review, 9 (July, 1957); also in William M. Evan (ed.), Law and Sociology.

Warkov, Seymour, "Employment Expectations of Law Students," The Sociological Quarterly, 6 (Summer, 1965), pp. 222-232.

Recommended:

Warkov, Seymour, Lawyers in the Making: The 1961 Entrants to American Law Schools. (National Opinion Research Center, Report #96, 1963).

Carlin, J. A., Lawyers on Their Own: A Study of Individual Practitioners in Chicago. (New Brunswick: Rutgers University Press, 1962), 234 pp.

Becker, Howard S. and Geer, B., "The Fate of Idealism in Medical School," ASR, 23 (February, 1958), pp. 50-55.

Fox, Renee C., "Training for Uncertainty," in Merton, et al., The Student Physician, pp. 207-241.

Kendall, Patricia L. and Selvin, Hanan, "Tendencies Toward Specialization in Medical Training," in Merton, et al., The Student Physician, pp. 153-174.

Huntington, Mary Jean, "The Development of a Professional Self-Image," in Merton, et al., The Student Physician, pp. 179-187.

Seeman, Melvin, and Evans, John W., "Apprenticeship and Attitude Change," AJS, LXVII (January, 1962), pp. 365-378.

Turk Herman, "Social Cohesion Through Variant Values: Evidence from Medical Role Relations," ASR, 28 (February, 1963), pp. 28-37.

Recommended:

Hughes, Everett; Strauss, Anselm; and Becker, Howard, Boys in White.

McElrath, Dennis, "Perspective and Participation of Physicians in Prepaid Group Practice," ASR, 26 (August, 1961), pp. 596-607.

D. Extra-Occupational Activity and Career Success

Wilensky, Harold L., "The Moonlighter: A Product of Relative Deprivation," Industrial Relations, 3 (October, 1963), pp. 105-121.

Dalton, Melville, "Informal Factors in Career Achievement," AJS, LVI (March, 1951), pp. 407-415.

Reader, Chapter 15, Ross, Dyer, William H. Whyte, Jr.

Recommended:

Wilensky, Harold L., "Orderly Careers and Social Participation: The Impact of Work History on Social Integration in the Middle Mass," ASR, 26 (August, 1961), pp. 521-539.

Form, William H. and Miller, Delbert C., "Occupational Career Patterns as a Sociological Instrument," AJS, LIV (1949).

Fichter, J. H., Religion As An Occupation, (South Bend, Indiana: University of Notre Dame Press, 1961), 259 pp.

Anonymous, "The Making of an Infantryman," AJS, LI (March, 1946), pp. 376-379.

Bidwell, Charles E., "The Young Professional in the Army: A Study of Occupational Identity," ASR, 26 (June, 1961).

Janowitz, Morris, The Professional Soldier, (Glencoe, Illinois: The Free Press, 1960).

Reissman, Leonard, "Life Careers, Power, and the Professions," ASR, 21 (April, 1956), pp. 215-221.

Wilson, Logan, The Academic Man, (New York: Oxford University Press, 1942).

Caplow, Theodore and McKee, Reece, The Academic Marketplace, (New York: Basic Books, Inc., 1958).

Kubie, Lawrence S., "Some Unresolved Problems of the Scientific Career," American Scientist, 42 (January, 1954), pp. 104-112.

Merton, Robert K., "Priorities in Scientific Discovery: A Chapter in the Sociology of Science," ASR, 22 (December, 1957), pp. 635-659.

Kornhauser, William, Scientists in Industry.

Merton, Robert K., Chapter VII, "Role of the Intellectual in Public Bureaucracy," in his Social Theory and Social Structure, pp. 207-224.

Wilensky, Harold L., Chapter 2 and 7, in his Intellectuals in Labor Unions.

Becker, Howard S., "The Professional Dance Musician and His Audience," AJS, LVII.

Westby, David L., "The Career Experience of the Symphony Musician," Social Forces, 38 (March, 1960), pp. 223-230.

Hall, Oswald, "The Stages of a Medical Career," AJS, LIII (March, 1948), pp. 327-336.

Hall, Oswald, "Types of Medical Careers," AJS, LV (1950).

Hughes, Everett C., "The Making of a Physician," in his Men and Their Work.

Carper, J. and Becker, H. S., "Adjustment to Conflicting Expectations in the Development of Identification With an Occupation," Social Forces, XXXVI (October, 1957), pp. 51-56.

III. The Institutional System, Control of Occupational Behavior, and Social Change

A. Collegueship and the Occupational Community: Cohesion and Potential Strains

Gross, Edward, Chapter 6, "The Occupational Colleague Group and the Work Group," in his Work and Society, pp. 222-241.

Wilensky and Lebeaux, Chapter 11, section on "Norms Governing Colleague Relations," in their Industrial Society and Social Welfare.

Goode, William J., "Community Within a Community: The Professions," ASR, 22 (April, 1957), pp. 194-200.

Hughes, Everett C., "Mistakes at Work," Canadian Journal of Economics and Political Science, XVII, (1951), pp. 320-327.

Collins, Orvis, "Ethnic Behavior in Industry: Sponsorship and Rejection in a New England Factory," AJS, LI (January, 1946), pp. 292-298.

Lipset, Seymour M., Trow, Martin A., and Coleman, James S., Chapter 6, "Determinants of the Occupational Community: I," pp. 106-126; Chapter 7, "Determinants of the Occupational Community: II," pp. 127-140, in their Union Democracy.

Hall, Oswald, "The Informal Organization of the Medical Profession," Canadian Journal of Economics and Political Science, XII (February, 1946), pp. 30-44.

Reader, Chapter 9, Katz.

Menzel, Herbert and Katz, Elihu, "Social Relations and Innovation in the Medical Profession. The Epidemiology of a New Drug," Public Opinion Quarterly, XIX (1955-56), pp. 337-352.

Smith, Harvey L., "Contingencies of Professional Differentiation," AJS, LXIII (January, 1958), pp. 410-414.

Bucher, Rue and Strauss, Anselm "Professions in Process," AJS, LXVI (January, 1961), pp. 325-334.

Wilensky, Harold L., "The Professionalization of Everyone?" AJS, LXX (September, 1964), pp. 137-158.

"Professionals and Complex Organizations," in Howard M. Vollmer and Donald L. Mills (eds.), Professionalization, pp. 264-294.

B. The Occupational and Professional Association: History, Membership, Function, and Relationship to Other Systems

Reader, Chapter 6, Readings 1 through 4, pp. 157-188.

Foote, Nelson, "The Professionalization of Labor in Detroit," AJS, LVIII (January, 1953), pp. 371-380.

Merton, Robert K., "The Functions of the Professional Association," American Journal of Nursing.

Landis, Benson Y. (ed.), "Ethical Standards and Professional Conduct," The Annals of the American Academy of Political and Social Science, Vol. 297 (January, 1955), pp. 1-199. Familiarize yourself with the codes of ethics of any two occupational groups among the several which are included in this issue. Article also includes a discussion of the question "What is a Profession?"

"Codes of Conduct," in Vollmer and Mills (eds.), Professionalization, pp. 129-144.

"Relations Among Occupational Groups," in Vollmer and Mills (eds.), Professionalization, pp. 227-263.

Parsons, Talcott, "Some Problems Confronting Sociology as a Profession," ASR, 24 (August, 1959), pp. 547-559.

Goode, William J., "Encroachment, Charlatanism, and the Emerging Profession: Psychology, Sociology, and Medicine," ASR, 25 (December, 1960), pp. 902-914.

Reader, Chapter 12, pp. 403-407; 436-440; Chapter 15 (Hughes).

Recommended:

- Carr-Saunders, A. M., and Wilson, P. A., Part III including "Constitution," pp. 319-364; "Education," pp. 365-385; "Reform of the System of Entry into the Professions," pp. 386-393; "Professional Discipline," pp. 394-417; "Professional Conduct," pp. 418-445; "Economic Problems," pp. 446-470; "The Professions and the Public," pp. 471-489, in their The Professions.
- Caplow, Theodore, Chapter 5, "Occupational Institutions," pp. 100-123; Chapter 6, "Occupational Ideologies," pp. 124-141, in his The Sociology of Work.
- Merton, Robert K., et al., "The Spectrum of Medical Values and Norms," in The Student Physician, pp. 71-79.
- Simmel, Georg, "The Secret and the Secret Society," in his The Sociology of Georg Simmel (translated by Kurt Wolff).
- Marshall, T. H., "The Recent History of Professionalism in Relation to Social Structure and Social Policy," Canadian Journal of Economics and Political Science, V (August, 1939), pp. 325-340.
- Glaser, William A., "Doctors and Politics," AJS, LXVI (November, 1960), pp. 230-245.
- Lewis, Roy and Maude, Angus, Professional People in England, (Cambridge, Mass.: Harvard University Press, 1953).
- "The Professions," Daedalus, (Fall, 1963), Entire Issue.

Sociology G402lx - Social Aspects of the Working Force

Outline:

I. Concepts and definitions

Readings: Jaffe and Stewart, Manpower Resources and Utilization, Part I
Measuring Employment and Unemployment, Chapters I, II

II. Data collection procedures: U.S., including Current Population Survey, BLS establishment reporting, Unemployment Insurance reporting, Old Age and Survivors Insurance reporting; foreign procedures

Readings: Jaffe and Stewart, Part I
Measuring Employment and Unemployment, Chapters III-VIII
Concepts and Methods Used in Household Statistics on Employment and Unemployment for the Current Population Survey
How the Government Measures Unemployment
Jaffe and Quesada, "Assessment of Underemployment in Non-Agricultural Industries of the Less Developed Countries"

III. The U.S. labor force, descriptionsReadings:1. Background

Economic Forces in the United States
"Jobs in the New York-Northeastern New Jersey Area"
"Manpower Planning and Control"
Brief History of the American Labor Movement
"Consumer Expenditures and Income, Urban United States, 1960-61"
"Consumer Expenditures and Income, Total United States, Urban and Rural, 1960-61"

2. Employment and unemployment

"Multiple Jobholders in May 1965"
"Work Experience of the Population in 1964"
"The Unemployed: Why They Started Looking for Work"
Manpower Report of the President, 1966, Chapters 2, 4, 5

3. Earnings

"A Ranking of U.S. Occupations by Earnings"
"Geographic Study of Employment and Earnings from 1939 to 1964"

4. Women

"Marital and Family Characteristics of Workers in March 1964"
"Why Women Start and Stop Working: A Study in Mobility"
1965 Handbook on Women Workers

A. J. Jaffe

III. The U.S. labor force, descriptions (continued)5. Education

"Educational Attainment of Workers"

6. Negro"A Century of Change: Negroes in the U.S. Economy,
1860-1960"7. YouthManpower Report of the President, Chapter 68. Farm workersManpower Report of the President, Chapter 79. Social SecuritySocial Security Programs in the United States
Social Insurance, Some Problems for Statistical Research10. Future"A Look at Tomorrow's Jobs"
"Estimated Need for Skilled Workers, 1965-75"
"Labor Force Projections for 1970-80"
"Occupational Outlook in the Mid-Sixties"
Manpower Report of the President, Chapter 3IV. Technology and the working forceReadings: Jaffe and Stewart, Chapters 14 and 15
Mangum, The Manpower Revolution, esp. pp. 208-240 and
401ff.
Bright, Automation and Management, Chapters 12 and 13
Jaffe, "Education and Automation"
Report of the President on AutomationV. Mobility of the working forceReadings: Palmer, Labor Mobility in 6 Cities
Parne, Research on Labor Mobility
Jaffe and Carleton, Occupational Mobility in the United
States, 1930-1960
Mobility and Worker Adaptation to Economic Change in the
United States
"Job Mobility in 1961"
"Job Tenure of American Workers, January 1963"
"Geographic Mobility and Employment Status, March 1962-
March 1963"
Jaffe, "From New Entries to Retirement"

A. J. Jaffe

Sociology G4021x - 3.

VI. The working force in underdeveloped areas

Readings: Jaffe and Stewart, Chapter 21
 Jaffe, People, Jobs and Economic Development
 Jaffe, "A Survey of Underemployment in Puerto Rico"
 Jaffe, "Economic Development, Full Employment, and Underemployment"
 Jaffe, "Economic Development and the Growth of the Male Working Force of Panama, 1950-1960"
 Jaffe and Froomkin, "Economic Development and Jobs - A Comparison of Japan and Panama, 1950 to 1960"

VII. Social aspects of the working force

Readings: Jaffe and Stewart, Chapters 18, 19, 20

NOTE: The articles in the Monthly Labor Review and International Labour Review (available in the Business Library) may cover any of these topics, as well as other aspects of the working force which we are not attempting to include in this course.

BIBLIOGRAPHY

The following books and pamphlets are on reserve in Burgess-Carpenter Library (4th floor, Butler):

- Bright, James R. Automation and Management. Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1958.
- Jaffe, A. J. People, Jobs and Economic Development. Glencoe: Free Press, 1959.
- Jaffe, A. J., and Carleton, R. O. Occupational Mobility in the United States, 1930-1960. New York: King's Crown Press, 1954.
- Jaffe, A. J., and Stewart, C. D. Manpower Resources and Utilization. New York: John Wiley & Sons, 1951. (This is out of print but second-hand copies may be available.)
- Mangum, Garth L., ed. The Manpower Revolution: Its Policy Consequences. Garden City: Doubleday & Co., 1965. (paperback)
- "Mobility and Worker Adaptation to Economic Change in the United States." Manpower Research Bulletin No. 1, July 1963. Washington: Office of Manpower, Automation and Training, U.S. Department of Labor.
- Palmer, Gladys L. Labor Mobility in 6 Cities. New York: Social Science Research Council, 1954.
- Parnes, Herbert S. Research on Labor Mobility. New York: Social Science Research Council, 1954.
- President's Committee to Appraise Employment and Unemployment Statistics. Measuring Employment and Unemployment. Washington: U. S. Government Printing Office, 1962.

1966-67

Sociology 328: Sociology of Professions and Other Occupations

T.-Th. 10:45-12 - Todd 102

<u>Date</u>	<u>Topic</u>	<u>References</u>
Th.-Sept. 29	Introduction	Lecture
T.-Oct. 4	The Meaning of Work	Mills, Chapter 10 Nosow & Form, Chap. II: 1,2
Th.-Oct. 6	Occupational Implications of Scientific and Technological Developments	Michael, Chapter 10 Technology and the American Economy, Chapters 1 and 10
T.-Oct. 11	Occupational Requirements of)	Miller & Form, pp.105-111,
Th.-Oct. 13	Work Organizations)	144-159. Mills, Chapter 5
T.-Oct. 18	Occupational Status Levels	Bendix & Lipset pp. 190-202, 411-425
Th.-Oct. 20	(WLS in Portland) Special Assignment	
T.-Oct. 25	Labor Force, Employment and Unemployment	Borow, Chapter 7
Th.Oct..27	Occupational Trends and Prospects	Occupational Outlook Handbook pp. 10-25, 280-284, 305-6, 331-333, 360-365, 792-795, 808-9.
T.-Nov. 1	Scientific and Professional Occupations	Henry (ed.) H. S. Becker's article.
Th.-Nov. 3	" " "	Mills, Chapters 6 & 7
T.-Nov. 8	Examination	
Th.-Nov. 10	Education and Occupation	Halsey, <u>et al.</u> Chapters 1, 3, 7, 24
T.-Nov. 15	Education and Occupation	Halsey, <u>et al.</u> Chapters 12, 14, 15.
Th.-Nov. 17	Occupational Mobility	Nosow & Form Chapter X: 1, 2, 3.
T.-Nov. 22	Occupational Mobility	Nosow & Form Chapter X: 4.5 Bendix and Lipset pp. 454-464
Th.-Nov. 25	Thanksgiving	

<u>Date</u>	<u>Topic</u>	<u>References</u>
T.-Nov. 29	Educational and Occupational Aspirations	
Th.-Dec. 1	Occupational Choice	
T.-Dec. 6	Occupational Associations	Nosow & Form Chapter VI: 1, 2
Th.-Dec. 8	" "	Nosow & Form, Chap. VI:3,4 Mills, Chapter 14
T.-Dec. 13	Career Patterns and Strategies	Glaser monograph pp. 1-136
Th.-Dec. 15	" " "	Janowitz, Part III; Mills, Chapter 12
T.-Dec. 20	Examination'	
	Christmas Vacation begining at noon Wednesday, December 21 and ends noon Wednesday, January 4.	
Th-Jan. 5	Occupations of Women	
T.-Jan. 10	Student Reports on Occupational Monographs	
Th.-Jan. 12	Student Reports on Occupational Monographs	
T.-Jan 17	Student Reports on Occupational Monographs	
Th.-Jan. 19	Student Reports on Occupational Monographs	
T.-Jan. 24	Student Reports on Occupational Monographs	
Th.-Jan. 26	Student Reports on Occupational Monographs	
	Final Examination	1:00 to 3:00 P.M. Tuesday January 31, 1967

Paperback Books to be Purchased by Students

Barney G. Glaser, Organizational Scientists: Their Professional Careers, (The Bobbs-Merrill Company, Inc., 1964)

C. Wright Mills, White Collar, (New York: Oxford University Press, 1956)

Morris Janowitz, The Professional Soldier (Glencoe, Illinois: The Free Press, 1960).

Basic Reference BooksOn 2-hour reserve

Bendix, R. and S. Lipset (eds.) Class, Status and Power.

Borow, Henry (ed.) Man in a World of Work.

Etzioni, Amatai, Complex Organizations.

Henry, N. (ed.) Education for the Professions.

Hughes, Everett C. Men and Their Work

Michael, Donald L., The Next Generation.

Miller, Delbert C. & William H. Form, Industrial Sociology.

Nosow, S and W. H. Form (eds.) Man, Work and Society

Reiss, A. J., Jr., Occupations and Social Status.

Technology and the American Economy, Report of the National Commission of
Technology Automation and Economic Progress (Washington, D. C., GPO) Jan., 1966.

On 3-day reserve

Halsey, A. H., Jean Floud and C. A. Anderson, Education, Economy, and Society.

In General Reference Section, Social Science Library

Occupational Handbook, U. S. Department of Labor

Pennsylvania State University
 SOCIOLOGY 455: Occupations and Professions
 Text: Caplow--The Sociology of Work

Kirk Dansereau

<u>Assigned Reading</u>	<u>Subject</u>	<u>Text Chapter</u>
Salz; Mills	1. Backgrounds of Occupational Sociology	Introduction
Roher & Sherif Friedman, Baker Miller & Form	2. Meaning of Work and Common Themes	Ch. 1--The Assignment of Work
	3. Occupational Distribution	Appendix--Description of American Labor Force
Rogoff Taussig & Joslyn Jaffe Warner & Abegglen	4. Occupational Mobility	Ch. 3 & 4--Vertical Mobility & Other Mobilities
Durkheim Hiller Oral Report	5. Occupational Organization and Structure	Ch. 5--Occupational Institutions Ch. 8--The Labor Union as an Occupational Association Ch. 12--Working Conditions
	6. The Ranking of Occupations	Ch. 2--Measurement of Occupational Status
Miller & Form Oral Report	7. Work Periods	Ch. 6--Occupational Ideologies Ch. 7--Sociology of the Labor Market Ch. 9--Vocational Choice
Mills Journal Articles	8. Trends in Selected Occupations	Ch. 10--Occupations of Women Ch. 11--Occupations & Family
	If Time	
	1. Bakke, E. Wight, <u>Citizens Without Work</u> (Browse)	
	2. Durkheim, Emile, <u>On the Division of Labor in Society</u> (Preface to 2nd edition)	
	3. Friedman, E. A., <u>The Meaning of Work and Retirement</u> (Browse)	
	4. Hiller, E. T., <u>Social Relations and Structures</u> (Ch. 22, 30, and 33)	
	5. Jaffe, A. J., <u>Occupational Mobility in the U.S. 1930-1960</u> (Browse)	
	6. Miller, D.C. & W.H. Form, <u>Industrial Sociology</u> (pp. 125-139 and one chapter from 15-20)	
	7. Mills C. Wright, <u>White Collar</u> (Ch. 10 and 4-9)	
	8. Rogoff, Natalie, <u>Occupational Mobility</u> (Browse)	
	9. Taussig, F. W. & C. S. Joslyn, <u>American Business Leaders</u> (Browse)	
	10. Warner, W. Lloyd & J.C. Abegglen, <u>Occupational Mobility in American Business and Industry</u> (Browse)	
	11. Salz, <u>Encyl. of the Soc. Sc., "Occupations."</u>	

Graduate students will be expected to familiarize themselves with the work of Jaffe, Rogoff, Taussig and Joslyn, and Warner and Abegglen.

Oral reports will deal with (1) an occupational association (2) a code of ethics, with emphasis on the provisions which: (a) protect the public from the practitioner (b) protect the practitioner from the public (3) protect practitioners from each other.

SOCIOLOGY 455: Occupations and Professions (continued)

Term Report:

Each student will be expected to prepare a term report dealing with some occupation(s) of his own interest, approved by the instructor. These reports should embody the student's own research efforts and/or the most recent writings related to the subject of the paper.

W. A. Faunce
Office - 1B Marshall Hall
Office Hours: 10:30 to 11:30 MWF

Sociology 430
Sociology of Occupations

Course Outline

First Five Weeks

I. Orientations to Work

- a. Variability in the function and meaning of work
- b. Occupational involvement and self-esteem testing
- c. Occupational status and work values
- d. Work groups and work values
- e. Work and leisure

Assignment: Chapters I, II, VIII, XIII

II. Occupational Profiles: The Social Organization of Work

- a. Business Elite
- b. White collar
- c. Blue collar
- d. Farmer
- e. Marginal and unemployed
- f. Professional

Assignment: Chapters XI, XII, XIV, VII

Second Five Weeks

III. Occupational Mobility and Career Patterns

- a. Types of mobility
- b. Correlates of mobility
- c. From school to work
- d. Career patterns
- e. From work to retirement

Assignment: Chapters IX, X

IV. Our Changing Occupational Structure

- a. Direction of change
- b. Factors producing change
- c. Effects of change
- d. Atoms, automation, and the world of work

Assignment: Chapters III, IV, V

TEXT: Sigmund and William H. Form, Man, Work and Society, Basic Books, Inc., N. Y., 1962.

Purdue University
Robert K. Bain
Sociology 520
The Sociology of Occupations and Professions

1. Introduction; Work in Other Times and Places

Everett C. Hughes, "The Sociological Study of Work: An Editorial Foreward,"
AJS 57:5 (March, 1952), pp. 423-426.

**Gross, Work and Society, Chapter 1 "The Area of Study" and Chapter 2, "Work
in Other Societies: An Approach to Analysis."

Adam Curle, "Incentives to Work: An Anthropological Appraisal," Human
Relations 1 (January, 1949), pp. 41- .

Adriano Tilgher, "Work Through the Ages," abridged from Work: What It Has
Meant to Men Through the Ages, translated from the Italian by Dorothy Canfield
Fisher, in Nosow and Form pp. 11-24.

Arthur Salz, "Occupations: Theory and History" Encyclopedia of the Social
Sciences, Vols. 11-12, pp. 424-428; abridged as "Occupations in Their
Historical Perspective" in Nosow and Form, pp. 58-63.

Ann Roe, The Psychology of Occupations (New York: John Wiley, 1956), Chapter
2, "Occupations in Three Societies."

William Foote Whyte, Men at Work (Homewood: The Dorsey Press, Inc., 1961),
Chapter 4, "The Work World in Intercultural Perspective."

2. The "Meaning of Work" and Job Satisfaction

Daniel Bell, The End of Ideology, Chapter 12, "Work and Its Discontents."
A philosophical essay.

E. A. Friedmann and Robert J. Havighurst, "Work and Retirement," abridged
from The Meaning of Work and Retirement, in Nosow and Form, pp. 41-55.

David Rissman and Warner Bloomberg, Jr., "Work and Leisure: Fusion or Polarity?"
abridged from article of same title in Arensberg, editor, Research in Industrial
Human Relations; in Nosow and Form, pp. 35-41.

Henri de Man, Joy in Work. New York: Henry Holt, 1929. Discussion of
technological, economic, and social factors affecting "joy in work", by a
Belgian whose research methods were "case histories" and personal documents
submitted by German workers to the author in the 1920's.

Robert S. Weiss and Robert J. Kahn, "Definitions of Work and Occupation,"
Social Problems 8:2 (Fall, 1960), pp. 142-151.

Nancy C. Morse and Robert S. Weiss, "The Function and Meaning of Work and the
Job," ASR 20:2 (April, 1955), pp. 191-198; abridged in Nosow and Form, pp. 29-35.

Robert Blauner, "Work Satisfaction and Industrial Trends in Modern Society in
Galenson and Lipset, eds, Labor and Trade Unionism (New York: John Wiley and
Sons, 1960), pp. 339-360. Summarizes studies showing that the higher the status
of the occupation, the higher the job satisfaction; explains this in terms of
occupational prestige, which in turn encompasses such factors as autonomy as
to time, work pace, etc.; freedom from close supervision; integrated work
group; occupational communities.

J. Walker and R. Marriott, "A Study of Some Attitudes to Factory Work,"
Occupational Psychology 25:3 (July, 1951), pp. 181-191. Interviews with
workers in 3 factories reveal more dissatisfaction with machine-paced and
repetitive work.

Leonard I. Pearlin, "Alienation From Work: A Study of Nursing Personnel,"
ASR 27:3 (June, 1962), pp. 314-326.

William H. Form and Joseph A. Geschwonder, "Social Reference Basis of Job
Satisfaction: The Case of Manual Workers," ASR 27:2 (April, 1962), pp.
228-237.

Elizabeth L. Lyman, "Occupational Differences in the Value Attached to Work,"
AJS 61:2 (September, 1955), pp. 138-144.

Alex Inkeles, "Industrial Man: The Relation of Status to Experience, Per-
ception, and Value," AJS 66:1 (July, 1960), pp. 1-31.

3. Occupational Status or Prestige: Theories and Empirical Findings

A. The Davis-Moore Theory and Its Critics

**Kingsley Davis and Wilbert E. Moore, "Some Principles of Stratification," ASR 10:2 (April, 1945), pp. 242-248; reprinted in Lewis A. Coser and Bernard Rosenberg, editors, Sociological Theory: A Book of Readings, pp. 408-420; also reprinted in abridged form in Nosow & Form, pp. 375-383.

Kingsley Davis, Human Society (New York: Macmillan Co., 1948), pages 366-377 sets forth a slightly revised version of the Davis-Moore theory; attempts to answer some of the objections of its critics.

Melvin M. Tumin, "Some Principles of Stratification: A Critical Analysis," ASR 18:4 (August, 1953), pp. 387-394; reprinted in Coser and Rosenberg, Sociological Theory, pp. 420-431. (If, as is preferable, you consult the original source for this article, see also Davis's "Reply" to Tumin (pp. 394-397), Moore's "Comment" (p. 397)).

Melvin M. Tumin, "Rewards and Task-Orientations," ASR 20:4 (August, 1955), pp. 419-423. Still plugging away at Davis and Moore, Tumin says that any gains society gets by differentiating rewards by occupational position are off set by losses in productivity; draws a poor analogy with parental roles to make his point; concludes by proposing a society which rewards according to task performance.

Walter Buckley, "Social Stratification and the Functional Theory of Social Differentiation," ASR 23:4 (August, 1958), pp. 369-375.

Kingsley Davis, "The Abominable Heresy: A Reply to Dr. Buckley;" Marion J. Levy, Jr., "Functionalism: A Reply to Dr. Buckley;" and Walter Buckley, "A Rejoinder to Functionalists Dr. Davis and Dr. Levy," in ASR 24:1 (Feb. 1959), pp. 82-86.

Richard D. Schwartz, "Functional Alternatives to Inequality," ASR 20:4 (August, 1955), pp. 424-430.

Richard L. Simpson, "A Modification of the Functional Theory of Social Stratification," SF 35:2 (December, 1956), pp. 132-137.

Nelson Foote and Paul K. Hatt, "Social Mobility and Economic Advancement," American Economic Review 43: (May, 1953), pp. 364-378.

Dennis H. Wrong, "The Functional Theory of Stratification: Some Neglected Considerations," ASR 24:6 (December, 1959), pp. 772-782.

Wilbert E. Moore, "But Some Are More Equal Than Others," ASR 28:1 (February, 1963), pp. 13-18. Redefense of Davis-Moore theory.

Melvin Tumin, "On Inequality," ASR 28:1 (February, 1963), pp. 19-26, and Wilbert E. Moore, "Rejoinder," pp. 26-28.

B. Methods of Studying Occupational Prestige and Some Additional Theories of Occupational Prestige or Status

Gross, Work & Society, Chapter 4 "The Occupational Status and Authority System" to P. 128 top.

Caplow, See Work, Chapter 2 Measuring Occupational Status"

Harry M. Johnson, Sociology: A Systematic Introduction, pp. 485-493. Includes a discussion of "primary factors affecting occupational prestige."

Edward Gross, "The Occupational Variable as a Research Category," ASR 24:5 (October, 1959), pp. 640-649.

Paul K. Hatt, "Occupation and Social Stratification," AJS 55:6 (May, 1950), pp. 533-543; abridged in Nosow and Form, pp. 238-249.

Richard T. Morris and Raymond J. Murphy, "The Situs Dimension in Occupational Structure," ASR 24:2 (April, 1959), pp. 231-239.

Peter H. Rossi and Alex Inkeles, "Multidimensional Ratings of Occupations," Sociometry 20: (September, 1957), pp. .

Salomon Rettig and Frank W. Jacobson, "Status Overestimation, Objective Status, and Job Satisfaction Among Professions," ASR 23:1 (February, 1958), pp. 75-81.

Werner Cohn, "Social Status and Ambivalence," ASR 25:4 (August, 1960), pp. 508-513. This is a very unusual theory.

Richard L. Simpson and Ida Harper Simpson, "Correlates and Estimation of Occupational Prestige," AJS 66:2 (September, 1960), pp. 135-140.

Albeno P. Garbin and Frederick L. Bates, "Occupational Prestige: An Empirical Study of its Correlates," SF 40:2 (December, 1961), pp. 131-136.

William A. Gamson and Howard Schuman, "Some Undercurrents in the Prestige of Physicians," AJS 68:4 (January, 1963), pp. 463-470. Individuals ranking doctors highest in prestige are slightly less apt to be generally favorable to the occupation than persons ranking physicians somewhat lower in prestige:

Louis Kriesberg, "The Bases of Occupational Prestige: The Case of Dentists," ASR 27:2 (April, 1962), pp. 238-244.

Robert W. Hodge, "The Status Consistency of Occupational Groups," ASR 27:3 (June, 1962), pp. 336-343.

Stanley H. Chapman, "The Minister: Professional Man of the Church," SF 23:2 (December, 1944), pp. 203-206, Discusses fall in status of the clergy.

Albert J. Reiss, Jr., Occupations and Social Status. New York: Free Press of Glencoe, 1961. Based on the 1947 NORC study.

C. Empirical Studies of Occupational Prestige - And a Little Additional Theory

(Note: It would be very desirable for these readings to be reported on as a whole topic. Any takers?)

Mapheus Smith, "An Empirical Scale of Prestige Status of Occupations," ASR 8:2 (April, 1943), pp. 185-192; reprinted in Nosow and Form, pp. 269-272.

Maethel E. Deeg and Donald G. Patterson, "Changes in Social Status of Occupations," Occupations 25:4 (January, 1947), pp. 205-207.

Paul K. Hatt and Cecil C. North, "Jobs and Occupations: A Popular Evaluation," Opinion News 9: (September 1, 1947), pp. 1-13; reprinted in Bendix and Lipset, eds., Class, Status, and Power, pp. ; reprinted in abridged form in Nosow and Form, pp. 277-283; and the table showing the findings (only) is presented in Broom and Selznick, Sociology, 2nd Edition, p. 187.

John Hall and D. Caradog Jones, "Social Grading of Occupations," BJS 1:1 (March, 1950), pp. 31-55.

A. F. Davies, "Prestige of Occupations," BJS 3: (June, 1952), pp. 134-147; reprinted in Nosow and Form, pp. 255-269. Review, evaluation, and criticism of previous studies of prestige ranking of occupations.

A. A. Congalton, "Social Grading of Occupations in New Zealand," BJS 4:1 (March, 1953), pp. 45-59.

Ronald Taft, "The Social Grading of Occupations in Australia," BJS 4:2 (June, 1953), pp. 181-188. Makes comparison with Hall & Jones' findings.

Joel B. Montague and Bernard Pustilnik, "Prestige Ranking of Occupations in an American City With Reference to Hall's and Jones' Study," BJS 5:2 (June, 1954), pp. 154-160. The city is Spokane, Washington.

Edward S. Tiryakian, "The Prestige Evaluation of Occupations in an Underdeveloped Country: The Philippines," AJS 63:4 (January, 1958), pp. 390-399.

N. F. Dufty, "Occupational Status, Job Satisfaction, and Levels of Aspiration," BJS 11:4 (December, 1960), pp. 348-355. Done in Australia.

Adam Sarapata and W. Wesoloski, "The Evaluation of Occupations by Warsaw Inhabitants," AJS 66:6 (May, 1961), pp. 581-590. Polish study.

Alex Inkeles and Peter H. Rossi, "National Comparisons of Occupational Prestige," AJS 61:4 (January, 1956), pp. 329-339. In connection with this article, recall the Inkeles article "Industrial Man..." already assigned under Topic 2.

R. Murray Thomas, "Reinspecting a Structural Position on Occupational Prestige," AJS 67:5 (March, 1962), pp. 561-565.

4. Occupational Choice and Recruitment

A. Social Stratification, Family, Education, and Occupational Choice and Level of Aspiration

Ely Chinoy, "The Tradition of Opportunity and the Aspirations of Automobile Workers," AJS 57:5 (March, 1952), pp. 453-459.

Herbert Hyman, "The Value Systems of Different Classes," in Bendix and Lipset, eds., Class, Status, and Power, pp. 426-442.

Bernard C. Rosen, "The Achievement Syndrome" A Psychocultural Dimension of Social Stratification," ASR 21:2 (April, 1956), pp. 203-211. Finds a relationship between social class and achievement motivation.

LaMar T. Empey, "Social Class and Occupational Aspiration: A Comparison of Absolute and Relative Measurement," ASR 21:6 (December, 1956), pp. 703-709. Findings of this study (using a 10% sample of Washington state high school seniors) refutes the Hollingshead et. al. notion that lower-class boys do not have as relatively high occupational aspirations as do upper-class boys.

August B. Hollingshead, Elmtown's Youth (New York: John Wiley & Sons, 1949; reprinted in paperback by Science Editions, Inc., 1961). Chapter 11 "Jobs and Ideas of Jobs" and Chapter 14 "Toil and Trouble."

Archie O. Haller and William H. Sewell, "Farm Residence and Levels of Educational and Occupational Aspiration," AJS 62:4 (January, 1957), pp. 407-411.

Richard M. Stephenson, "Mobility Orientation and Stratification of 1,000 Ninth Graders," ASR 22:2 (April, 1957), pp. 204-212.

Alan B. Wilson, "Class Segregation of Social Classes and Aspirations of High School Boys," ASR 24:6 (December, 1959), pp. 836-845.

"Abstracts of Papers and Round-Table Discussions, Proceedings of the Seventeenth Conference on Public Opinion Research, Suzanne Keller and Marisa Savallino, 'Ambition and Social Class'," Public Opinion Quarterly 26:3 (Fall, 1962), pp. 452-453. Comparisons of the "ambitiousness" of different social classes must take into account the accessibility of a goal for members of the class in question. Position is similar to that of Empey's article cited above.

Gross, Work & Society, Chapter 5 "The Career," pp. 143-164.

Seymour M. Lipset et. al., "Job Plans and Entry into the Labor Market," Social Forces 33:3 (March, 1953), pp. 224-232; abridged in Nosow & Form, pp. 297-306.

B. Personality and Occupational Choice

Peter M. Blau et. al., "Occupational Choice: A Conceptual Framework," I&LRR 9: (July, 1956), pp. 531-543.

John R. Dyer, "Sources and Permanence of Vocational Interest of College Man - 101 Cases Over Five Year Period," Journal of Applied Psychology 16:3 (June, 1932), pp. 233-240.

Lloyd Meadow, "Toward A Theory of Vocational Choice," Journal of Counseling Psychology 2:2 (Summer, 1955), pp. 108-112.

Eli Ginsberg et. al., Occupational Choice: An Approach to a General Theory. (New York: Columbia University Press, 1951).

Ann Roe, The Psychology of Occupations may have chapters on occupational choice and personality - check and see.

Joshua A. Fishman, "Social-Psychological Theory of Selecting and Guiding College Students," AJS 66:1 (March, 1961), pp. 472-484. This article may or may not be relevant to the present topic - check and see.

(There is undoubtedly a much larger literature than is cited here on personality and occupational choice. Any student choosing this to report on as a topic is invited to search out additional sources on this topic.)

Morris Rosenberg, Occupations and Values. (Glencoe: The Free Press, 1953).

Egon G. Cuba et. al., "Occupational Choice and the Teaching Career," Educational Research Bulletin 38:1 (January 14, 1959), pp. 1-12, 27.

"Major Studies of Workers' Reasons for Job Choice," Monthly Labor Review, March 1955.

D. M. Moore and Nathan Kohn, Jr., "Motives for Entering Dentistry," AJS 66:1 (July, 1960), pp. 48-53.

Enrico Quarantelli, "The Career Choice Patterns of Dental Students," Journal of Health and Human Behavior 2:2 (Summer, 1961), pp. 124-131. (This article possibly might be classified under sub-topic "A" above or "C" below; don't know - haven't read it.)

Eli Ginsberg, "Toward A Theory of Occupational Choice," Occupations 30:7 (April, 1952), pp. 491-494. (This belongs just before Ginsberg's book listed above).

C. Recruitment From the Standpoint of the Occupation Itself

August B. Hollingshead, "Ingroup Membership and Academic Selection," ASR 3: (, 1938), pp. 826-833.

Harold L. Wilensky, Intellectuals in Labor Unions: Organizational Pressures on Professional Roles (Glencoe: Free Press, 1956). Pages vii-x, 103-108, and 111-174.

Erwin O. Smigel, "The Impact of Recruitment on the Organization Structure of the Large Law Firm," ASR 25:1 (February, 1960), pp. 56-66.

Bennie Graves, "Breaking Out: An Apprenticeship System Among Pipeline Construction Workers," HO 17:3 (Fall, 1958), pp. 9-13.

Howard S. Becker and Anselm Strauss, "Careers, Personality, and Adult Socialization," AJS 62:3 (November, 1956), pp. 253-263.

5. Socialization Into the Occupation

Howard S. Becker, "Notes on the Concept of Commitment," AJS 66:1 (July, 1960), pp. 32-40.

Howard S. Becker and James W. Carper, "The Development of Identification With an Occupation," AJS 61:4 (January, 1956), pp. 289-298.

Howard S. Becker and James W. Carper, "The Elements of Identification With an Occupation," ASR 21:3 (June, 1956), pp. 341-348.

Howard S. Becker and Blance Geer, "The Fate of Idealism in Medical School," ASR 23:1 (February, 1958), pp. 50-56.

James W. Carper and Howard S. Becker, "Adjustment to Conflicting Expectations in the Development of Identification With an Occupation," SF 36:1 (October, 1957), pp. .

Charles E. Bidwell, "The Young Professional in the Army: A Study of Occupational Identity," ASR 26:3 (June, 1961), pp. 360-372.

Everett C. Hughes, "The Making of a Physician," HO 14:4 (Winter, 1956), pp. 21-25; reprinted in Hughes, Man & Work, pp. 116-130.

Everett C. Hughes, "Stress and Strain in Professional Education," Harvard Educational Review 29:4 (Fall, 1959), pp. 319-329.

Robert K. Merton et. al., The Student Physician. Cambridge: Harvard University Press, 1957.

Melvin Seeman and John W. Evans, "Apprenticeship and Attitude Change," AJS 67:4 (January, 1962), pp. 365-378.

Sanford M. Dornbusch, "The Military Academy as an Assimilating Institution," SF 33:4 (May, 1955), pp. 316-321. Summarized in Broom and Selznick, Sociology (2nd Edition), pp. 100-104.

Leon Uris, Battle Cry. This novel about the Marines in World War II gives a good picture in its early chapters on the socialization of recruits into Marines.

6. Careers and Mobility

Dan C. Lortie, "Laymen to Lawmen: Law School, Careers, and Professional Socialization," Harvard Educational Review 29:4 (Fall, 1959), pp. 352-369.

Everett C. Hughes, "Cycles, Turning Points, and Careers," pp. 11-22 in Men and Their Work.

Melville Dalton, "Informal Factors in Career Achievement," AJS 56:5 (March, 1951), pp. 107-415. Religion, ethnicity, and political beliefs play a part in the informal selection for career advancement that takes place in businesses studied.

Joseph R. Gusfield, "Occupational Roles and Forms of Enterprise," AJS 66:5 (May, 1961), pp. 571-580. A study of workers in a city finds career patterns related to the degree of determinateness of the occupational role but not to employment in large-scale corporations versus small local organizations.

Louis Kriesberg, "Careers, Organization Size, and Succession," AJS 68:3 (November, 1962), pp. 355-359. Relationship between size of organization and turnover rate of top-level personnel.

Oscar Grusky, "Corporate Size, Bureaucratization, and Managerial Succession," AJS 67:3 (November, 1961), pp. 261-269.

Oswald Hall, "The Stages of a Medical Career," AJS 53:5 (March, 1948), pp. 327-336; abridged in Nosow and Form, pp. 478-486.

David Westby, "The Career Experiences of the Symphony Musician," Social Forces 38:3 (March, 1960), pp. 223-230.

Myles W. Rodehaver and Luke M. Smith, "Migration and Occupational Structure: The Clergy," Social Forces 29:4 (May, 1951), pp. 416-421.

Gladys Palmer, "Attitudes Toward Work in an Industrial Community," AJS 63:1 (July, 1957), pp. 17-26.

Louis Kriesberg, "The Retail Furrier: Concepts of Security and Success," AJS 57:5 (March, 1952), pp. 478-485.

Howard S. Becker, "The Career of the Chicago Public Schoolteacher," AJS 57:5 (March, 1952), pp. 470-477; reprinted in Nosow and Form, pp. 321-329.

Howard S. Becker, "Some Contingencies of the Professional Dance Musician's Career," Human Organization 12:1 (Spring, 1953), pp. 22-26.

Harvey L. Smith, "Contingencies of Professional Differentiation," AJS 63:4 (January, 1958), pp. 410-414; reprinted (abridged) in Nosow and Form, pp. 219-225.

Kurt W. Back et. al., "Public Health as a Career of Medicine: Secondary Choice Within a Profession," ASR 23:5 (October, 1958), pp. 533-541.

Erving Goffman, "On Cooling the Mark Out: Some Aspects of Adaptation to Failure," Psychiatry 15: (, 1952), pp. 451-463.

August B. Hollingshead, "Climbing the Academic Ladder," ASR 5: (, 1940), pp. 416-425.

Donald E. Super, The Dynamics of Vocational Adjustment. New York: Harper and Brothers, 1942.

Super, "Vocational Adjustment: Implementing a Self-Concept," Occupations 30:2 (November, 1951), pp. 88-92.

Super, "A Theory of Vocational Development," American Psychologist 8:5 (May, 1953), pp. 185-190.

Super, The Psychology of Careers. New York: Harper and Brothers, 1957.

C. Arnold Anderson et. al., "Intelligence and Occupational Mobility," Journal of Political Economy 60: (June, 1952), pp. 218-239.

Thomas R. Donovan, "Socioeconomic and Educational Factors Influencing the Achievement Level of Individuals in Large-Scale Organizations," Sociology and Social Research 46:4 (July, 1962), pp. 416-425.

William H. Form and Delbert C. Miller, "Occupational Career Pattern as a Sociological Instrument," AJS 54:4 (January, 1949), pp. 317-329; reprinted in Nosow and Form, pp. 287-297.

Harold L. Wilensky, "Careers, Life Style, and Social Integration," pp. 329-332 in Nosow and Form.

Harry J. Crockett, Jr., "The Achievement Motive and Differential Occupational Mobility in the United States," ASR 27:2 (April, 1962), pp. 191-204.

Albert J. Reiss, Jr., "Occupational Mobility of Professional Workers," ASR 20:6 (December, 1955), pp. 693-700; abridged in Nosow and Form, pp. 307-317.

Robert Perrucci, "The Significance of Intra-Occupational Mobility: Some Methodological and Theoretical Notes, Together With a Case Study of Engineers," ASR 26:6 (December, 1961), pp. 804-883.

Reinhard Bendix et. al., "Social Origins and Occupational Career Patterns," Industrial and Labor Relations Review 7: (, 1944), pp. 246-261.

Seymour M. Lipset and Reinhard Bendix, "Social Mobility and Occupational Career Patterns: I. Stability of Jobholding; and II. Social Mobility," AJS 57:4 and 5 (January and March, 1952), pp. 336-374 and 494-504.

Lipset and Bendix, Social Mobility in Industrial Society, Chapter V "The Oakland Mobility Study" and VI "Intra-Generational Mobility."

W. Lloyd Warner and James C. Abegglen, "Occupational Mobility of American Business Elites," abridged in Nosow and Form, pp. 343-348.

Seymour M. Lipset and Natalie Rogoff, "Occupational Mobility in Europe and the United States," abridged in Nosow and Form, pp. 362-372.

7. Interpersonal Relations at Work: Problems of Norms and Social Control

A. Relations With Clients or Public

Everett C. Hughes, "Mistakes at Work," Canadian Journal of Economics and Political Science, 17:3 (August, 1951), pp. 320-327; reprinted in Hughes, Men and Their Work, pp. 88-101. Discussion of collective responses to the risks involved when, in dealing with clients, the practitioner may make a mistake.

Howard S. Becker, "The Professional Dance Musician and His Audience," AJS 57:2 (September, 1951), pp. 136-144. Techniques and dilemmas resulting in protecting a "professional's" competence against lay appraisal.

Fred Davis, "The Cabdriver and His Fare: Facets of a Fleeting Relationship," AJS 65:2 (September, 1959), pp. 158-165. The cabdriver needs to control his clients, but since they are usually strangers this poses problems.

William Foote Whyte, Human Relations in the Restaurant Industry, (New York: McGraw-Hill, 1948). Chapter 8, "When Workers and Customer Meet," and Chapter 9, "Waitress-Customer Adjustment."

Fred L. Strodbeck and Marvin B. Sussman, "Of Time, The City, and the 'One-Year Guarantee': The Relations Between Watch Owners and Repairers," AJS 61:6 (May, 1956), pp. 602-609.

B. Relations With Colleagues, Fellow Workers, or Superiors

Peter M. Blau, "Cooperation and Competition in a Bureaucracy," AJS 54:6 (May, 1954), pp. 530-535. The main topic of this article is the relationship between competition and productivity, but it also has some remarks concerning conditions under which competition is controlled.

Cecil M. French, "Correlates of Success in Retail Selling," AJS 66:2 (September, 1960), pp. 128-134. High-producing furniture salesmen observed group norms regulating competition less, and had reference groups composed of other than fellow salesmen.

Nicholas Babchuk and William J. Goode, "Work Incentives in a Self-Determined Group," ASR 16:5 (October, 1951), pp. 679-687. How clothing salesmen reestablished controls over competition with each other and kept production up too.

Lauren G. Wispe, "A Sociometric Analysis of Conflicting Role-Expectancies," AJS 61:2 (September, 1955), pp. 134-137. Among insurance salesman, qualities perceived as making a good salesman conflicted with those making for a good friend. Why?

Edward Gross, "Social Integration and Control of Competition," AJS 62:3 (November, 1961), pp. 270-277. In a business office, friendship cliques were composed of non-competitors:

William F. Whyte, "The Social Structure of the Restaurant," AJS 54:4 (January, 1949), pp. 302-310. Tensions between workers develop when lower-status workers initiate contacts with higher-status ones; how such tensions can be relieved.

Louis Kriesberg, "Occupational Controls Among Steel Distributors," AJS 61:3 (November, 1955), pp. 203-212. Analysis of source of norms governing participation in a "gray market" in steel among several kinds of steel distributors (middlemen).

Mary E.W. Goss, "Influence and Authority Among Physicians in an Outpatient Clinic," ASR 26:1 (February, 1961), pp. 39-50. Conditions under which the same physicians are in an authority versus colleague relationship to each other.

Melville Dalton, "Conflicts Between Staff and Line Managerial Officers," ASR 15:3 (June, 1950), pp. 342-351. Conditions under which staff and line personnel don't get along with each other.

Harvey L. Smith, "Psychiatry in Medicine: Intra- or Inter-Professional Relationships?" AJS 63:3 (November, 1957), pp. 285-289. Tensions between physicians and psychiatrists, both of whom are M.D.'s.

Richard R. Myers, "Interpersonal Relations in the Building Industry," Human Organization 5:2 (Spring, 1946), pp. 1-7; abridged in Nosow and Form, pp. 126-137.

Fred E. Katz, "Occupational Contact Networks," Social Forces 37:1 (October, 1958), pp. 52-55; abridged in Nosow and Form, pp. 317-321.

C. Role and Status Dilemmas or Strains and Adjustments Thereto

Everett C. Hughes, "Dilemmas and Contradictions of Status," AJS 50:5 (March, 1945), pp. 353-359; reprinted in Hughes, Men and Their Work, pp. 102-115. Status "dilemmas" (inconsistencies) when new kinds of people enter old occupations.

Waldo W. Burchard, "Role Conflicts of Military Chaplains," ASR 19:5 (October, 1954), pp. 528-535. Interviews with chaplains revealed that they resolve role conflicts most frequently by compartmentalization of conflicting roles.

Bryan R. Wilson, "The Pentacostalist Minister: Role Conflicts and Status Contradictions," AJS 64:5 (March, 1959), pp. 494-504.

Barnard Segal, "Male Nurses: A Case Study in Status Contradiction and Prestige Loss," Social Forces 41:1 (October, 1962), pp. 31-38.

Ronald G. Corwin, "The Professional Employee: A Study of Conflict in Nursing Roles," AJS 66:6 (May, 1961), pp. 605-615. Conflict between ideals and reality encountered by beginning nurses are resolved differently depending upon type of nursing school the nurse attended.

William A. Westley, "Violence and the Police," AJS 59:1 (July, 1953), pp. 34-41. Conflicting demands upon policemen are resolved in part by resort to illegal violence.

Mark G. Field, "Structured Strain in the Role of the Soviet Physician," AJS 58:5 (March, 1953), pp. 493-502. The State and the patient make conflicting demands upon the Soviet physician.

Walter I. Wardwell, "The Reduction of Strain in a Marginal Social Role," AJS 61:1 (July, 1955), pp. 16-25. Role strains of chiropractors are handled by an "oppressed minority" ideology.

Thelma McCormick, "The Druggists Dilemma: Problems of a Marginal Occupation," AJS 61:4 (January, 1956), pp. 308-315.

Roland J. Pellegrin and Frederick L. Bates, "Congruity and Incongruity of Status, Attributes Within Occupations and Work Positions," Social Forces 38:1 (October, 1959), pp. 23-28.

D. Factors Affecting Ability to Engage in Concerted Action on Broad Scale

W. Lloyd Warner and J. O. Low, "Wages and Worker Solidarity," in Nosow and Form, pp. 137-142; abridged from The Social System of a Modern Factory, pp. 90-98.

Clark Kerr and Abraham Siegel, "The Interindustry Propensity to Strike: An International Comparison," in Kornhauser et. al., editors, Industrial Conflicts, pp. 189-212.

8. The Professionalization of an Occupation

A. General on the Professions

Edward A. Ross, Principles of Sociology. (New York: The Century Company, 1923). Chapter 39, "Professionalization."

A. M. Carr-Saunders and P. A. Wilson, "Professions," in Encyclopedia of Social Sciences, Volume 12. Abridged in Nosow and Form, pp. 199-206.

E. T. Hiller, Social Relations and Structures. (New York: Harper and Brothers, 1947). Chapter 33, "Professions."

T. H. Marshall, "The Recent History of Professionalism in Relation to Social Structure and Social Policy," Canadian Journal of Economics and Political Science 5:3 (August, 1959), pp. 325-340; abridged in Nosow and Form, pp. 225-235.

Everett C. Hughes, "The Professions in Society," Canadian Journal of Economics and Political Science 26:1 (February, 1960), pp. 54-61.

Talcott Parsons, "The Professions and Social Structure," in Essays in Sociological Theory, Pure and Applied.

William J. Goode, "Community Within a Community: The Professions" ASR 22:2 (April, 1957), pp. 194-200.

Everett C. Hughes, "License and Mandate," in Men and Their Work, pp. 78-87.

B. The Emergence of Professions

Raymond W. Mack, "Occupational Ideology and the Determinate Role," Social Forces 36:1 (October, 1957), pp. .

Vernon K. Dibble, "Occupations and Ideologies," AJS 68:2 (September, 1962), pp. 229-241.

Robert K. Bain, "Conditions for the Emergence of a Professionalization Movement," Unpublished paper read to the 1960 ASA Convention. (Instructor can loan you a copy.)

E. Jackson Baur, "The Functions of Ceremony in the Advertising Business," Social Forces 27:4 (May, 1949), pp. 358-365.

9. Relationships Between Occupations and Ideologies and Political Behavior

W. A. Kerr, "Untangling the Liberal-Conservative Continuum," Journal of Social Psychology, 35: (, 1952), pp. 111-125. Analysis of the terms "liberal" and "conservative."

Kenneth K. Krogh, "Needed: New Political Labels," Saturday Review, December 3, 1960, pp. 17-19 and 63-64. Criticism of the "left" and "right" political labels.

Raymond J. Murphy and Richard T. Morris, "Occupational Situs, Subjective Class Identification, and Political Affiliation," ASR 26:3 (June, 1961), pp. 383-392.

Oscar Glants, "Class Consciousness and Political Solidarity," ASR 23:4 (August, 1958), pp. 375-383; abridged in Nosow and Form, pp. 419-431.

Martin A. Trow, "Small Businessman, Political Tolerance, and Support for McCarthyism," AJS 64:3 (November, 1958), pp. 270-281. Study found that McCarthy received disproportionately strong support from small businessmen in Bennington, Vt.

David Rogers and Ivar E. Berg, Jr., "Occupation and Ideology: The Case of the Small Businessman," Human Organization 20:3 (Fall, 1961), pp. 105-111. A critique of previous thinking concerning relationship of small businessman to ideologies, and results of a study of auto dealers.

Joseph Bensman and Arthur Vidich, "Business Cycles, Class, and Personality," Psychoanalysis and Psychoanalytic Review 49:2 (Summer, 1962), pp. 30-52. Effects of ups and downs of business cycle upon attitudes of different occupational groups.

Seymour M. Lipset, "The Psychology of Voting: An Analysis of Political Behavior," in Gardner Lindzey, editor, Handbook of Social Psychology, Volume II, pp. 1124-1175. See especially pages 1124-1150. Includes a large bibliography at end of article.

Daniel Bell, editor, The New American Right. (New York: Criterion Books, 1956), Contains essays by Lipset, Reisman, Hofstadter, and others trying to explain the "radical right" of today.

Seymour M. Lipset, "Democracy and Working-Class Authoritarianism," ASR 24:4 (August, 1959), pp. 482-501; reprinted in Lipset, Political Man (New York: Doubleday Anchor Books, 1963), Chapter 4. Lower classes are said to favor "extremist" political behavior and although they support "economic liberalism" only by accident do they support "political liberalism," says Lipset.

"Some Comments on 'Working Class Authoritarianism,'" Berkeley Journal of Sociology 6:1 (Spring, 1961), pp. . A critical discussion of Lipset's thesis. pp. 99-112.

S. M. Miller and Frank Riessman, "'Working-Class Authoritarianism': A Critique of Lipset," BJS 12:3 (September, 1961), pp. 263-276. See also Lipset's rejoinder in the same issues, pages 277-281.

S. M. Miller and Frank Riessman, "The Working Class Subculture: A New View," Social Problems 9:1 (Summer, 1961), pp. 86-97. Criticizes "ethnocentric" views of working class behavior and offers "a more realistic" picture of working class life.

Seymour M. Lipset, "Social Stratification and 'Right-Wing Extremism'," BJS 10:4 (Dec., 1959), pp. 1-38. Right, left, and center each have moderate and extremist groups; discusses extremists.

Seymour M. Lipset, "Fascism--Left, Right, and Center," Chapter 5 in Lipset's Political Man.

Joseph Kahl, American Class Structure, Chapter VI, "Class Consciousness and Political Ideology."

David Street and John C. Leggett, "Economic Deprivation and Extremism: A Study of Unemployed Negroes," AJS 67:1 (July, 1961), pp. 53-57.

Harold L. Wilensky and Hugh Edwards, "The Skidder: Ideological Adjustments of Downward Mobile Workers," ASR 24:2 (April, 1959), pp. 215-231.

C. Wright Mills, White Collar. (New York: Oxford University Press, 1951). An angry interpretation of middle class white-collar life.

C. Wright Mills, "The Power Elite," abridged from book of the same title; in Nosow and Form, pp. 395-402.

Willaim A. Glaser, "Doctors and Politics," AJS 66:3 (November, 1960), pp. 230-245.

Industrial Sociology 447
University of Oregon

S. Deutsch
Winter 1967

Class will meet Friday, January 20th at 7:00 p.m. in the Conference Room Rm. 153, Prince Lucian Campbell (next to the Sociology Dept.). Subsequent meetings will shift to Thursday night at the Coffeehouse.

For the January 20th Meeting we will continue the discussion on the parameters of the field, and we will develop the discussion of sociological theory and industrial sociology. Readings assigned: (library reserve)

E. Gross, Work and Society, chpts. 1, 2
T. Caplow, Sociology of Work, chpt. 1
M. Moore, Ind. Rels. and the Social Order, part 1
Miller and Form, Industrial Sociology, chpt. 1 (1st edition chpts. 1-4)
E. Schneider, Industrial Sociology, intro. chpt. 1
R. Dubin, The World of Work, chpt. 1
R. Faris (ed.) Handbook of Sociology, chpt. by E. Gross, "Industrial Relations"

article by Hart, "Ind. Rels. Research and Social Theory", Canadian J. of Ec. and Pol. Science, Feb. 1949.

Scott, "Aims of Ind. Soc.", British J. of Soc. 1959.

Blumer, "Soc. Theory in Ind. Rels.", ASR, June 1949.

Van Kleeck, "Towards and Ind. Soc.", ASR, Oct. 1946.

Dunlop and Whyte, "Framework for Analysis of Ind. Rels.-Two Views," ILRR, 1950.

Handout on Loan (pick up in Soc. Dept. office), W. Moore, "Economy and Society", 1955.

Additional recommended articles and books:

W. Moore, "Current Issues in Ind. Soc.," ASR, Dec. 1947.

W. Moore, "Ind. Soc.--Status and Prospects," ASR, Aug. 1948--with commentary by R. Dubin, D. Miller, P. Meadows, and A. Gouldner.

Roethlisberger and Dickson, Management and the Worker

W. L. Warner and J. Low, Social Systems of the Modern Factory

R. Bendix, Work and Authority in Industry (chpt. 5)

J. Gittler, Review of Sociology, chpt. by Whyte and Miller, "Industrial Sociology"

Term paper topics should be decided by Jan. 20th. Consultation with instructor is urged.

INDUSTRIAL SOCIOLOGY 447

The class will meet on February 2 on the theme--Sociology of Unionism; Labor Sociology. Here you are to obtain a perspective on the history and theory of the American labor movement; sociological literature on unions and workers. The general assignment is:

Caplow, The Sociology of Work, chpt. 8
 Miller and Form, Industrial Sociology (2nd. ed.), chpts. 8, 9
 Schneider, Industrial Sociology; chpt. 10
 Shostak and Gomberg, Blue-Collar World; part 1 (pp. 1-57)
 (recommended: Wm. Haber, ed., Labor in A Changing America)

Class Reports: (* = paperback)

- *Lipset, Trow and Coleman, Union Democracy
- *Chinoy, Automobile Workers and the American Dream
- *Swados, On the Line
- Walker and Guest, Man on the Assembly Line
- Miller, Zeller and Miller, The Practice of Local Union Leadership
- *Peck, The Rank and File Leader
- *Mills, White Collar
- Barbash, Labor's Grass Roots
- Berger, Workingclass Suburb
- Rose, Union Solidarity
- *Sayles and Strauss, The Local Union
- Seidman, et. al., The Worker Views His Union
- Kornhauser, et. al., When Labor Votes
- Tannenbaum and Kahn, Participation in Union Locals
- Sayles, Behavior of Industrial Work Groups
- *Stieber, Governing the UAW (or other volume in series on trade union gov't.)
- Turner and Lawrence, Industrial Jobs and the Worker
- Kornhauser, Mental Health of the Industrial Worker
- Leggett, "Sources and Consequences of Working-Class Consciousness," in Shostak and Gomberg, Blue-Collar World
- Dubin, "Industrial Workers' Worlds: A Study of the 'Central Life Interest' of Industrial Workers," Social Problems, Jan. 1956.

University of Oregon
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Industrial Sociology 447

- Feb. 16 I. Continuation of Discussion of Labor Sociology and Sociology of Unionism; student reports on studies of workers.
- II. Marxism and Alienation. Here we will deal with the concept of alienation, its historical link to Marxian Economics and its development in Industrial Sociology.

Assignment: Erich Fromm, Marx's Concept of Man
Irving Louis Horowitz, The New Sociology; chpts. 7, 12, 15, 16, 17, 18

Additional Key References

Robert Nisbet, The Sociological Tradition (1966), Chpt. 7

Fritz Pappenheim, The Alienation of Modern Man (1959)

Lewis Feuer, "What is Alienation? The Career of a Concept,"
in Maurice Stein and Arthur Vidich, Sociology on Trial (1963)

Daniel Bell, The End of Ideology (1961), Chpt. 15

Robert Blauner, Alienation and Freedom (1964)

Melvin Seeman, "On the Meaning of Alienation," American Sociological Review, Vol. 28, (December 1959) pp. 599-608.

Goetz Briefs, The Proletariat (1937)

Emile Durkheim, The Division of Labor in Society (trans. 1947),
Intro.

William Kornhauser, The Politics of Mass Society (1959)

Erich Fromm (ed.) Socialist Humanism (1966), especially section 4

C. Wright Mills, The Marxists (1962)

Eric and Mary Josephson, Man Alone: Alienation of Modern Man (1959)

BOOKS AND JOURNAL ARTICLES ON RESERVE
FOR INDUSTRIAL SOCIOLOGY 447

*Books so marked are available in paperback editions

<u>Call No.</u>	<u>Book</u>	<u>Author</u>
HD/6971/.N58	<u>Man, Work and Society</u>	(ed.) Nosow, Sigmund, and William Form
HD/8072/.S58	<u>Blue Collar World</u>	Shostak & Gomberg
HD/21/.K45	* <u>Industrialism and Industrial Man</u>	Kerr, Clark, et. al.
HD/4904/.G74	<u>Work and Society</u>	Gross, Edward
301/C 172	* <u>The Sociology of Work</u>	Caplow; Theodore
658.12/M786/1951	<u>Industrial Relations and the Social Order (revised)</u>	Moore, Wilbert
301.4/M613/1964	<u>Industrial Sociology (2d.ed)</u>	Miller and Form
301.4/M613	<u>Industrial Sociology (1st.ed.)</u>	Miller and Form
301.4/Sch57 (On order in Library)	<u>Industrial Sociology</u> <u>An Introduction to Industrial Sociology</u>	Schneider, Eugene Spalding, Charles
331.88/P336	* <u>The Rank and File Leader</u>	Peck, Sidney
HD/6901/.B57	<u>Alienation and Freedom</u>	Blauner
HD/5306/.K6	<u>Industrial Conflict</u>	Kornhauser, Dubin, and Ross
323.3/D139	* <u>Class and Class Conflict in Industrial Society</u>	Dahrendorf, R.
HD/6476/.G27	<u>Comparative Labor Movements</u>	Galenson, Walter
HD/4901/.M85	<u>Labor Commitment and Social Change in Developing Areas</u>	Moore and Feldman
HX/39.5/.F7	* <u>Marx's Concept of Man</u>	Fromm, Eric
301.151/P199	* <u>The Alienation of Modern Man</u>	Pappenheim
H/35/.H68	* <u>The New Sociology</u>	Horowitz, I. L.
658.1/F914 E	* <u>Industrial Society</u>	Friedmann, G.
301.243/W151	* <u>Modern Technology and Civilization</u>	Walker, Charles
338.4/M454	* <u>The Human Problems of an Industrial Civilization</u>	Mayo, Elton
331.88/In86	* <u>Union Democracy</u>	Lipset, S.
HT/658/.B4	* <u>Work and Authority in Industry</u>	Bendix, Reinhard
301.243/So54	<u>Adjusting to Technological Change</u>	Somers and Cushman
(On order in Library)	* <u>Automation: Implications for the Future</u>	Philipson, Morris
In Library Being Cataloged	* <u>Automation and Economic Progress</u>	Bowen and Mangum
HD/6971/.D82	<u>The World of Work</u>	Dubin, Robert
HM/51/.F3	<u>Handbook of Modern Sociology</u>	Robert...Faris, ed.
	(see chpt. 17, pp. 619-679, "Industrial Relations" by Edward Gross. This book can be obtained from the Social Science Division Desk, 2nd floor, library)	

JOURNAL ARTICLES

- Hart "Industrial Relations Research and Social Theory", Canadian Journal of Economics and Political Science, (Feb., 1949), pp. 53-73.
- W. H. Scott, "The Aims of Industrial Sociology - Some Reflections," British Journal of Sociology, V. 10, 1959, pp. 193-203.
- Dunlop and Whyte "Framework for the Analysis of Industrial Relations: Two Views," Industrial and Labor Relations Review, 3, 1950, pp. 383-402.
- Blumer, Herbert "Sociological Theory In Industrial Relations," American Sociological Review, V. 12, (June, 1949), pp. 271-278.
- Kleek, Mary Van "Towards an Industrial Sociology," American Sociological Review, V. 11, (Oct., 1946), pp. 501-505.

DEPARTMENT OF SOCIOLOGY
NORTHWESTERN UNIVERSITY

C15: Industrial Sociology
R. J. Pokrant

Course Outline
Summer Session, 1965

TEXTS:	E. Schneider, <u>Industrial Sociology</u>	Hardback	Abbr.
	W. E. Moore, <u>Economy & Society</u>	Paper	I. S.

The student is required to read 2 of the following paperback books. They each deal with a special problem of industrial societies and should not be treated as text books. They are meant to function as supports to the Schneider book which, because of its comprehensiveness, does not cover many of the things that we will be dealing with.

R. Bendix & S. M. Lipset, Social Mobility in Industrial Societies

R. Bendix, Work & Authority in Industry

A. A. Berle, Power Without Property

S. M. Lipset, Union Democracy

There will be a mid-term exam on Tuesday, July 13, that will deal with the lectures up to that point and the 2 texts listed above. Also, there will be a term paper of not more than 10 double spaced typed pages long that is due on Thursday, July 29. The student is advised to use 1 or both of the 2 books he chooses from the list above as a useful organizing device for his paper. The paper should deal with a major problem area of the course. For those who have difficulty in establishing a significant problem area they can discuss the matter with the instructor at times that will be specified in class.

There will be a bibliography distributed during the first few days of class that will include materials dealing with all parts of the course. The student should acquaint himself with a few of the readings although this is not required.

STRUCTURE OF THE COURSE

This course is designed to give an understanding of the structure of modern industrial organizations and of their relationship with the wider society. The material is mainly derived from American and British sources although parts of the course will deal specifically with the new nations. It is hoped that we can establish whether the sociologist can throw light on some of the major problems of industrial societies and the industrialization process.

1) Introduction:

the field of industrial sociology.
its relationship to sociology and the social sciences.
history of the field.

All students are expected to have read the Moore book by the end of the first week. Also, I. S., pp. 1-75.

2) The history of industrial societies, the sociological approach:

What is a non-industrial society?
The role of work in society.
Theoretical models of the change to industrial society.

3) Industrial organization:

bureaucracy.
Power and authority - concentration or diffusion?
Formal and informal organization - the sociological dilemma?
The worker and the work organization - productivity and morale - the "schools" of industrial sociology and their effects on the conception of the worker.
Labour and Unions - the foreman.
Industrial conflict - conflict and competition, strikes and collective bargaining.
The manager, his functions and role, changing definitions and the managerial revolution.
The head/hands line.

4) Industry and society:

The family.
The polity.
Education.
Ethnicity.
The relationship between the institutional orders of society.

5) Social processes and industrial society:

The values of industrial society, ideology and class consciousness, behavior patterns of industrial populations.
Social mobility and its relationship to class, values and behavior.
Occupation and organization - staff-line conflict, science and industry, the professions.
White collar and embourgeoisement.
Comparative industrial organizations, capitalism, socialism and industrialism.
The developing areas.

6) Industrialization:

Similarities and differences.
Common problems of industrial societies.
Work and leisure, alienation and automation.

7) The future of industrial societies:

Industrial sociology and prediction in social science.
The current views.
Gaps in research and the problem of theory.
Does the study of industrial society help us to establish any meaningful generalizations about the human group?

DEPARTMENT OF SOCIOLOGY
NORTHWESTERN UNIVERSITY

C15: Industrial Sociology
Mr. R. Pokrant

Summer 1965
BIBLIOGRAPHY

HISTORY OF THE FIELD

1. G. Friedmann, Industrial Society, part 1, chapter 1, 2, 3, 4, 5, Part 2, ch. 1-5.
2. H. Landsberger, Hawthorne Revisited
3. Roethlisberger & Dickson, Management & The Worker
4. E. Mayo, The Social Problems of an Industrial Civilization
5. E. Mayo, The Human Problems of an Industrial Civilization
6. J. A. C. Brown, Social Psychology of Industry

SOCIOLOGY AND THE STUDY OF INDUSTRY

1. W. E. Moore, "Current Issues in Industrial Sociology," American Sociological Review, Vol. 12, 1947.
2. W. E. Moore, "Industrial Sociology: Status and Prospects," A.S.R., Vol. 13, 1948
3. C. Wright Mills, "The Contribution of Sociology to the Study of Industrial Relations," Proceedings of the First Annual Meeting of the Industrial Research Association, Vol. 1, 1948.
4. W. A. Koivisto, "Value, Theory and Fact in Industrial Sociology," Social Forces, Vol. 33, 1955.

HISTORY OF INDUSTRIAL SOCIETIES

1. P. Mantoux, The Industrial Revolution in the Eighteenth Century
2. T. S. Ashton, The Industrial Revolution
3. H. D. Fong, The Triumph of the Factory System
4. D. George, England in Transition
5. E. Durkheim, Division of Labour in Society

MODELS OF CHANGE

1. W. W. Rostow, The Stages of Economic Growth
2. N. Smelser, Social Change in the Industrial Revolution
3. M. Weber, The Protestant Ethic and the Spirit of Capitalism
4. K. Marx, The German Ideology
5. D. Lemer, The Passing of Traditional Society
6. N. Smelser and T. Parsons, Economy and Society

NON-INDUSTRIAL SOCIETIES

1. K. WittPoegel, Oriental Despotism
2. M. Weber, General Economic History
3. G. Sjoeborg, The Preindustrial City
4. E. F. Gay, "Putting Out System," Encyclopedia of the Social Sciences, 13: 7-11

INDUSTRIAL ORGANIZATION

1. BUREAUCRACY:

- a. M. Weber, Theory of Social and Economic Organization
- b. T. Caplow, The Principles of Organization
- c. P. Selznick, "Foundations of the Theory of Organization," A.S.R., Vol. 13, 1948
- d. A. Gouldner, Patterns of Industrial Bureaucracy
- e. P. Blau, Bureaucracy in Modern Society
- f. P. Blau, The Dynamics of Bureaucracy.
- g. R. K. Menton, et.al., A Reader in Bureaucracy

2. POWER AND AUTHORITY:

- a. P. S. Florence, The Logic of British and American Industry
- b. A. A. Berle and C. Means, The Modern Corporation and Private Property
- c. C. W. Mills, The Power Elite
- d. R. Michels, Political Parties
- e. D. Riesman, "Who Has the Power?" in Class, Status, and Power (ed. R. Bendix & S. M. Lipset)

3. THE WORKER AND THE WORK ORGANIZATION:

- a. R. Bendix, and . H. Fisher, "The Perspectives of Elton Mayo," Review of Economics and Statistics, 31, 1949
- b. E. Shils, "Primary Groups in the American Army," Continuities in Social Research: Studies in the Scope and Method of "The American Soldier," (R. K. Merton and P. Hazarsfeld)
- c. E. Chinoy, The Automobile Worker and the American Dream
- d. Walker C. R. Guest, The Man on the Assembly Line
- e. L. Sayles, The Behavior of Industrial Work Groups

4. LABOR AND UNIONS, INDUSTRIAL CONFLICT AND THE IDEOLOGIES OF INDUSTRIAL SOCIETIES

- a. A. Komhauser, et.al., Industrial Conflict
- b. E. L. Wigham, Trade Unions
- c. S. Pealman, History of Trade Unionism in the United States
- d. S. Greer, Last Man In
- e. C. Wright Mills, New Men of Power
- f. R. Dahrendorf, Class and Class Conflict in Industrial Society
- g. A. M. Ross and Harlmann, Changing Patterns of Industrial Conflict
- h. J. H. Goldthorpe, "The Treatment of Conflict in Human Relations Training," Sociologie du Travail, Vol. 3, 1961
- i. T. T. Patterson and F. J. Willett, "Unofficial Strike," Sociological Review, Vol. 43, 1951.
- j. Walker and Guest, Foreman on the Assembly Line
- k. D. E. Wray, "Marginal Men of Industry--the Foreman," American Journal of Sociology, Vol. 54, 1948-49.

5. THE MANAGER, OCCUPATIONS AND ORGANIZATIONS;

- a. M. Dalton, Men Who Manage
- b. M. Dalton, "Conflicts Between Staff and Line Managerial Officers," American Sociological Review, Vol. 15, June, 1950

- c. W. H. Whyte, The Organization Man
- d. W. Miller (ed), Men in Business
- e. T. Burns and G. M. Stalker, The Management of Innovation
- f. M. Newcomer, The Big Business Executive
- g. W. E. Moore, The Conduct of the Corporation
- h. T. Parsons, Essays in Sociological Theory--Section on the Professions
- i. S. Nosow and W. H. Form, Man, Work, and Society: A Reader in the Sociology of Occupations
- j. S. Manson, The Scientist in American Industry

STRATIFICATION

- a. R. Dahrendorf, ibid.
- b. R. Bendix and S. M. Lipset, Class, Status and Power
- c. N. Rogeff, Recent Trends in Occupational Mobility
- d. C. Wright Mills, White Collar
- e. R. W. Mack (ed), Race, Class and Power

INDUSTRIALIZATION AND THE PROBLEMS OF INDUSTRIAL SOCIETY

- a. C. Clark, The Conditions of Economic Progress
- b. F. Cottrell, Energy and Society
- c. K. de Schweinitz; Industrialization and Democracy
- d. W. E. Moore, Industrialization and Labor
- e. W. E. Moore and B. Hoselitz, Industrialization and Society
- f. W. E. Moore and A. S. Feldman, Labour Commitment and Social Change in Developing Areas
- g. U.N.E.S.C.O., Social Implications of Industrialization and Urbanization in Africa, South of the Sahara, 1956
- h. G. Myrdal, An International Economy
- i. M. Harrington, The Other America: Poverty in the United States
- j. R. Titmuss, Essays on the Welfare State
- k. H. L. Wilensky and C. N. Helaux, Industrial Society and Social Welfare
- l. C. R. Walker, Toward the Automatic Factory

Purdue University
Sociology 516 - Industrial Sociology
Course Outline and Reading List
Dr. Robert K. Bain

No textbook is required for this course. The required readings are those found this list. These readings should be read approximately in the order in which they appear on this list.

Unless otherwise noted, each of the listed readings has been placed in the Reserve Book Room of the main library. In some instances, a given reading has appeared in more than one source of publication; in such cases, each of the several sources of publication has been placed on Reserve. In certain cases, the names of journals in which a reading appears have been abbreviated as follows:

- AJS - American Journal of Sociology
- ASR - American Sociological Review
- ASQ - Administrative Science Quarterly
- HBR - Harvard Business Review

Two books of readings include certain of the articles on this reading list. These books are: Joseph A. Litterer, Organizations: Structure and Behavior (library call number 658.082/L7180) and Donald Porter and Philip Applewhite, Studies in Organizational Behavior and Management (library call number 658.082/P833s.) Hereafter, each of these two books will be referred to only by their authors' last names. Litterer is on Reserve, but Porter and Applewhite is only available in the Industrial Engineering Library and in the Industrial Administration Library.

Certain readings are preceded by a code number in the left margin, such as "P-28." This indicates that the reading is available in the "Bobbs-Merrill Reprint Series," and that it may be purchased for 25¢ at the University Book Store. It may be ordered by the code number only. Because of the large enrollment in this course, you are strongly urged to purchase each reading available in this reprint series, in order avoid waiting in line at the Reserve Book Room.

Those readings preceded by an "(H)" (for Handout) in the left margin of the page are in the form of mimeographed or hectographed leaflets and will be handed out to you by the instructor.

Note that those readings preceded by no entry in the left margin are available only in the Reserve Book Room; to avoid waiting in line to obtain access to the reading, you are urged to consult each such reading early-- before the rush starts!

1 Introduction: The Forerunners: Taylor and Mayo

Read any one of the following three sources:

Frederick W. Taylor, Shop Management, pp. 24-35; 47-53; 98-110; 131-137; 191-195.

Frederick W. Taylor, Principles of Scientific Management, Chapter 1; Chapter 2 through p. 75; pp. 121-125; p. 128.

Samuel Haber, Efficiency and Uplift, Chapters 1 and 2.

Recommended (and on Reserve) but not required: C. B. Thompson, editor, Scientific Management, p. v (Preface), and pp. 3-23, 40-48.

(S-123) George C. Homans, "The Western Electric Researches," in Schuyler D. Hoslett, editor, Human Factors in Management, pp. 152-185 in 1st edition, or pp. 210-241 in Revised Edition.

2. Group Norms, Social Control, and Productivity

Cecil French, "Correlates of Success in Retail Selling," AJS 66: 2 (September, 1960), pp. 128-134.

(S-28) Peter M. Blau, "Cooperation and Competition in a Bureaucracy," in: (a) AJS 59:6 (May, 1954), pp. 530-535; (b) Litterer; and (c) Robert W. O'Brien et. al., Readings in General Sociology, 3rd Edition, pp. 309-315. (AJS not on Reserve.)

Melville Dalton, "The Industrial Rate-Buster: A Characterisation," Applied Anthropology 7:1 (Winter, 1948), pp. 5-18.

(S-244) Donald F. Roy, "Quota Restriction and Goldbricking in a Machine Shop," in: (a) Litterer; (b) AJS 57:5 (March, 1952), pp. 427-442.

3) Leadership Style and Productivity

(H) "Some Dimensions of Leadership Behavior," 7 pages.

(S-45) Lester Coch and John R. P. French, "Overcoming Resistance to Change," Human Relations 1 (1948), pp. 512-532.

Morris S. Viteles, Motivation and Morale in Industry, Chapters 8 and 9. Summarizes the findings of the Harwood Manufacturing Company study (the study reported in the Coch and French article just above) and the Prudential and C&O studies.

Daniel Katz and Robert L. Kahn, "Human Organization and Worker Motivation," in Industrial Relations Research Association (this organization is listed as the "author" of the book), Industrial Productivity, pp. 146-171.

(S-206) Nancy Morse and Everett Reimer, "The Experimental Manipulation of a Major Organizational Variable," Journal of Abnormal and Applied Psychology 52:1 (January, 1956), pp. 120-129; also in Porter and Applewhite.

Donald C. Pelz, "Leadership Within a Hierarchical Organization," in the First-Line Supervisor," in: (a) Edwin Fleishman, editor, Studies in Personnel and Industrial Psychology, pp. 328-338; (b) Personnel, 29:3 (November, 1952), pp. 209-217.

Donald C. Pelz, "Leadership Within a Hierarchical Organization," in: (a) Rubenstein and Haberstroh, editors, Some Theories of Organization, pp. 203-209; and (b) Journal of Social Issues 7:3 (1951), pp. 49-55.

- (H) "The Coefficient of Correlation," 11 pages.
- (H) Summary of Martin Patchen, "Supervisory Methods and Group Performance Norms," 7 pages.
- (H) Summary of Victor Vroom and Floyd Mann, "Leader Authoritarianism and Employee Attitudes," 9 pages.
- (S-321) James C. Worthy, "Organizational Structure and Employee Morale," in: (a) Litterer; (b) ASR 15:2 (April, 1950), pp. 169-179; (c) Paul Pigors, editor, Readings in Personnel Administration, 2nd Edition, pp. 167-182.

4. Worker Satisfaction and Productivity

Robert Kahn and Nancy Morse, "The Relationship of Productivity to Morale," Journal of Social Issues 7:3 (1951), pp. 8-17.

5. Technological Influences Upon Individual and Group Behavior

- (H) "Some Aspects of Technology Relevant for Sociological Analysis," 3 pages.
- (H) "Statistically Significant Relationships from a Study of Technology and Leadership," 1 page.
- (H) Summary of L. Keith Miller and Robert L. Hamblin, "Interdependence, Differential Rewarding, and Productivity," 7 pages.

Charles R. Walker and Robert H. Guest, "The Man on the Assembly Line," in: (a) Litterer; (b) HBR 30:3 (May-June, 1952), pp. 71-83.

Charles R. Walker, "Life in the Automatic Factory," in: (a) HBR 36:1 (January-February, 1958), pp. 111-119; also in (b) Porter and Applewhite. (Porter and Applewhite is not on Reserve; see first page of this reading list.)

6. The Division of Labor: Line and Staff Relations

Burleigh Gardner and David Moore, Human Relations in Industry, 3rd Edition, Chapter 3, "Division of Labor."

- (S-59) Melville Dalton, "Conflicts Between Staff and Line Managerial Officers," in: (a) Litterer; (b) ASR 15:3 (May-June, 1950), pp. 342-351; also in (c) Porter and Applewhite (latter not on Reserve.)

Charles A. Myers and John Turnbull, "Line and Staff in Industrial Relations," in: (a) Litterer; (b) HBR 34:4 July-August, 1956, pp. 113-124; (c) Paul Pigors, editor, Readings in Personnel Administration (2nd Edition), pp. 63-81.

7. The Problematical Role of the Foreman

(S-91) Burleigh Gardner and William Foote Whyte, "The Position and Problems of the Foreman," Applied Anthropology 4:2 (Spring, 1945), pp. 17-28. (Note: the Bobbs-Merrill reprint of this article includes some other materials as well; but only pages 17-28 are required.)

8. Causes and Consequences of Status Differences

Burleigh Gardner and David Moore, Human Relations in Industry, 3rd Edition, Chapters 5 and 6.

(S-68) Kingsley Davis and Wilbert E. Moore, "Some Principles of Stratification," in: (a) ASR 10:2 (April, 1945, pp. 242-248; (b) Coser and Rosenberg, editors, Sociological Theory, pp. 408-420; and (c) Sigmond Mosow and William H. Form, editors, Man, Work, and Society, pp. 375-383; (d) Milton L. Barron, editor, Contemporary Sociology, pp. 396-343; (d) H. Laurance Ross, editor Perspectives on the Social Order, pp. 396-407; (Note: None of above are on Reserve.)

James F. Downs, "Environment, Communication, and Status Change Aboard on Aircraft Carrier," Human Organization 17:3 (Fall, 1958), pp. 14-19.

(S-314) William F. Whyte, "The Social Structure of the Restaurant," AJS 54:4 (January, 1949), pp. 302-10; (b) in Porter and Applewhittie; (c) in Robert O'brien et. al., editors, Readings in General Sociology, 3rd Edition, pp. 378-383.

(H) Summary of Rose L. Coser, "Authority and Decision-Making in a Hospital: A Comparative Analysis," together with a summary of a partial replication of Coser's study by Eugene Selmanoff and James L. Hawkins, approximately 13 pages. (Note: the above handout may or may not be used; to be announced later.)

Textbook: Handbook of Medical Sociology, Freeman, Howard E., Sol Levine, and Leo G. Reeder (Editors)

Recommended for Purchase: Patients, Physicians and Illness, Jaco, E. Gartly (Editor)

Books on Reserve:

1. Apple, Dorrian (Editor), Sociological Studies of Health and Sickness
2. Blau, P. and W. R. Scott, Formal Organizations
3. Bloom, Samuel, The Doctor and the Patient
4. Freidson, Eliot, The Hospital in Modern Society
5. Jaco, E. Gartly (Editor), Patients, Physicians, and Illness
6. Faris, R. E. L. Handbook of Modern Sociology
7. Knutson, Andie L., The Individual, Society, and Health Behavior
8. March, James (Editor), Handbook of Organizations
9. Merton, R., L. Broom, and L. Cottrell, Sociology Today
10. Parsons, Talcott, The Social System
11. Parsons, Talcott, Social Structure and Personality
12. Paul, Benjamin D. (Editor), Health, Culture and Community
13. Pearsall, Marion, Medical Behavioral Science: A Selected Bibliography
14. Simmons, Leo W. and Harold G. Wolff (Editors), Social Science in Medicine
15. Susser, M. W. and W. Watson, Sociology in Medicine
16. Scott, W. Richard and Edmund H. Volkart, Medical Care: Readings in the Sociology of Medical Institutions.

Supplementary Readings:

1. Means, J. H., Doctors, People and Government
2. Greenberg, Selig, The Troubled Calling: Crisis in the Medical Establishment
3. Merton, Broom and Cottrell (Editors), Sociology Today (See: Introduction, "Notes on Problem Finding in Sociology," by Robert K. Merton; Chapter 10, "The Sociology of Medicine," by George G. Reader and Mary W. E. Goss; Chapter 18, "Organizational Analysis," by Alvin W. Gouldner; Chapter 20, "The Study of Occupations," by Everett C. Hughes; and Chapter 22, "The Sociology of Mental Illness," by John A. Clausen.)
4. Lazarsfeld, Paul P. and M. Rosenberg, The Language of Social Research (See: "Indices of Psychological Illness" by Samuel A. Stouffer; "Definitions of a Situation" by Robert K. Merton; and Section IV, "Formal Aspects of Research on Human Groups").

5. Parsons, Talcott, The Social System (Especially Chapter X, "Social Structure and Dynamic Process: The Case of Modern Medical Practice").
6. Freeman, H.E. and L.G. Reeder, "Medical Sociology," ASR, Vol. 22, No. 1, pp. 73-81.
7. Straus, Robert, "The Nature and Status of Medical Sociology," ASR, Vol. 22, No. 2, pp. 200-204.
8. Bloom, Samuel W., et.al., "The Sociologist as Medical Educator: A Discussion," ASR, Vol. 25, No. 1, pp. 95-101.
9. Graham, Saxon, "Sociological Aspects of Health and Illness," Chapter 9 in Handbook of Modern Sociology, Robert E. L. Faris, Editor.
10. Blau, Peter M. and W. Richard Scott, Formal Organizations, Chapter 2, "The Nature and Types of Formal Organizations.
11. Perrow, Charles, "Hospitals: Technology, Structure, and Goals," Chapter 22 in Handbook of Organizations (edited by James March)
12. Parsons, Talcott, Social Structure and Personality, see especially chapters 5, 9, 10, 11, and 12.
13. Knutson, Andie L., The Individual, Society and Health Behavior, Chapters 16, 22, 23, 27, and 28.
14. Murphy, Jane M. and Alexander H. Leighton (Editors), Approaches to Cross-Cultural Psychiatry, Chapters I, II, and VIII.
15. Bloom, Samuel W., The Doctor and the Patient, Chapters 3-7.
16. Freidson, Eliot (Editor), The Hospital in Modern Society, Chapters 1-6.
17. Macgregor, Frances, Social Science in Nursing, Chapters 1 and 2.
18. Simmons, Leo and Harold Wolff (Editors), Social Science in Medicine, Chapters 1, 2, 4, 5, 6.
19. Davis, Michael M., Medical Care for Tomorrow
20. Serbein, Oscar N., Jr., Paying for Medical Care in the United States
21. Susser, M. W., and W. Watson, Sociology in Medicine, Chapters 1-5.
22. Somers, Herman W. and Anne R. Somers, Doctors, Patients, and Health Insurance
23. Skipper, James K., Jr. and Robert C. Leonard, Social Interaction and Patient Care
24. Lolta, Jeanette R. and Edith S. Deck, A Sociological Framework for Patient Care

A-cx

I.A. 120b Introduction to Operations Analysis
Spring Term 1966-67

Mr. R.B. Fetter, Room 210 Kirtland

Text: E.H. Bowman and R.B. Fetter, Analysis for Production and Operations Management. 3rd edition (Homewood, Illinois: R.D. Irwin, Inc., 1967).

Supplementary References: Buffa, E.S., Models for Production and Operations Management. (New York: Wiley, 1963).

Churchman, Ackoff, and Arnoff, Introduction to Operations Research. (New York: John Wiley & Sons, 1957).

Duncan, A.J., Quality Control and Industrial Statistics. 3rd edition (Homewood, Ill.: R.D. Irwin, Inc., 1965).

Morris, W.T., The Analysis of Management Decisions. (Homewood, Illinois: R.D. Irwin, Inc., 1964).

Vazsonyi, A., Scientific Programming in Business and Industry. (New York: Wiley, 1958).

The reading assignments are from the course text and reprints available for use in the I.A. library. The following list keys in chapters in the supplementary references to the text. These readings are suggestive rather than required, but some of the more important are starred. An additional reference list of books available in the I.A. library is attached.

Bowman & Fetter	Buffa	Churchman Ackoff, & Arnoff	Duncan	Vazsonyi	Morris
Ch. 1	Chs. 1,2	Chs. 5,6,7		Ch. 1*	Ch. 3, 4,5,6, 7
Ch. 2	Chs. 3,4,5	Chs. 2,3,4		Chs. 4, 5,6	
Ch. 3	Ch. 12	pp. 299-327*		Chs. 2,3	
Ch. 4	Ch. 11	pp. 283-298*			
Ch. 5	Ch. 7		Chs. 12,* 13,14,15, 16,17		
Ch. 6	Ch. 8		Chs. 7,* 8,10,11		
Ch. 7			Chs. 18,19* 20,23,24		
Ch. 8	Chs. 9,10, 15,16,17	Chs. 8,9*,14		Ch. 10	Chs. 10-20
Ch. 9				Ch. 10	Ch.9
Ch. 10	Chs. 13,14	Ch. 17			Ch.23
Ch. 11	Chs. 18,19,20	pp. 174-183*			

MATHEMATICS

- Bowen, Mathematics with Applications in Management and Economics, Irwin, 1963.
- Fowler and Sandberg, Basic Mathematics for Administration, Wiley, 1962.
- Howell and Teichroew, Mathematical Analysis for Business Decisions, Irwin, 1963.
- Theodore, Applied Mathematics, Irwin, 1965.

COMPUTERS AND DATA PROCESSING

- E. W. Martin, Electronic Data Processing, rev. ed., Irwin, 1965.
- Nathan and Hanes, Computer Programming Handbook: A Guide for Beginners, Prentice-Hall, 1962.
- McMillan and Gonzalez, Systems Analysis, Irwin, 1965.
- Stanford L. Optner, Systems Analysis for Business Management, Prentice-Hall, 1960.
- Journals: Computers and Automation, Data Processing.

REFERENCES

GENERAL

- Bowman & Fetter, Analysis for Production and Operations Management, 3rd Edition, Irwin, 1967.
- Bierman, Bonini, Fouraker, and Jaedicke, Quantitative Analysis for Business Decisions, Irwin, 1965.
- Buffa, Models for Production and Operations Management, Wiley, 1963.
- Churchman, Ackoff, and Arnoff, Introduction to Operations Research, Wiley, 1957.
- Morris, Management Science in Action, Irwin, 1963.
- Sasieni, Yaspan, and Friedman, Introduction to Operations Research, Wiley, 1960.
- Journals: Management Science, Operations Research, Journal of Industrial Engineering.

PROBABILITY AND STATISTICS

- Paul Hoel, Elementary Statistics, Wiley, 1960.
- Robert Schlaifer, Introduction to Statistics for Business Decisions, McGraw-Hill, 1961.
- W. J. Dixon and F. J. Massey, An Introduction to Statistical Analysis, McGraw-Hill.
- Samuel Goldberg, Probability, An Introduction, Prentice-Hall, 1960.
- B. W. Lindgren and G.W. McElrath, Introduction to Probability and Statistics, Macmillan, 1959.
- A.J. Duncan, Quality Control and Industrial Statistics, 3rd Edition, Irwin, 1965.

LINEAR PROGRAMMING

- Charnes and Cooper, Management Models and Industrial Applications of Linear Programming (2 volumes), Wiley, 1961.
- Saul I. Gass, Linear Programming, McGraw-Hill, 1958.
- Walter W. Garvin, Introduction to Linear Programming, McGraw-Hill, 1960.

DYNAMIC PROGRAMMING

- Richard Bellman, Dynamic Programming, Princeton University Press, 1957.
- Richard Bellman and Stuart Dreyfus, Applied Dynamic Programming, Princeton University Press, 1962.

PRODUCTION SMOOTHING; ITEM INVENTORY CONTROL

- Holt, Modigliani, Muth, and Simon, Planning Production, Inventories, and Work Force, Prentice-Hall, 1960.
- Fetter & Dalleck, Decision Models for Inventory Management, Irwin, 1961.
- John F. Magee, Production Planning and Inventory Control, McGraw-Hill, 1953.
- Hansmann, Operations Research in Production and Inventory Control, Wiley, 1962.
- Hadley and Whitin, Analysis of Inventory Systems, Prentice-Hall, 1963.

I.A. 120b Production Administration
Spring Term 1966-67

Schedule: 9:00-10:30 T, Th

Room 207, Kirtland

Date	Subject	Reading	Problem
Jan. 26	Introduction to Course		
31	Decision-Making	Ch. 1	
Feb. 2	Models & Analysis	Ch. 1	
7	Graphical Planning Models	Ch. 2	2-6
9	LP Models	Ch. 3	
14	Simplex Method	Ch. 3	3-3
16	Duality	Ch. 3	3-6
21	Transportation Models	Ch. 4	
23	LP Model Formulation	Ch. 4	4-1
28	Dynamic Programming	Ch. 4	4-8
Mar. 2	Exam		
7	Statistical Control	Ch. 5	
9	Statistical Control	Ch. 5	5-3
14	Sampling	Ch. 6	5-7
16	Sampling	Ch. 6	6-13
Apr. 4	Quality Control Economics	Chs. 5&6	6-23
6	Quality Control Economics	Chs. 5&6	
11	Inventory Models	Chs. 8&9	
13	Inventory Models	Chs. 8&9	9-4
18	Inventory Models	Chs. 8&9	9-7
20	Exam		
25	Investment Models	Ch. 10	
27	Investment Models	Ch. 10	
May 2	Risk Analysis		10-8
4	Simulation	Ch. 11	
9	Simulation	Ch. 11	11-13
11	Simulation & Heuristics	Ch. 12	12-9
16	Review		

APPENDIX B

Hospital Administrators

Boyum, Kenneth M. A pilot study to compare the vocational interest profiles of hospital administration students and selected hospital administrators. 1964.
(Minnesota)

Goodblatt, Sherwin Z. The route of progress for 16 graduating classes or hospital administration alumni make good. 1963.
(Columbia)

Hamilton, Samuel Lloyd. A study of the distribution of graduates of schools in the United States which offer Master's Degree programs in hospital administration. 1963.
(Virginia)

Holmes, Robert M. A statistical analysis of the first ten years of graduates of the Graduate Program in Hospital Administration, State University of Iowa, 1952-61. 1962
(Iowa)

Pavellas, Ronald A. Administrative and career patterns among administrative personnel. 1965.
(California, Berkeley)

Pozza, Joseph P. Study of recruitment and development of hospital executives. 1962.
(Michigan State)

Nurses

Axtell, Kenneth H. The status of men nurses in the United States and other nations. 1961.
(Virginia)

Barry, Dennis R. A study to measure job mobility and related factors among nurses. 1965.
(Chicago)

Christenson, William C. Employment patterns of the 1955 graduates of three nursing programs, a four-year college, three-year hospital, and one-year hospital programs. 1961.
(Minnesota)

Gross, Paul Allan. Motivational differences between registered professional nurses and licensed practical nurses. 1964.
(Virginia)

Huff, T. Abner. Registered nurse recruitment and staffing at Ohio State University Hospitals. 1965.
(Chicago)

Kittell, Theodore H. A study of selected background and personality characteristics of sub-professional nurses. 1963.
(Minnesota)

Thompson, James Harold. An investigation of the hospital employed registered nurse shortage in Davidson County Tennessee. 1964.
(Virginia)

Physicians

Aram, Assad N. A study to determine if there is a need for a special orientation program for foreign interns in Twin City hospitals. 1963.
(Minnesota)

Barker, Thomas C. A quantitative analysis of the relationships between and the influences of the Hospital Survey and Construction program in Iowa and distribution of practicing physicians in the state. 1963.

Cattaneo, Everett Grant. The possible impact of physician corporations upon the general community hospital in California. 1962.
(California)

Ecker, G.T. Dunlop. Contractual arrangements between general hospitals of 25 to 400 beds and radiologists and pathologists. 1964.
(Iowa)

Terrill, Thomas E. Multiple staff appointments; a pilot study. 1963.
(Pittsburgh)

Yerxa, Stephen P. A study of certain characteristics of interns in four Bay Area Hospitals as these characteristics relate to the amount of stipend paid by the hospitals and selection of these hospitals by interns. 1963.
(Minnesota)

Zimmerman, James P. A study of internists in New York State. 1965.
(Pittsburgh)

Recruitment and Retention of Personnel

Carr, John L. Selecting nurse aides for increased longevity of employment. 1964.
(Minnesota)

Davis, Allan E. A day nursery school as a means of recruiting and stabilizing professional employees in hospitals. 1964.
(Minnesota)

Rose, Richard A. Comprehensive analysis of personnel turnover within a dietary department. 1966.
(Pittsburgh)

Salaries

Dalton, James E., Jr. Study to determine the probable initial effects of federal minimum wage coverage upon the non-government hospitals in central Virginia. 1966.
(Virginia)

Staffing and Utilization

Baker, Kenneth Michael. The utilization of part-time professional nurses by University Hospital, University of Michigan. 1964.
(Michigan)

Barner, C. Henry. A study of utilization of part-time employees for the professional care of patients. 1963.
(Virginia)

Clark, Robert L. An evaluation of procedures for reporting clinic workload at Brooke General Hospital, San Antonio, Texas. 1963.
(Baylor)

Crawford, John P. A proposal for staffing the operating room, recovery room, and intensive care unit of Santa Rosa Hospital. 1963.
(Baylor)

Cross, Jack. Evaluation of the utilization of housekeeping personnel on nursing units. 1962.
(Baylor)

○ Crowder, Robert S. Functional roles in the operating room. The registered nurse vs. the L.V.N. and/or surgical technician. 1965.
(California, Berkeley)

Davis, John J. Non-professional staffing and organization of the clinic services to assist in the hospital mission. 1962.
(Baylor)

Dykes, Leroy C. A study of the workload placed on the pathology and radiology departments of a general acute air force hospital by a tuberculosis service. 1963.

Elliot, Eugene L. Investigation to determine how working time is utilized by nurses and corpsmen at USAF Hospital Carswell, Carswell AFB, Texas. 1966.
(Virginia)

Farrisey, Claire G. A study of the appointment systems at the Montefiore Hospital medical group practice. 1964. (Yale)

Feazell, Samuel G. Investigation to determine how working time is utilized by nurse aides at Norfolk General Hospital. 1966 (Virginia)

Haas, Robert F. A study to determine the adequacy of the staffing of the nursing service at Southton Convalescent Sanatorium. 1964. (Baylor)

Hansen, Robert D. A comparative study to determine the effect of ward clerks in releasing the time of registered nurses for direct patient care. 1962. (Minnesota)

McFadden, G. Bruce. A study to determine criteria in the selection, training and utilization of clerical assistants in nursing units. 1961. (Virginia)

Malla, Chatra P. Relationship of physicians length of experience and graduate training with their levels of utilization of some hospital services. 1963. (Minnesota)

Moore, Jerry L. Developing an effective management tool; for internal distribution of manpower resources in a thousand-bed United States Air Force hospital. 1965. (Iowa)

Rhode, John F. Report of the utilization of civilian manpower in a military hospital. 1966 (Chicago)

Simmons, Billy F. The effects of staffing patterns on named U.S. Air Force hospitals. 1961. (Minnesota)

Tower, David H. Study of off-unit trips made by nursing personnel at University Hospital of New York University Medical Center. 1966. (Chicago).

Training

Bailey, Willie V. On-the-job training. 1964. (Baylor)

- Bamford, Dana F. Administrative aspects of the non-university affiliated community internship. 1961.
(Iowa)
- Baybars, Reuben A. Education of paramedical personnel in East Java Province, Indonesia. 1966
(Virginia)
- Coffey, John C. Medical staff evaluation of a three-year school of nursing. 1962.
(Minnesota)
- Dahl, H. Allan. Post clinical instruction experience as viewed by the graduates of the Methodist-Kahler School of Nursing. 1964.
- Goldin, Sidney. A study to determine the need for a school of medical record librarians in the state of Virginia. 1962.
(Virginia)
- Holman, Richard H. An undergraduate hospital management curriculum designed for middle management positions. 1964.
(Michigan)
- LaMotte, Thomas M. The direct and indirect costs and the service aspect of a training program for interns and residents in a non-university affiliated hospital. 1961.
(Minnesota)
- Straughn, Herbert E. A study of the inservice training program for specialized medical technicians and the post-military employment of these technicians. 1965.
(Pittsburgh)
- Urda, James. Coordination of educational resources as a resolution to problems and requirements existing in present day diploma nursing schools. 1961.
(Michigan)
- Walter, James T. Hospital employee inservice training programs: a study of training programs and the extent of their use in Illinois hospitals. 1963.
(Iowa)

APPENDIX C

1. Statement of objectives of master's degree programs in medical care administration
2. Graduates from master's degree programs in medical care administration, by academic year and school
3. Present work setting of 1963-64 academic year graduates from master's degree programs in medical care administration, by school
4. Present type of work of 1963-64 academic year graduates from master's degree programs in medical care administration, by school
5. Courses taken by 1964-65 academic year graduates, by frequency of enrollment and school

Material in this Appendix taken from Background Materials distributed at the Conference on Teaching of Medical Care Administration, June 24-26, 1965 at the University of Michigan.

Statement of Objectives
of
Master's Degree Programs
in
Medical Care Administration

University of California, Berkeley

General Objective:

The program is designed to prepare students for employment in executive and/or research positions in medical care programs of various types as they are encountered in this country today. At more advanced levels (doctoral program), it prepares students to enter research or academic careers in fields relating to the social, political, or economic aspects of the provision of medical care services.

In keeping with the philosophy of the School, the work offered in this program retains a strong orientation to the field of public health. It is our view that all organized programs for meeting health care needs are parts of a single area of service which, especially at the community level, should be bound together by common goals, common knowledge, and the sharing of facilities and coordination of services to the greatest extent possible. Even though medical care programs, hospital programs, home care programs, and public health services may, in practice, find themselves in several different jurisdictional or sponsoring patterns, there should be close coordination and common understanding among them. This, we believe, obtains regardless of whether the responsible agency is governmental, voluntary, nonprofit, or proprietary.

University of California, Los Angeles

The teaching program in medical care administration is designed to educate graduate students for community service, teaching, or research purposes.

The primary emphasis is toward preparation for administrative roles in medical care programs such as:

- health insurance plans
- public medical care programs
- planning agencies for hospitals or health services
- rehabilitation programs
- clinics and special hospital services
- quality-control agencies

The M.P.H. program is intended to convey the basic needs for medical care, fundamentals of medical economics, and the essential features of the major organized medical care programs in the United States and other nations. It intends to acquaint the student with the basic issues in the field, on which there are controversies, and objective approaches to their analysis. The essentials of internal hospital organization and administration are also taught. A brief exposure is given also to research methods on the one hand and current administrative problems on the other.

Relatively little attention is given, however, to the practical operating details of medical care programs, which may be learned later, on the job. Some of this type of learning may be gathered in a 10-week rotating field observation course.

Training is offered to the master's and the doctoral (Dr. P.H.) level.

The doctoral program is arousing much interest and absorbing a good deal of effort. It requires two years of full-time studies beyond the master's degree and a research dissertation. Its objective is to train persons for high-level responsibility in medical care programs as well as for teaching or research appointments.

Columbia University

The teaching program in medical care administration is designed to provide specialized training to individuals who plan to pursue a career in administrative medicine, particularly as it is concerned with the administration of health care services. The training extends to both the master's and Ph. D. degree levels. Students who complete the master's program may be expected to fill such positions as labor union welfare fund administrators, prepayment plan administrators, health department personnel concerned with medical care services, and regional hospitals and medical care facilities planning councils. Those who complete the Ph. D. degree program may be expected to engage in a career of research and teaching in administrative medicine.

The teaching program is completely flexible because of the varied educational and experiential backgrounds of the students and the great diversity in the courses needed by them to prepare them for the positions and roles to which they aspire.

University of Michigan

The major aim of the master's degree program is preparation for professional practice in medical care administration and areawide planning of medical care services and facilities.

The program does not prepare persons for academic or research careers. Preparation for these careers is provided by the doctoral program in medical care organization. Because its purpose is professional education rather than technical or vocational training, the program places major emphasis on developing understanding of concepts and phenomena, and the acquisition of analytic skills.

In terms of content, the student is expected to acquire, at a level of some generality, an understanding of (a) the medical care process; (b) the systems of arrangements which have been or may be developed, for the provision of medical care, and the relationships between the medical care process and various attributes of these systems; (c) organizational behavior and the process of administration, both in general terms and as they are modified by the peculiar attributes of the medical care process and the medical care system; and (d) the process of community organization in general and as modified by the special demands of the medical care process and system.

The required content includes knowledge about the rationale and applicability of certain basic techniques in administration and areawide planning. It is hoped that with this kind of basic understanding the student will be able to evaluate and respond appropriately and effectively to a variety of specific situations for which he has not been prepared in detail; and that he will also have the ability to acquire further knowledge and understanding in order to meet changing situations.

In addition to providing basic professional education, it is the purpose of the program to help the student identify with the emerging profession of medical care administration, and acquire a set of values compatible with a social commitment to the achievement of the best possible medical care for all.

University of Pittsburgh

The program in medical care administration seeks to prepare students for administrative and research position in such programs as: tax-supported and private medical care plans, hospitals, clinics, health insurance programs and medical care planning by community health and welfare agencies. The program focuses on the provision of integrated, comprehensive, personal health services of high quality to individual groups, and communities.

The course of study is planned to develop the student's knowledge, understanding, and administrative skills for use in this growing field.

It is hoped to give the students, in particular, an understanding of the professional, organizational, and economic factors that influence the quality of personal health services. The purpose is to teach the students how to identify and modify these factors in an organizational setting so as to promote comprehensiveness, continuity, and effectiveness of medical services for the benefit of the entire community.

Every effort is made to assist the student to develop initiative, independence of thought, and self-sufficiency, and resourcefulness. Students are encouraged to work on special projects, do independent reading, and assist in the solution of actual problems in hospitals and other medical care organizations in the community. The residency programs places students for experience in such medical care programs as The Health Insurance Plan of Greater New York, medical group practice programs, labor health programs, and Blue Cross.

Yale University

The Yale School of Public Health was a pioneer among schools of public health in the development of education and training in the field of medical care--stemming from the active interest of the late Professor C. E. A. Winslow in this subject from the time he was associated with the Committee on the Costs of Medical Care (1927-32). The School has had formal courses, training programs and research activities in this field for many years--under Professor Winslow, Dr. Franz Goldmann, Dr. Milton I. Roemer, Dr. Jonas N. Muller, and others. The development, since 1947, of a comprehensive education and training program in hospital administration has led to extensive interlocking between the School of Public Health and the Yale-New Haven Medical Center and many other hospitals and medical centers.

The current program in medical care dates from the summer of 1961 when Dr. I. S. Falk was appointed to the staff as Professor of Public Health (Medical Care), to develop a more extensive program of teaching, training and research in medical economics and medical care administration. Dr. E. R. Weinerman's appointment followed soon thereafter, providing even closer links with the Medical Center, since he holds appointments as Director of the Ambulatory Services and as a member of the teaching staffs in this Department and in the Department of Internal Medicine.

Accordingly, the present MPH program in medical care does not stand by itself. It has been developed within the framework of the broad 2-year public health education and training programs, and with the closest possible coordination of "medical care administration" with "hospital administration." Indeed, at many points, these programs are integrated and not merely coordinated--both being conducted in a Departmental Section of "Medical Care and Hospital Administration." Each of these two majors pursues certain special objectives; but each also affects the content of the other. This is evidenced not only in specific courses and their content, but also in the topics selected for student project assignments and master's essays.

Education in medical care at Yale is completely integrated within the framework of education and training in public health. The aim of the Yale School of Public Health is to educate and train future leaders in the field of medical care. The programs are designed to prepare students for careers in teaching, research or administration, with special emphasis on skill in the application of scientific methods to the study of problems in medical care organization, economics and administration.

Table 1: Graduates from master's degree programs in medical care administration, by academic year and by school

Year	Number of Graduates						
	Total	Col.	Cal. Berk.	UCLA	Mich.	Pitt.	Yale
1958-59	3	1	2	0	0	0	0
1959-60	2	0	1	0	1	0	0
1960-61	11	1	4	0	3	3	0
1961-62	8	2	1	1	3	1	0
1962-63	18	3	1	2	4	5	3
1963-64	37	8	4	10	12	2	1
1964-65	35	2	5	10	13	4	1

Table 6: Present work setting of 1963-64 academic year graduates from master's degree programs in medical care administration, by school

Type of Work Setting	Number of Graduates						
	Total	Col.	Cal. Berk.	UCLA	Mich.	Pitt.	Yale
Private practice	0						
Health facility:							
Hospital	7	3	1		2	1	
Clinic, group practice	1		1				
Other	1	1					
Governmental agency:							
Health	3	1			1		1
Welfare	1				1		
Mental health	2				2		
Other	2	1			1		
Voluntary health and welfare agencies	3		1		1	1	
Academic institutions:							
Health	3			1	2		
Other	1		1				
Other	1	1					
Unknown	12	1		9	2		

Table 9: Present type of work of 1963-64 academic year graduates from master's degree programs in medical care administration, by school

Type of Work	Number of Graduates						
	Total	Col.	Cal. Berk.	UCLA	Mich.	Pitt.	Yale
TOTAL	37	8	4	10	12	2	1
Administration	17	6	2		8		1
Clinical practice	2		1			1	
Teaching and research	4		1	1	2		
Other	1	1					
Unknown	13	1		9	2	1	

CALIFORNIA--BERKELEY

Table 15: Courses taken by 1964-65 academic year graduates,
by frequency of enrollment

<u>Course No.</u>	<u>Course</u>	<u>No. of Students</u>
<u>Medical Care</u>		
PH 107	Introd. to Medical Care Administration	5
PH 207	Group Study in Medical Care	5
PH 298	Case Studies of Medical Care Programs	5
PH 184	Hospital Problems & Programs	4
<u>Public Health</u>		
PH 110	Environmental Health Sciences	5
PH 145	Introd. to Epidemiology	4
PH 245A	Advanced Epidemiology	1
<u>Administration</u>		
PH 200A	Public Health Organization & Administration	5
PH 200B	Public Health Organization & Administration	4
PH 204A	Proseminar in Public Health Administration	4
Eus. Ad. 190	Organization & Administration	2
PH 204B	Proseminar in Public Health Administration	1
PH 290A	Public Health Administration	1
PH 290Q	Hospital Administration	1
PH 190	Organization & Administration	1
<u>Social Sciences & Related Fields</u>		
Soc. Welf. 207A	Social Welfare Policies & Programs	3
Soc. Welf. 296A	Social Work Practice in Public Health	1
Soc. Welf. 296B	Social Work Practice in Public Health	1
PH 295S	Public Health Social Work	1
Anthropology 170	Transmission of Culture & Socialization of the Individual	1
<u>Scientific Methodology</u>		
PH 162A	Introd. to Public Health Statistics	5

UCLA

Table 15: Courses taken by 1964-65 academic year graduates,
by frequency of enrollment

<u>Course No.</u>	<u>Course</u>	<u>No. of Students</u>
<u>Medical Care</u>		
PH 202A	Medical Care Administration	10
PH 202B	Medical Care Administration	10
PH 253A	Seminar in Medical Care Administration	7
PH 253B	Seminar in Medical Care Administration	7
PH 297	Individual Studies in Medical Care	2
PH 106	Economic Problems of Families	2
PH 290G	History of Public Health & Social Medicine	1
XL 59	Economics of Health & Welfare Plans	1
<u>Public Health</u>		
PH 147	Principles of Epidemiology	9
PH 110	Environmental Health	9
PH 220	Occupational Health	2
PH 271B	Gerontology	1
<u>Administration</u>		
PH 201A	Hospital Administration	9
PH 200A	Principles of Health Administration	8
PH 200B	Principles of Health Administration	8
PH 201B	Hospital Administration	1
PH 290D	Hospital Administration Seminar	1
PH 257B	Seminar in Health Administration & Organization	1
XL 90	Business Administration, Organization, Management Theory	1
<u>Social Sciences & Related Fields</u>		
PH 258	Seminar in Social Work in Public Health	3
Sociology 262	Urban Sociology	1
XL 81	Psychology of Human Relations	1
XL 158	Economics of Collective Bargaining	1
<u>Scientific Methodology</u>		
PH 160A	Principles of Biostatistics	5
PH 245	Research Methods in Community Health	3

COLUMBIA

Table 15: Courses taken by 1964-65 academic year graduates,
by frequency of enrollment

<u>Course No.</u>	<u>Course</u>	<u>No. of Students</u>
<u>Medical Care</u>		
Adm. Med. 203	Organization & Financing of Medical Care	2
Adm. Med. 204	Current Topics in Medical Care	2
Adm. Med. 204A	Medical Care Field Trips	2
Adm. Med. 210	Special Studies	2
HA 208 III & IV	Hospital Planning & Construction	2
HA 209	Prepayment & Hospitals	2
PH 206	Social Foundations of Community Health	2
<u>Public Health</u>		
Epid. 206	Epidemiology for Hospital Administrators	2
MH 201	Personality: Its Development & Functioning	2
MH 203 III & IV	Mental Disorders: Their Etiology, Prevention, Distribution, & Control	2
PH 207	Public Health Aspects of Radiation	2
PH 214	Public Health Projects	2
Occ. Med. 201	Introd. to Occupational Medicine	1
PH 214	Public Health Projects	1
<u>Administration</u>		
HA 201	Hospital Organization & Management	2
Adm. Med. 201C	Personnel Management	2
HA 214	Principles of Accounting	2
HA 205	Financial Management	2
HA 203	Legal Aspects	2
HA 204 III	Hospital Organization & Management	2
HA 204 IV	Case Study	2
Adm. Med. 202	Principles of Administration	1
HA 207	Trustees	1
Adm. Med. 201B	Principles of Administration	1
F3600	Management & Public Attitude	1
<u>Physical Sciences</u>		
PH 215 I, II, III, IV	Medical Background	1
<u>Social Sciences & Related Fields</u>		
Adm. Med. 201D	Labor Relations	2
Adm. Med. 201A	Group Processes	1
Econ. F3491y	Current Issues in Labor Management	1

Columbia (continued)

<u>Course No.</u>	<u>Course</u>	<u>No. of Students</u>
<u>Scientific Methodology</u>		
Biostat. 201	Introd. to Vital Statistics	2
<u>Other</u>		
Adm. Med. 218	Written Communications	2
Adm. Med. 219	Advanced Topics in Written Communications	2

MICHIGAN

Table 15: Courses taken by 1964-65 academic year graduates,
by frequency of enrollment

<u>Course No.</u>	<u>Course</u>	<u>No. of Students</u>
<u>Medical Care</u>		
CHS 630	Organization & Financing of Medical Care Programs, I	13
CHS 631	Organization & Financing of Medical Care Programs, II	13
CHS 730	Field Experience in Medical Care Administration	12
CHS 633	Areawide Planning of Medical Care Services & Facilities	9
CHS 632	Social Policy in Medical Care.	2
CHS 833	Readings on Medical Care	1
<u>Public Health</u>		
EH 500	Environment and Health	12
Epid. 510	Principles of Epidemiology	12
HD 571	Maternal & Child Health Problems, Programs & Services	4
HD 581	Community Mental Health Administration	3
CHS 590	Programs in Adult Health & Aging	2
HD 671	Planning & Organization of Community Programs for Handicapped Children	2
HD 972	Special Studies in Maternal & Child Health	2
HD 582	The Consultation Process	2
CHS 514	International Health	1
CHS 595	Gerontology	1
HD 673	Readings in Maternal & Child Health	1
<u>Administration</u>		
CHS 511	Public Health Administration & Law	12
CHS 512	Seminar & Field Experience in Public Health Administration	12
CHS 513	Public Administration	11
CHS 515	Hospital Administration for Public Health Personnel	7
CHS 613	Research in Public Health Practice	3
Pol. Sci. 631	Proseminar in Administrative Organization & Management	2
CHS 611	Seminar in Public Health Methods	1
<u>Physical Sciences</u>		
HD 520	Human Biology in Health & Disease	3

Michigan (continued)

<u>Course No.</u>	<u>Course</u>	<u>No. of Students</u>
<u>Social Sciences & Related Fields</u>		
Psych. 501	Principles of Psychology as a Social Science	1
Soc. 430	Population Problems	1
<u>Scientific Methodology</u>		
Biostat. 500	Statistical Methods in Public Health, I	11
Biostat. 550	Statistics for Health Research, I	2
Biostat. 530	Techniques of Survey Research	1

PITTSBURGH

Table 15: Courses taken by 1964-65 academic year graduates,
by frequency of enrollment

<u>Course No.</u>	<u>Course</u>	<u>No. of Students</u>
<u>Medical Care</u>		
MHA 211	Introd. to Medical & Hospital Care	4
MHA 214	The Hospital & the Community	4
MHA 240	Medical Care--Organization for Service	4
MHA 243	Special Topics	4
MHA 265	Patient Care Seminar	4
MHA 221	Special Studies	3
MHA 213	Patient Care Services	3
MHA 242	Hospital & Medical Care Problems	3
MHA 244	Administration of Group Medical Practice	3
PHP 245	Health Planning	2
PHSS 241	Health Organizations & Their Social Environ- ments	1
PHP 221	Special Studies	1
<u>Public Health</u>		
PH 213	Evaluation & Control of Environmental Health Hazards	4
Epid. 213	Principles of Epidemiology, I	3
Epid. 214	Principles of Epidemiology, II	1
PH 215	Epidemiology & Control of Infectious Diseases	1
PH 240	Epidemiology & Control of Chronic Diseases	1
<u>Administration</u>		
PHP 211	Principles of Public Health Practice	4
PHP 225	Public Health Practice Field Seminar	4
PHP 212	Public Health Problems	4
MHA 212	Hospital Administration--Organizational & Managerial Elements	3
CC 209C	Public Management: Concepts & Issues	1
MHA 241	Hospital Administration--Operational Comp.	1
CC 208	Administrative Theory (GSP1A)	1
<u>Physical Sciences</u>		
PH 212	Topics in Human Biology	4
<u>Social Sciences & Related Fields</u>		
PHSS 214	Social Environment	4
Bus. Ed. 250	Management of Human Resources--Labor Relation- ships	1

Pittsburgh (continued)

<u>Course No.</u>	<u>Course</u>	<u>No. of Students</u>
<u>Scientific Methodology</u>		
Biostat. 211	Principles of Statistical Reasoning	4
Soc. 210	Methods of Sociological Research	1
PH 243	Public Health & Population Change	1

YALE

Table 15: Courses taken by 1964-65 academic year graduates,
by frequency of enrollment

<u>Course No.</u>	<u>Course</u>	<u>No. of Students</u>
<u>Medical Care</u>		
EPH 170	Medical Care	1
EPH 171	Medical Care in the U.S.A.	1
EPH 172	The Hospital in Modern Society	1
EPH 206	Seminar in Medical Care Administration	1
EPH 212	Research in Public Health Practice (Medical Care)	1
<u>Public Health</u>		
EPH 120	Epidemiology	1
EPH 121a	Epidemiology & Control of Infectious Diseases	1
EPH 121b	Epidemiology & Control of Noninfectious Organic Diseases	1
EPH 122	Epidemiology & Control of Mental Illness	1
EPH 220	Advanced Epidemiology	1
EPH 150	Man in His Environment	1
EPH 174	Adult Health	1
<u>Administration</u>		
EPH 140	Principles & Practice of Public Health	1
EPH 149	Public Health Seminar	1
<u>Scientific Methodology</u>		
EPH 131	Statistical Methods in Epidemiology	1
EPH 134	Introduction to Demography	1
EPH 230	Applications of Probability Theory	1

APPENDIX D

OMPER PROGRAMS

1. OMPER institutional grants
2. Pilot Program Proposal, Iowa State University
3. Manpower research faculty fellowships announcement, Iowa State University
4. Conference on human resources development announcement, Iowa State University
5. Articles on manpower activities of Iowa State University from Iowa Business Digest
6. Progress report of University of Maine
7. Semi-Annual Report of North Carolina State University
8. Announcement of graduate work in Economics, Temple University
9. Announcement of Ph.D. program in Economics of Manpower, Temple University
10. Progress report of Virginia State College, Norfolk Division
11. Research proposal and Progress report of Oklahoma State University
12. Overview of operations of Center for Manpower Studies, Atlanta University

Grant No.: 91-11-66-60

Institution: Atlanta University
Atlanta, Georgia

Principal Staff: Dr. Harding B. Young.

Major School or Dept.: Graduate School of Business Administration

Research Objectives: Problems of labor force adjustment to a rapidly changing industrial environment will be analyzed. Particular emphasis will be placed on discriminatory problems—barriers to apprenticeship programs and labor union membership, poor communication about job opportunities, and lack of work orientation—that Negroes and members of other disadvantaged groups have in gaining employment. Results will be used to design programs which will help the unemployed overcome handicaps to successful employment.

Developmental Activities: The University will develop the facilities necessary for long-term manpower research. It will encourage study by faculty members with an interest in labor problems, acquire necessary reference materials and equipment, and train students for careers in the manpower field.

Grant No.: 91-17-66-61

Institution: Iowa State University
Ames, Iowa

Principal Staff: Dr. Edward B. Jakubauskas.

Major School or Dept.: Industrial Relations Center

Research Objectives: A multi-disciplinary group of scholars from the departments of psychology, sociology, and economics will study human resource problems in the Great Plains States Region comprising the six States of Iowa, North Dakota, South Dakota, Nebraska, Kansas, and Missouri. Of highest priority will be studies leading toward the implementation of manpower programs as a part of a general economic

development plan for the Great Plains States Region. Typical research will include occupational-employment projections for functional economic areas within the region, patterns of labor mobility from rural to urban areas, and employment opportunities and training facilities for women.

Developmental Activities: A manpower research unit within the Industrial Relations Center will be established. This unit will have as its mission the development of a program of co-ordinated manpower research and graduate education for the institutions of higher education in the Great Plains States Region. A nondegree Summer Institute for scholars and advanced graduate students will be offered, as well as research assistantships to graduates of colleges and universities in the region. A clearinghouse of information on current research projects and manpower publications will be established.

Grant No.: 91-21-66-63

Institution: University of Maine
Orono, Maine

Principal Staff: Dr. David H. Clark.

Major School or Dept.: College of Business Administration

Research Objectives: The project will entail construction of a model relating manpower underutilization in Maine to sources which cause it, such as community environment. An interdisciplinary research team will investigate four sectors of community environment in which groups concentrate their activities—educational, economic, political, and social. The structure and values of each sector will be examined by scholars in the several disciplines. They will specify and measure causal relationships between the sectors comprising community environment and underutilization of manpower. Results should be applicable to similar areas throughout the United States.

Developmental Activities: Because the project is interdisciplinary, faculty will profit from contact with

members in other fields by considering common problems from varied viewpoints. The project will serve as the training vehicle for both faculty and graduate students in manpower problems and social science research.

Grant No.: 91-35-66-65

Institution: North Carolina State University at Raleigh
Raleigh, North Carolina

Principal Staff: Dr. Charles E. Bishop, Robert M. Fearn.

Major School or Dept.: Department of Economics

Research Objectives: Investigators will study both manpower problems common to the whole country and those unique to the South. Research will be conducted on the job market behavior of professionals and technicians, on the costs and benefits of retraining workers of different age groups and different skill levels, and on the economic effects of social welfare programs. Studies will try to determine the effect of changing technology on traditional industries—on demand for labor, the degree to which skills are transferable from one occupation to another, and the effect of the growing urbanization of Negroes on their labor force participation.

Developmental Activities: A theoretically based, empirically-oriented program of graduate studies for Ph. D. students specializing in labor economics, human resource development, and manpower policy will be established. This program will culminate in a research workshop. It is expected that faculty members and graduate students at Duke University and the University of North Carolina will participate in the research workshop, both by attending sessions and by presenting papers.

Grant No.: 91-38-66-64

Institution: Oklahoma State University
Stillwater, Oklahoma

Principal Staff: Dr. Joseph J. Klos, Dr. Maurice W. Roney, Dr. Robert W. Scofield, Dr. Solomon Sutker, Dr. James D. Tarver.

Research Objectives: A steering committee composed of a staff member from each of the departments of sociology, economics, industrial education, and psychology will stimulate and coordinate manpower research. Demographic studies will be made with particular reference to population changes in southern towns and cities and labor force participation rates in the Ozark low-income area. Research will also be done in the areas of vocational education, occupational analysis, and public welfare programs.

Developmental Activities: A Manpower Research Center will be established to administer the curriculum for manpower trainees and to coordinate university manpower research. Manpower specialists will be trained in a 2-year program which will lead to an M.S. degree.

Grant No.: 91-40-66-62

Institution: Temple University
Philadelphia, Pennsylvania

Principal Staff: Dr. Louis T. Harms.

Major School or Dept.: Department of Economics

Research Objectives: Research will be conducted on human resource development and employment problems. Specifically, a method of constructing economic models of small regions, including analysis of key industries, population projections, and implications of technical change, will be developed. These models will be used in determining manpower needs and human resource development and in eventual planning for vocational educational facilities and programs.

Developmental Activities: A Ph. D. program in economics is being initiated in Fall 1966. The grant will be used to foster original research by both students and faculty in the manpower field as one aspect of the new Ph. D. program. In addition, the department will develop a team of experts who are trained in the con-

ceptual, methodological, and physical aspects of data processing and in policy application. This team will conduct research, teach, and provide community services in the manpower field.

Grant No. 91-49-66-66

Institution: Virginia State College at Norfolk
Norfolk, Virginia

Principal Staff: Dr. James H. Gadson, Jr.

Major School or Dept.: Departments of Economics,
Sociology, Business Administration, and Psychology

Research Objectives: Scholars from the various
disciplines of the college will be organized into an in-

terdisciplinary manpower research team. The group will examine manpower losses resulting from underutilization of human resources in the Tidewater area of Virginia, and determine to what extent remedial programs can be devised to remedy this problem.

Developmental Activities: A Manpower Utilization Institute will be established. The institute will offer undergraduates in the social sciences training in laboratory techniques usually available only to graduate students at large universities. Institute studies will offer a framework within which to orient individual study by students who are required to do a senior research project. New courses structured around the findings of the proposed study will be added to the curriculum, and courses relating to manpower utilization will be increased at the evening college. The institute will also encourage research by faculty members seeking advanced degrees.

PILOT PROGRAM PROPOSAL

Project Title: Demonstration of Research-conference Procedures for Estimating Health Manpower Requirements and in Evaluating Educational and Training Programs for Selected Health Occupations in Non-metropolitan Areas.

Submitted to the U.S. Commissioner of Education under the provisions of Section (C) of the Vocational Education Act of 1963 by the Department of Economics of Iowa State University, Ames, Iowa.

October 4, 1966

PILOT PROGRAM PROPOSAL

Check One: Research Training Experimental, Developmental or Pilot

Submitted to the U.S. Commission of Education
Under the Provisions of Section 4 (C)
of the Vocational Educational Act of 1963

Project Title: Demonstration of Research-conference Procedures
for Estimating Health Manpower Requirements and
in Evaluating Educational and Training Programs
For Selected Health Occupations in Non-metro-
politan Areas.

Applicant: Department of Economics, Iowa State University, Ames,
Iowa

Address: East Hall, Iowa State University, Ames, Iowa

Telephone Number: 1-515-294-2426

Investigator: Dr. Edward B. Jakubauskas
Department of Economics--East Hall
Iowa State University
Ames, Iowa

Submitted by: Dr. W. Robert Parks
President
Iowa State University
Ames, Iowa

Federal Funds Requested:

Duration: Beginning December 1, 1966; Ending May 31, 1967
Total time for feasibility study: six months.

Date Transmitted: October 4, 1966

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ABSTRACT

- (A) Submitted By: Iowa State University, Ames, Iowa
- (B) Principal Investigator: Dr. Edward B. Jakubauskas
Department of Economics
Iowa State University
Ames, Iowa
- (C) Title: Demonstration of Research-conference Procedures for Estimating Health Manpower Requirements and in Evaluating Educational and Training Programs For Selected Health Occupations in Non-metropolitan Areas.
- (D) Objectives:
- (1) To involve community health agencies and vocational-education institutions in the development of a long-range research-demonstration program for the six-state Great Plains States Region (Iowa, North Dakota, South Dakota, Nebraska, Missouri, and Kansas).
 - (2) As a first phase of the overall program, to develop research-conference procedures for estimating health manpower requirements and supply; evaluate education and training programs serving non-metropolitan areas; utilize health, education, and research personnel in Iowa as the nucleus for regional health manpower development.
 - (3) To integrate and coordinate plans of the states in this region for more efficient manpower utilization, training, curriculum development, and job re-structuring.
- (E) Procedures:
- (1) Conduct community meetings of leaders in health, education, and research, in Iowa.
 - (2) Utilize research conference procedures in generating usable data for program development in health manpower education.
 - (3) Conduct community meetings of leaders in health, education, and research in Iowa.
 - (4) Develop demonstration projects based upon research findings for the region, and particularly for non-metropolitan areas.
 - (5) Evaluate research and demonstration programs.
- (F) Time Schedule: Pilot-feasibility Study: Beginning December 1, 1966; Ending May 31, 1967

Abstract (cont.)

Comprehensive research-demonstration program:
July 1, 1967 to June 30, 1970.

(G) Budget: Pilot-feasibility Study: \$20,494
(HEW funds requested: \$14,894)

Comprehensive research-demonstration program:
(To be determined upon completion of pilot-feasibility study)

I. The Problem

In recent years the demand for medical and other health services has been increasing rapidly. Expenditures by consumers for medical, dental, and other health care, and public budgets for community health programs and health research are at peak levels. In many areas, demands for health care have outstripped the availability of physicians, nurses, and other trained health workers to meet the needs.

During the next 10 years, it is anticipated that the demand for health services in hospitals, nursing homes, and other health facilities will increase even faster. By 1975 the total number of hospital beds is expected to grow by nearly 12 per cent to about two million; the impact of medicare and other programs is likely to cause at least a doubling between 1965 and 1975 in the number of beds in skilled-care nursing homes. In spite of the productivity increases expected in the industry, total health services employment is expected to rise by over 30% from 2.65 million to 3.50 million.¹

The efficiency of present and future labor markets in matching manpower requirements with appropriately trained workers has been made increasingly difficult by rapid scientific and technological changes, changes in the size, composition, and location of population, new institutional arrangements, and by a changing distribution of consumer and voter preference. The increasing difficulty of achieving a balance between manpower resources and requirements has focused attention on the need for early detection of current and prospective trouble spots. It has also emphasized the vital role of education and training in providing programs which realistically help prepare students and workers to adapt to a shifting pattern of job opportunities.

The underlying forces at work fall with uneven impact on various sectors of the economy. The health industry has been especially sensitive to the operation of these forces. As in other fields, numerous changes have taken place in the structure of health occupations. New jobs have come into being while others have passed from the scene or have changed significantly in content. The importance of the health service industry (2.65 million jobs in 1965), the rapid rate of progress in the field of medicine, the changing structure of employment opportunities, and the growing demand for more and better health services make

¹"Technological Change and Manpower Forecasts", Peter E. Haase, Industrial Relations: A Journal of Economy and Society, Institute of Industrial Relations, University of California, Berkeley, Volume 5, Number 3, May 1966.

it more imperative than ever that persons who can be qualified for these positions be sought out, motivated, and trained.

To develop curricula in the health occupations, establish institutions for health occupation training, redesign and re-structure jobs--in short, to match future requirements for health manpower with a high level quality of supply--it is first necessary to forecast accurately projected employment needs in the various health occupations taking into consideration population changes, technological developments, governmental and private health expenditures, and numerous other factors which affect the manpower requirements of a locality or region. Given the demand, consideration must be placed on the quality of supply of manpower forthcoming to meet emerging requirements. Often, existing shortages of quality health personnel are more serious than shortages of numbers of health workers. Substandard training facilities--or no training facilities--often become accepted and customary by communities unwilling to consider the social and economic benefits resulting from changes in productivity of workers through formal vocational-technical training programs for health workers.

Frequently, projections of manpower requirements in the health field fail to consider the possibilities for re-structuring professional jobs into functional components. Shortages often exist as a result of having professional workers perform less than professional tasks, with consequent underemployment of the professional workers and unemployment for those with a capability of being trained for sub-professional tasks.

It has been customary to relate health manpower needs in terms of ratios to population. Often these comparisons, though useful on the surface, have been misleading. Ratios of physicians (or any other health occupation) to population need not be constant. Rising living standards, medicare, prepaid medical expenses all have the tendency of increasing the required number of health workers to population. On the other hand, innovations in medicine or technology have the tendency of increasing productivity and the quality of service, and in lessening the need for additional manpower.²

Against the backdrop of the national expansion of demand for health services is the problem of areal differentiation in needs, availability of personnel, and patterns of institutional

²"Projections of Manpower Requirements and Supply", Harold Goldstein, Industrial Relations: A Journal of Economy and Society, Institute of Industrial Relations, University of California, Berkeley, Volume 5, Number 3, May 1966.

adjustment. Especially important are the differences between metropolitan and non-metropolitan areas. Differences in the growth, composition, distribution and movement patterns of the population to be served, and in social and economic status influence the demand for services and hence manpower requirements.

If the need for information regarding health manpower requirements, supply, and education and training programs has been great in the nation's cities, it has been even greater in rural and small-town non-metropolitan areas. Lacking advanced training facilities for the development of health manpower resources, rural areas have had to provide the means for attracting manpower away from urban centers of training. Yet, it is precisely in rural areas that low wage levels, sub-standard cultural and living conditions, and outmoded political institutions have tended to block both the development of better quality as well as larger numbers of trained health personnel.

It has been long recognized that professional health workers have traditionally gravitated toward large urban centers. It has been less recognized that this urban-rural imbalance has been compounded by the problem of sub-standard training for many rural health workers. Also, there has been an acute shortage of specialists, and in many cases professional health workers have been called upon to perform sub-professional tasks--thus compounding the availability of scarce health manpower resources. Sparsely settled rural areas have lacked the concentration of population to develop desirable health occupational specialization, even where there has been a desire for change, and availability of funds to upgrade the quality of health services.

In all too many rural counties there has developed a pattern for utilizing scarce health resources only in the most dire circumstances, with little emphasis upon preventive medicine for either the individual or the community. In many rural counties the health officer is often an elected or appointed official with no medical or health training whatsoever.

New developments in the health field have a lag in application which is adverse to rural areas. This lag in adopting new equipment and methods is further aggravated by an outmoded county form of government which has failed to meet the needs of a changing society--by failing to develop alternative political structures such as multi-county health facilities. In some cases, such as Iowa, state services in mental health, mental retardation, sanitation and corrections have existed side by side with county institutions.

Current developments in the establishment of Area Vocational Schools, and community health facilities provide a

ray of hope in an otherwise neglected and lagging field. These developments, encouraged by federal financial assistance and a growing awareness of needs at the state level are still hindered by the lack of adequate procedures for estimating health manpower requirements and supply, by a current gap which exists in bringing to bear all of a community's resources in solving emerging needs for health manpower as well as the implementation of health and education plans for the development of appropriate training curricula in the area vocational schools.

The Great Plains States Region (North Dakota, South Dakota, Nebraska, Iowa, Missouri, and Kansas) provides an excellent illustration of social, economic, and demographic trends which are relevant for the development of education and training programs for health occupations in non-metropolitan areas. For example:

1. The Great Plains States Region has experienced a higher than national average birth rate, but because of out-migration of residents the region's population has been growing at substantially less than the national rate.
2. As people move from rural areas to towns and urban areas the nonfarm population has increased more rapidly than the total population.
3. The proportion of children and older age groups is increasing.
4. The proportion of males and females in the 25 to 44 age bracket is decreasing.
5. The rate of increase in the female labor force participation rate has been higher than the national figure.
6. The people of the region face an increasingly severe problem in educating their young and caring for their old. These public responsibilities will be born by a decreasing percentage of people in the economically most productive age group.
7. The geographical pattern of trade and population centers is changing in response to economic forces. The changing spatial distribution of the region's population is a manifestation of a changing pattern of economic opportunities. There has been an eastward pattern of migration to the large metropolitan centers.

8. The dispersed population of the countryside, coupled with intra-regional shifts in the location of population which create both areas of growth and decline, pose special problems of medical care delivery systems, optimum size and location of facilities, travel time and cost, and the number and type of health personnel required.

As a region in social and economic transition the Great Plains States Region provides an excellent laboratory for developing models of personnel needs and the most promising types of health education and training programs for non-metropolitan areas.

II. Description of Proposal: Pilot-Feasibility Study

It is proposed that a system of procedures be developed for a systematic assessment and evaluation of manpower requirements, resources, training, and patterns of labor utilization for selected health occupations which may serve as a model for health manpower planning in sparsely settled non-metropolitan areas. The "laboratory" for testing these procedures is the State of Iowa, and four Area Vocational School Districts within the state. Participating agencies will involve public and private organizations at the state and local level, including experts in health, education, and research.

This pilot project seeks to demonstrate the feasibility of utilizing action, research, and training organizations in the state (and Area Vocational School Districts) in participating in the development of a low-cost self-survey of health manpower needs, training facilities, and other problems related to current training gaps which exist in matching manpower requirements with current and anticipated labor supply.

Similar self-surveys have been conducted successfully in other areas of employment. For example, a self-survey of employment needs and working conditions was conducted by the State of Minnesota in 1955.³ The proposed project seeks to undertake a similar approach in the determination of health manpower needs

³The Minnesota Self-Survey: Reports of the Functional Task Forces and Summary Review. St. Paul, Minnesota, December 15, 1956.

The Minnesota Self-Survey: Reports of the Operational Task Forces and Summary Evaluation. St. Paul, Minnesota, October 15, 1956.

involving not only the traditional public and private health agencies, but research and education organizations as well.

The specific goals of the pilot-feasibility study are to:

1. Develop a replicable system of procedures (involving health, education, and research organizations) for estimating health occupational employment requirements and supply on a state-wide and multi-county level.
2. Estimate future health manpower needs for non-metropolitan areas at the state level and sub-regions within the state.
3. Determine the emergence of new occupations in the health field.
4. Determine the feasibility for restructuring professional health occupations with the resultant emergence of new sub-professional occupations.
5. Evaluate the effectiveness of current health education and training programs in non-metropolitan areas, and make recommendations for the establishment of new curricula, new careers for training, and new methods for imparting skills to workers in the health field.
6. Determine the degree of interest, cooperation and participation of selected community representatives, health profession leaders and appropriate educators in a comprehensive study of health manpower requirements and education and training programs.
7. Determine possible points of integration or coordination of the systematic study with existing programs of vocational education and training for health occupations in Iowa.
8. Analyze existing studies of health manpower and occupational education or training.
9. Identify and prepare data and data collection instrument requirements.
10. Review study plans with selected community representatives, health profession leaders and appropriate educators.

11. Develop a detailed plan for conducting the proposed comprehensive study.

Timetable and "Step-wise" Procedures Development for Pilot-Feasibility Demonstration Program

- (1) Initial Involvement of Health, Education, and Research Agencies, under the sponsorship of the Iowa State Manpower Development Council.

April 12, 1966 and May 13, 1966.

- (2) August 1966--Development of Pilot-Feasibility Project Proposal.

- (3) December 1, 1966 to January 31, 1967--

Preparation of Working Papers by research consultants on state and local health manpower needs, supply, training facilities and problem areas.

- a. Use of mailed questionnaires, interviews, and secondary data.

- b. Working papers prepared for major sub-areas of health field: Hospital Employment; Nursing Home and Homemaking Services; Preventive medicine, Public Health, and Environmental Health.

- (4) February 1967-

- a. Evaluation of preliminary working papers through state level workshops in major sub-areas of health field including resource personnel from health, education, and research.

- b. Modification of working papers; Identification of problem areas and gaps in health manpower policies and training.

- c. Initiate plans for multi-county meetings.

- (5) March & April 1967-

- a. Multi-county meetings in 4 selected multi-county areas in the state.

- b. Preparation of working papers for multi-county areas.
- c. Multi-county workshops in 4 areas.
- d. Identification of problem areas, gaps in health manpower policies and training.

(6) May 1967-

- a. Preparation of final draft for pilot-feasibility report to U. S. Office of Education. Preparation of self-survey of health manpower needs, problems, and training facilities for State of Iowa, and 4 multi-county areas. Preparation and evaluation of system of procedures in meeting health manpower needs through the involvement of health, education, and research personnel and agencies.
- b. Preparation of Comprehensive Multi-state Health Manpower Planning Program. Demonstration projects. Innovative approaches in meeting health manpower needs.

The proposed pilot-feasibility study would be conducted in close liaison with a similar program sponsored by the U. S. Office of Education in Indianapolis, Indiana with the Indianapolis Hospital Development Association. In addition, close coordination will be developed with the Health Information Facility of the University of Oklahoma to find areas of activity which would be applicable to the proposed project.

III. Objectives: General Scope of Comprehensive Study

Phase I. Involvement of Health, Education, and Research Agencies in the identification of health manpower research needs and program development (completed in April and May of 1966); and Phase II. The proposed feasibility study of health manpower research conference procedures for conducting a "self-survey" of health manpower needs is to be completed over the six month period from December 1, 1966 to May 31, 1967). This should be considered as the foundation of the comprehensive research and demonstration project to be conducted over the three year period from 1967 to 1970.

In broad outline the major phases of the comprehensive study would be as follows:

Phase III. Research and analysis of health manpower resources and requirements for the Great Plains States Region.

Research-conference procedures developed in Phase II (using Iowa as a model) will be applied to the whole six states Great Plains States Region.

Manpower requirements will be analyzed both in terms of the medical concept of need and the economic concept of demand. Requirements will be projected far enough into the future so that planning and implementing education and training programs are facilitated, but not so far as to risk estimates with an unacceptable level of reliability. Projections for 1970, 1975, and 1980 appear consistent with this objective. Among other factors these projections should encompass the influence of population trends, trends in care per capita, the impact of relevant public programs such as medicare, and anticipated technological developments as they affect the scope and cost of services offered and the productivity of health workers. A range of projections (high, medium, low) should be presented by occupational classification and by type of employer.

The supply of manpower for health occupations should also be estimated and projected. Current sources of supply should be identified and their current and projected rates of supply determined. Estimates should be presented by source and by occupational classification. The adequacy of existing sources of supply should be analyzed both in terms of numbers and quality of training. Financial rewards, cost, availability and length of training, recruitment programs, mobility in health occupations, and other factors affecting the entry of workers into this field should also be investigated.

Existing and projected capacity to identify, motivate, and train people for health occupations should be adjusted for out-migration of those trained in the region and in-migration of those trained in other regions. The results should then be related to projected manpower requirements. Several models, based on variable assumptions regarding supply and requirements, would provide a range of estimated shortages (or surpluses) by occupational classification.

Phase IV. Analysis of Job Content and Required Education and/or training by Occupational Classification for the Great Plains States Region.

Jobs currently performed by health personnel should be analyzed in terms of work actually being done to determine the possibility of restructuring jobs so as to permit the increased use of sub-professional personnel and assistants in jobs which require less training. Forecasts should be made of new jobs

which may emerge as a result of social, technological and institutional changes. Jobs should then be analyzed in terms of the education or training required. In this grouping attention should be given to the possibility of ordering a range of jobs from initial entry through intermediate positions to sub-professional and possibly professional status.

Phase V. Regional Conferences would be sponsored under the Aegis of the Iowa State Manpower Development Council to Implement Research Findings into Regional Cooperative Health Occupation Training Programs.

The Iowa State Manpower Development Council is planning a Great Plains States Human Resources Conference for October 13-14, 1966. Topics will focus upon the training and human resource development problems and programs at the national, regional and state level. Phase V. would involve the sponsorship of conferences and workshops by the Iowa State Manpower Development Council and other state and regional coordinating agencies. The basic goal of these conferences will be to translate research findings into action-programs.

Phase VI. Development of Pilot Education and Training Programs for Selected Health Occupations.

This phase of the comprehensive program will be concerned with the development of new training programs and the modification of existing health occupation training programs. Particular attention will be given to the development of trained health personnel and the development of job opportunities for residents of small-towns and rural areas in the Great Plains States Region. Demonstration projects will be developed with emphasis upon innovative and imaginative aspects as well as interstate cooperation in utilizing state and local financial resources in maximizing the availability of health services to communities. Pilot programs should be developed and conducted in cooperation with appropriate certification and/or licensing agencies. In so far as possible, they should be integrated and coordinated with existing facilities and programs of vocational education and training for health occupations in the respective states and for the region.

Phase VII. Evaluation of Demonstration Projects.

Pilot programs developed in Phase VI. should be evaluated

by independent agencies in terms of effectiveness and facility in meeting the health service needs of the population.

Phase VIII. Comprehensive Action Plan for Health Occupation Training.

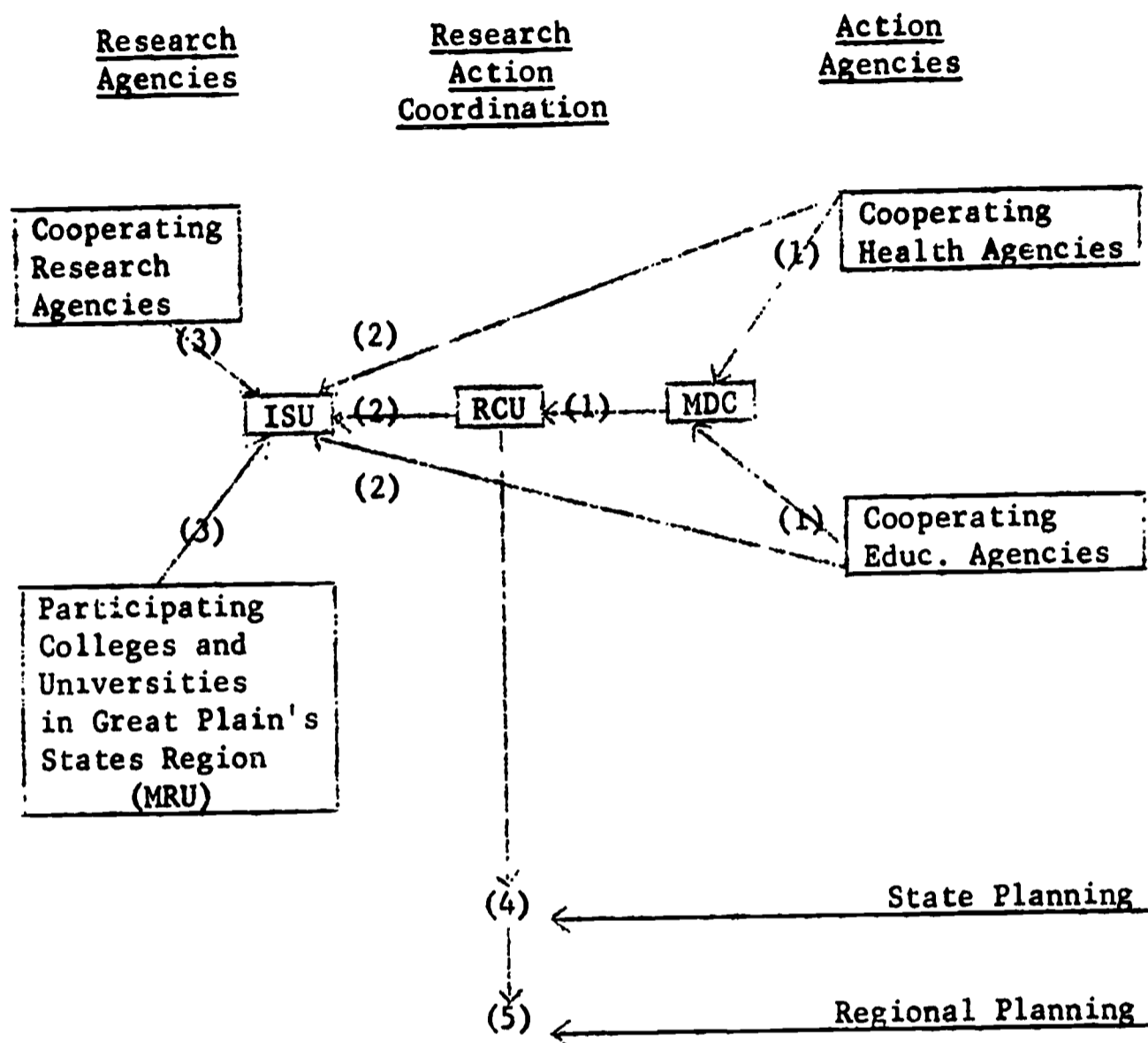
On the basis of the research and analysis conducted, and the evaluation of pilot programs, a comprehensive action plan should be prepared for the development of education and training programs for health occupations in the Great Plains States Regions.

By the middle of 1970 a fully developed cooperative health occupation training plan should emerge with provisions for continuous evaluation of existing programs as well as guidance and direction of action-programs through university-sponsored research.

IV. Administrative Structure and Procedures

The Pilot-feasibility study will be conducted by the staff of the Manpower Research Unit of the Industrial Relations Center and the Department of Economics of Iowa State University, Ames. This study will be conducted in close cooperation with the Bureau of Business and Economic Research of the University of Iowa, Iowa City, the numerous health agencies in the state of Iowa, and the Research Coordinating Unit of the State Department of Public Instruction, as well as the Iowa State Manpower Development Council. (The structure for the comprehensive research and demonstration program which will follow the feasibility study will be determined at a later date, but will involve all of the above agencies.)

The administrative structure for the pilot-feasibility study is as follows:

Organization Chart: Pilot-feasibility StudyPlanning Steps:

- (1) Preliminary meetings. Need for pilot-feasibility study determined. Cooperation of Health & Education agencies. Coordination by RCU.
- (2) Assignment of pilot-feasibility study to IR Center at Iowa State University. Consultation with action agencies.
- (3) Conduct pilot-feasibility study and disseminate findings. Cooperation of research organization.
- (4) State planning; Area Vocational School District workshops and planning.
- (5) Regional conference and development of a multi-state comprehensive health manpower program. Health Occupation Training Demonstration projects--multi-state regional development.

V. Research Dissemination and Use of Findings

Results of the pilot-feasibility study will be prepared as a detailed and systematic written plan of action for a study in depth of manpower requirements and supply, health education and training programs of selected occupations using the state of Iowa as a laboratory model for program development. The completed pilot study will serve as a plan of action for health and education agencies as a master blueprint for the development of a comprehensive plan for research and demonstration for the Great Plains States Region.

VI. Personnel:

Preliminary meetings to discuss health training needs in Iowa were held on April 12, and May 13, 1966. At the first meeting representatives from the U. S. Office of Education were invited to discuss health occupation training needs from the national viewpoint, and to provide assistance in developing a program for health education training in sub-professional areas. At the May 13th meeting, Dr. Lewis Wagner represented the Bureau of Business and Economic Research of the University of Iowa, Iowa City. This organization indicated a strong interest in developing a pilot study of research to identify needs and to develop a comprehensive regional plan for the Great Plains States Region. On May 18th Dr. Wagner and Dr. Edward Jakubauskas (at that time Director of the Iowa State Manpower Development Council) visited with Messrs. Robert Herman and Bernard Yabroff of the U. S. Office of Education. The Bureau of Business and Economic Research was encouraged to apply for a pilot-research grant to develop a larger comprehensive program.

In mid-August 1966 the Bureau notified the Manpower Development Council that it was unable to continue negotiation for a research grant, and it was suggested that Iowa State University, Ames, take the initiative in developing the feasibility grant, and with the cooperation of other agencies, the comprehensive program as well.

Principal Investigator: Dr. Edward B. Jakubauskas

The principal investigator for the proposed pilot-feasibility grant is to be Dr. Edward B. Jakubauskas, Associate Professor of Economics at Iowa State University (see attached vita) and formerly Director of the Iowa State Manpower Development Council. He is also project director of the Manpower

Research Unit within the Industrial Relations Center at Iowa State University which has been established by the U. S. Department of Labor under a manpower institutional grant of \$75,000 per year for three years. The mission of the Manpower Research Unit is to assist colleges and universities in the Great Plains States Region by training research personnel, conducting manpower workshops, maintaining a clearinghouse of manpower information, in providing faculty released time for research, and in assisting graduate students in furthering careers in graduate training.

Consultants:

Resource personnel attending the April and May planning sessions in Iowa would serve as consultants in planning and guiding research activities, in disseminating research findings, and in facilitating regional coordination and planning. Those most actively involved would be re-imbursed for time and effort. Others would serve ex-officio.

Indicated below are those who have participated in the planning sessions leading to the development of this project proposal. (April 12th meeting*; May 13th meeting**; attended both meetings***):

*** Edward B. Jakubauskas	Iowa State Manpower Development Council; Iowa State University, Ames
*** James A. Socknat	Iowa State Manpower Development Council
*** Carl W. Fairman	Iowa State Manpower Development Council
* John M. Ropes	Iowa State Manpower Development Council
** Dana Merrell	Iowa State Manpower Development Council
** Father Cyril F. Engler	Iowa State Manpower Development Council
* Walter M. Burnett	Board of Control
*** Warren Freiband	Board of Control

* Elizabeth Palmer	Board of Control
*** Dr. Elmer Smith	Board of Social Welfare
* Joe Veehoff	Department of Social Welfare
*** Cecile E. Kopecky	Assistant Director, H.O.E. Programs in Iowa
*** Elizabeth Kerr	Director, Health Occupations Center
* Vera M. Sage	Exec. Dir., Board of Nursing
* Merlin Lee	Personnel and Training Office State Department of Health
*** Thelma Luther	Division of Nursing - Health Dept.
*** Lloyd Nelson	Department of Health
* Madeline M. Downey, M.D.	Department of Health
* James F. Speers, M.D.	Department of Health
*** P. J. Houser	Department of Health
*** Winifred W. Cleveland	Department of Health
*** John W. DeBiak	Department of Health
* Jack W. Clemens	Department of Health
** Vivian Jensen	Department of Health
** Paul H. Ogilvie	Department of Health

** Linda Mulder	Department of Health
** D. O. Vipond	Department of Health
** Stanley L. Hendricks	Department of Health
* Bernard Yabroff	Office of Educ., Washington, D.C.
* Windol Wyatt	Department of Public Instruction
* Kenneth M. Wold	Department of Public Instruction
* Charles Churan	Commissioner's Office on Alcohol- ism
*** Helen Henderson	Iowa Assoc. for Retarded Children
** Glenn W. Sterling	Iowa Commission for the Blind
*** Albin T. Benander	Employment Security Commission
** E. Frances Stoney	Board of Nursing
** Lew Wagner	Bureau of Business & Economic Research - University of Iowa
** John C. Bartlett	College of Medicine - Iowa City
* Robert Herman	Office of Education - Wash., D.C.

VII. Facilities for Research, and Description of Participating
Agencies involved in the Implementation of the Pilot-
Feasibility Study

The Manpower Research Unit At Iowa State University

The Manpower Research Unit was established under a

grant of \$75,000 per year for three years from the U. S. Department of Labor. This is one of seven grants awarded in July 1966, the purpose of which is to raise the research potential of developing college and university programs. The mission of the Manpower Research Unit is to increase the manpower research potential of colleges and universities in the six-state Great Plains States Region comprising Iowa, North Dakota, South Dakota, Nebraska, Kansas, and Missouri. It is envisioned that coordinated manpower research programs will be developed on a multi-disciplinary basis involving faculty from the departments of economics, sociology, and psychology as well as the newly-formed Industrial Relations Center.

Service will be rendered to colleges, universities, and manpower "Action-Agencies" in the region by offering:

1. A non-degree Summer Institute for scholars and advanced graduate students, with a major focus upon the manpower research needs of the region,
2. A clearinghouse of information on on-going research projects and published manuscripts in manpower,
3. Research assistantships to graduates of colleges and universities in the region (awards made at MS & Ph.D. levels),
4. A coordinated long-term plan for the development of basic research projects of regional and national significance,
5. Close liaison between action-agencies and research organizations in the region leading toward "Human Resource Development Planning" on a multi-state basis.

The Iowa State Manpower Development Council

The Council is a federally financed state agency concerned with the coordination of manpower programs for Iowa, and directly responsible to the Governor. In addition to coordination of manpower programs, its functions also include liaison with federal agencies, technical assistance to state and private agencies in drafting manpower project proposals, information on manpower data and programs through a periodic newsletter, and the development of innovative special projects.

The Council fulfills these functions through six

branches and a staff of 25 people. The branches include: Research, Disadvantaged and Handicapped, Vocational Education & Training, Higher Education, Rural Manpower, and Special Projects. The Council was inaugurated in June 1965 for an initial period of 18 months (later extended to 30 months), as an experimental and demonstration project in manpower coordination at the state level. Initial financing has taken place through the Manpower Administration of the U. S. Department of Labor. (Continuation for 1967 has been approved). To date, over 50 projects are in the process of development including close to a half million dollars of on-the-job training contracts developed for the Manpower Development Council itself and for other agencies in Iowa.

During 1967, the Manpower Development Council plans to continue and expand its programs through the development of regional coordination with neighboring states. This will be accomplished through the offices (or delegated agencies) of the Governors of the various states.

It is anticipated that from this cooperation at the regional level will emerge the identification of manpower problems common to all states (e.g. rural to urban population shifts, migration of rural youth, growth of older citizens population) and that cooperative programs will develop among the states.

The work of the Council involves assistance to state agencies in developing action-programs and in identifying research needs. It is strongly a part of the philosophy of the Council that research programs would provide guidance and knowledge to policymakers. In 1967 plans will be developed for multi-state regional planning and development of manpower programs coordinated through the offices of the highest state executives or their representatives.

The budget of the Council for 30 months is \$615,000. Including the prime-OJT contracts developed for the Manpower Development Council's operations and the proposed renewal of the Council's contract with the U. S. Department of Labor, the total budget of the Council will be over a million dollars in 1967.

CHART IRelationship of Industrial Relation Center's Manpower Unit at Iowa State University and Iowa State Manpower Development Council

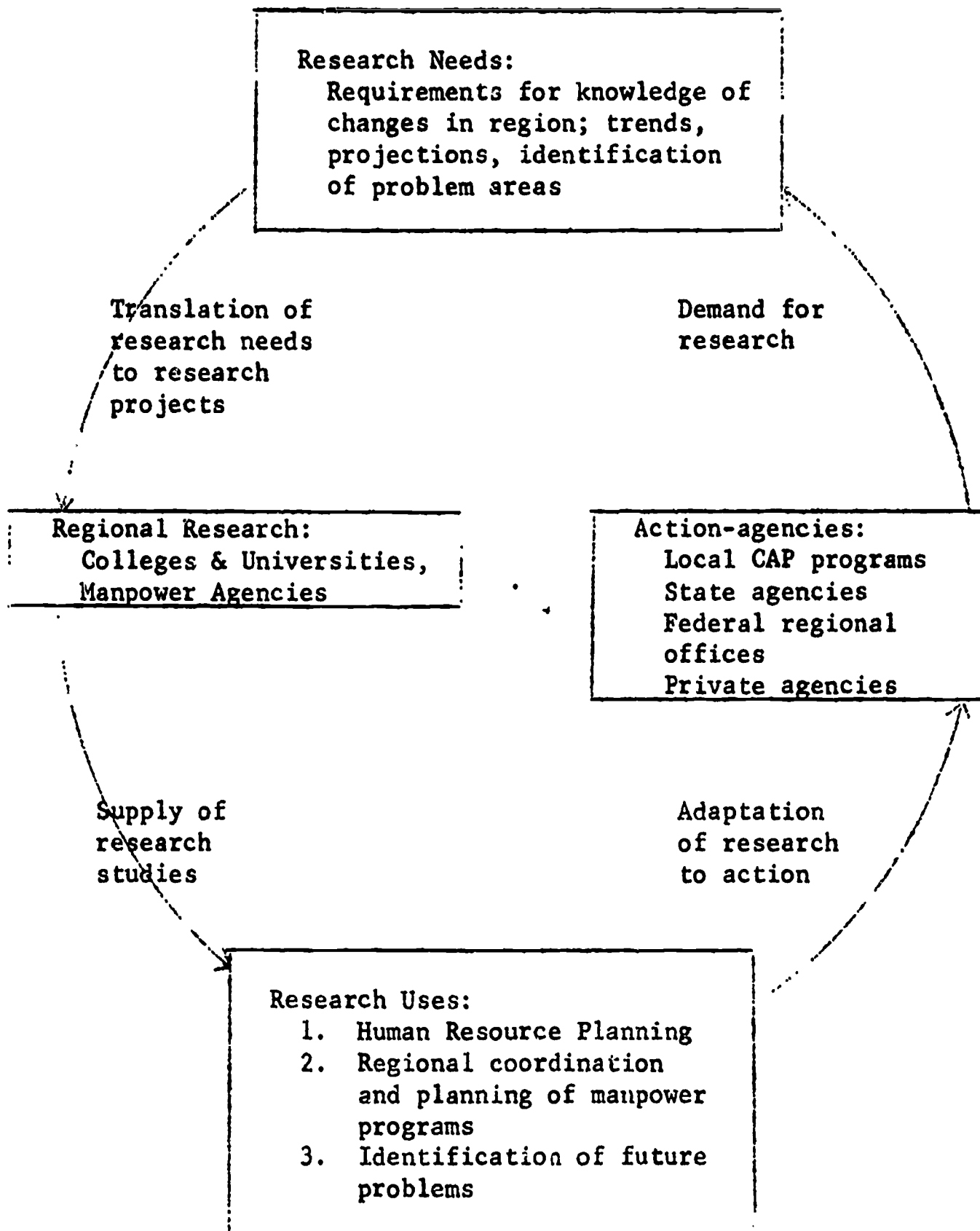
<u>Development Phase:</u>	<u>Manpower Research</u>	<u>Action-programs</u>
	Manpower Research Unit at Iowa State University	Iowa State Manpower Development Council
	SERVICE TO:	SERVICE TO:
I. Planning and Experimental (6/65-12/66)	(not funded)	Public & Private Manpower Agencies in Iowa
II. Planning for Regional Cooperation	Colleges & universities in region; local, state and federal agencies (Proposed for 7/66 to 6/69)	Regional cooperation Governors offices (or representative state agencies) 1/67 to 6/69
III. Full Regional coordination	Colleges and universities in region; local, state, and federal agencies (7/69....) (Funding would be from non-Labor Department sources.)	Regional Compact for manpower action-programs (7/69.....) (Funded wholly by state legislature)

TARGET DATE FOR FULL COORDINATION OF MANPOWER RESEARCH AND ACTION-PROGRAMS: July 1969.

CHART II

Flow-chart of Research and Action-Programs:

Manpower Development Council and Industrial Relations
Center (Manpower Research Unit) Iowa State University



Supporting Research Facilities at Iowa State University

The research and assistance of the Computation Center, and the Statistical Laboratory at Iowa State University are available for use by those participating in the proposed project.

Computation Center

The Computation Center was organized in 1962 to provide an all-university computing service and a centralized facility for research and education in the computer sciences. University staff members and students having problems suited for digital computation can use the computing service as well as a consulting and programming service. The Center maintains a variety of computing facilities ranging from unit record equipment through large scale digital computers. Peripheral equipment includes analogue-to-digital conversion system, and a digital plotter. The Center offers short non-credit courses in computer programming and provides liaison for academic departments offering formal courses in computer sciences. Research encompasses numerical mathematics, programming research and digital computer systems.

Statistical Laboratory

The Statistical Laboratory is a research and service institute which conducts research in statistical theory and methodology and promotes and fosters the use of sound statistical methods in university research. Established in 1933, it was the first statistical center of its kind in the United States. The laboratory cooperates closely with research workers in all colleges and universities. Staff and facilities are maintained for statistical consulting aid, numerical analysis and programming sample survey operations, and statistical design and analysis of surveys and experiments. Similar consulting aid, research cooperation and services are extended to off-campus groups, other colleges and universities and civic groups when such activities are of mutual benefit or otherwise in the public interest.

VIII. The Research Coordinating Unit of the Division of Vocational Education, Iowa Department of Public Instruction

The Iowa RCU has participated actively in coordinating and assisting all agencies and individuals involved in the design

of this project. This close relationship will continue throughout the activity of the pilot-feasibility study as well as the development of the Comprehensive Plan.

This proposal has been reviewed by the Iowa RCU, and has received its endorsement.

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IX. Proposed Budget

	<u>HEW</u>	<u>ISU</u>	<u>MDC</u>
<u>DIRECT COSTS:</u>			
A. <u>Salaries</u>			
(1) Prin. Investigator	\$ 2,600	\$2,600	---
(2) Secretary	---	2,000	---
(3) Two Research Asst.	3,600		
B. <u>Consultant Fees</u>	3,000		\$ 1,000
C. <u>Other Direct Costs</u>			
(1) Emp. Serv. & Ben.	474		
(2) Travel	900		
(3) Supplies & materials	500		
<u>INDIRECT COSTS:</u>	3,820		
	<u>\$14,894</u>	<u>\$ 4,600</u>	<u>\$ 1,000</u>
 TOTAL PROJECT COST:	 <u>\$20,494</u>		

Budget (cont.)Explanatory Notes

Line A-1: Principal Investigator - one-quarter of \$20,666 annual salary for six months $(\$20,666/12) \times 6 = \$2,600$

Line A-3: Two Research Assistants - salary of \$300 per month for six months $(\$300) \times 2 \times 6 = \$3,600$

Line B: Consultant Fees - 30 man days at anticipated average daily rates of \$100 $(\$100) \times 30 = \$3,000$

Line C: Employee Services and Benefits

Principal Investigator 12% (2,600) = \$312

Research Assistants 4.5% (3,600) = \$162

Manpower Development Council will contribute up to \$1000 toward consultant fees for workshops and conferences, travel funds, and professional staff time. (Federal funds).

The Industrial Relations Center at Iowa State University will contribute released faculty time for principal investigator and secretary. (Federal funds).

Indirect Costs: Approved audit rate of 61.6% of salaries $(6,200) \times 61.6\% = \$3,820$

One-page Summary Vita -- Principal Investigator

NAME: Edward B. Jakubauskas

Address: 1816 Maxwell Avenue, Ames, Iowa

Phone: Office: 1-515-294-2426 Home: 1-515-232-0612

Date of Birth: April 14, 1930

Marital Status: Married, 3 children

Military Service: U.S. Army, 1954-56

Education:

Ph.D., June 1961, University of Wisconsin.

Areas of professional interest: Labor economics with special interest in manpower research; Economics of Education; Public Finance; Foreign Labor Movements.

B.A. with honors (economics) 1952; M.A. (economics) 1954, University of Connecticut, Storrs, Connecticut.

Experience:

Teaching Assistant, 1952-54, University of Connecticut.

Education Specialist, 1954-56, U.S. Army.

Public Utilities Specialist, 1956, U.S. Federal Power Commission.

Research Economist, 1956-58, U.S. Bureau of Labor Statistics.

Teaching/Research Assistant, 1958-61, Department of Economics, University of Wisconsin, Madison.

Instructor, 1961-62, Department of Economics, University of Wisconsin.

Assistant Professor, 1962-63, Department of Economics, University of Wisconsin.

Assistant Professor, 1963-65, Department of Economics, Iowa State University, Ames.

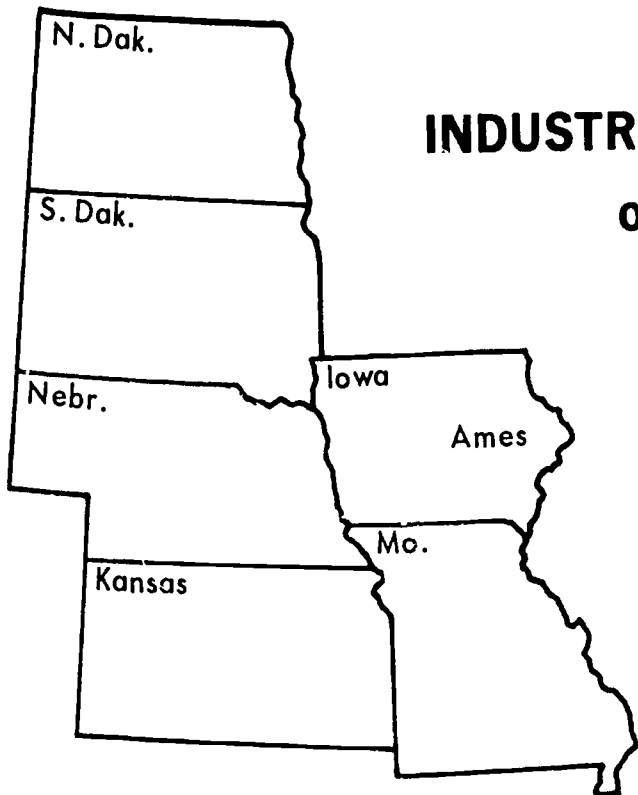
Director, Iowa State Manpower Development Council, 1965-66, Office of the Governor.

Associate Professor, Sept. 1965, Department of Economics, Iowa State University, Ames (on leave, 1965-66).

The idea of a manpower research unit serving the six-state region of Iowa, North Dakota, South Dakota, Nebraska, Kansas and Missouri was developed jointly by the Industrial Relations Center at Iowa State University and the Iowa State Manpower Development Council.

The basic goal of this unit is to bring university and college research to bear on the human resource development problems of this Great Plains States Region. One long-run vision of this project is that it may lead to a regional compact among colleges and universities—a compact to eventually close the gap between basic research and action-programs in the whole field of human resource and manpower development. The Summer Manpower Research Institute is one of the first services being offered. Look inside to see how scholars may apply for fully-paid fellowships to the Summer Institute.

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INDUSTRIAL RELATIONS CENTER
of IOWA STATE UNIVERSITY
announces

FACULTY FELLOWSHIPS

for a Summer Manpower Research Institute June 12-17, 1967

- * Theory relating to manpower research
- * Current developments in manpower policies
- * Current research needs in manpower



FACULTY FELLOWSHIPS June 12 - June 17, 1967

QUALIFICATIONS

Open to faculty members at accredited colleges or universities in the (six-state) Great Plains States Region who have an interest (teaching and/or research) in manpower.

WARD INFORMATION

Fellowships pay a stipend of \$100 for the six-day Summer Manpower Research Institute, plus a travel allowance of 10 cents a mile (up to a maximum of \$50), as well as a room, free of charge, at the Memorial Union on the Iowa State University campus.

PLICATION

Vita should be sent to: Dr. Edward B. Jakubauskas
Industrial Relations Center
103 East Hall
Iowa State University
Ames, Iowa 50010

no later than Feb. 10, 1967. Selection of *thirty* scholars for the fellowships will be made by the staff of the Iowa State University Industrial Relations Center.



RESEARCH INSTITUTE June 12 - June 17, 1967

PURPOSE

To increase the research skills of college and university scholars involved (or interested) in manpower research. This includes teaching as well as actual research interests.

STAFF

The Institute faculty will be made up of nationally-known manpower research personnel.

CURRICULUM

- Core theory relating to manpower research—drawing heavily from the social science disciplines, and including economics, psychology, sociology, statistics and data processing.
- Current developments in manpower policies.
- Current research needs in manpower.

Applicants: Send Vita to Iowa State University Industrial Relations Center no later than Feb. 10, 1967.

PEOPLE ON THE PROGRAM

Aller, Curtis C. Director, Office of Manpower Policy Evaluation and Research, U.S. Department of Labor, Washington, D. C.

Anderson, Marvin A. Dean of University Extension, Iowa State University, Ames

Beal, George M. Professor of Sociology, ISU

Boulding, Kenneth E. Professor of Economics, University of Michigan, Ann Arbor, Mich.

Bushnell, David S. Director, Division of Adult and Vocational Research, Office of Education, U.S. Department of Health, Education and Welfare, Washington, D. C.

Coleman, Joseph G. Acting Assistant Secretary of Health, Education and Welfare, Washington, D. C.

Davey, Harold W. Professor of Economics, ISU

Eldridge, Eber Professor of Economics, ISU

Faltnson, Julia M. Assistant Dean of Home Economics, ISU

Futrell, Gene Assistant Professor of Economics, ISU

Harrington, James W. Member, Iowa Board of Control of State Institutions, Des Moines

Kolmer, Lee State Leader, Agricultural and Economic Development, Cooperative Extension Service, ISU

Konenker, William E. Vice President of Academic Affairs, University of North Dakota, Grand Forks, N. D.

Kovarsky, Irving Professor of Business Administration, University of Iowa, Iowa City

Lubbers, Erwin J. President, Iowa Association of Private Colleges and Universities, Des Moines

Miller, Rev. Austin E. S. J. Chairman, Social Order Conference, Creighton University, Omaha, Nebr. and Chairman, Great Plains Regional Manpower Advisory Committee

Powers, Ronald C. Associate Professor of Sociology, ISU

Somers, Gerald G. Professor of Economics and Director, Industrial Relations Research Institute, University of Wisconsin, Madison, Wis.

Thomas, James A. Executive Director, Iowa Civil Rights Commission, Des Moines

Weinberg, Edgar Chief, Division of Technological Studies, Bureau of Labor Statistics, U.S. Department of Labor, Washington, D. C.

Williams, J. Earl Professor of Economics and Director, Human Resources Institute, University of Houston, Houston, Tex.

conference on

HUMAN RESOURCES DEVELOPMENT

Co-sponsored by Iowa State University Cooperative Extension Service, Iowa State Manpower Development Council and Iowa State University Industrial Relations Center

October 13-14
1966

Memorial Union
Iowa State University
Ames, Iowa

PROGRAM

THURSDAY, OCTOBER 13

8:30 Registration

MORNING SESSION

Sun Room

Concept and Problems of Human Resources Development
Lee Kolmer, Chairman

9:15 Welcome - Marvin A. Anderson

9:30 An Evaluation of Human Resources Development Policies - Curtis A. Aller

10:30 Discussion - J. Earl Williams

11:00 Discussion - Rev. Austin E. Miller

11:30 LUNCH - Go through cafeteria line and carry trays to South Ball Room

AFTERNOON SESSION

Sun Room

Need and Demand for Human Resources Development
Harold W. Davey, Chairman

1:30 Human Resources Development as a Learning Process - Kenneth E. Boulding

2:30 Manufacturing Employment Trends - Gene Futrell

3:00 BREAK TIME

3:20 Agricultural Employment Trends - Eber Eldridge

3:50 Services Sector Employment Trends - Edgar Weinberg

6:30 BANQUET
Erwin J. Lubbers, Chairman
Speaker: Joseph G. Coleman

FRIDAY, OCTOBER 14

MORNING SESSION

Sun Room

Barriers to Human Resources Development
George M. Beal, Chairman

8:30 Racial Barriers in Apprentice Training Programs - Irving Kovarsky

9:30 Buzz Groups Prepare Questions for Panel

10:00 BREAK TIME

10:30 Questions for the Panel
Panel: James W. Harrington, Physical and Mental Barriers
James A. Thomas, Institutional Barriers
Ronald C. Powers, Social and Spatial Barriers

11:30 LUNCH - Go through cafeteria line and carry trays to South Ball Room

AFTERNOON SESSION

Sun Room

Needed Directions in Human Resources Development
Julia M. Faltinson, Chairman

12:30 Evaluation of Manpower Development Programs - Gerald G. Somers

1:30 Directions in Human Resources Development for College-Bound Youth - William E. Konenker

2:00 Directions in Adult and Vocational Human Resources Development - David S. Bushnell

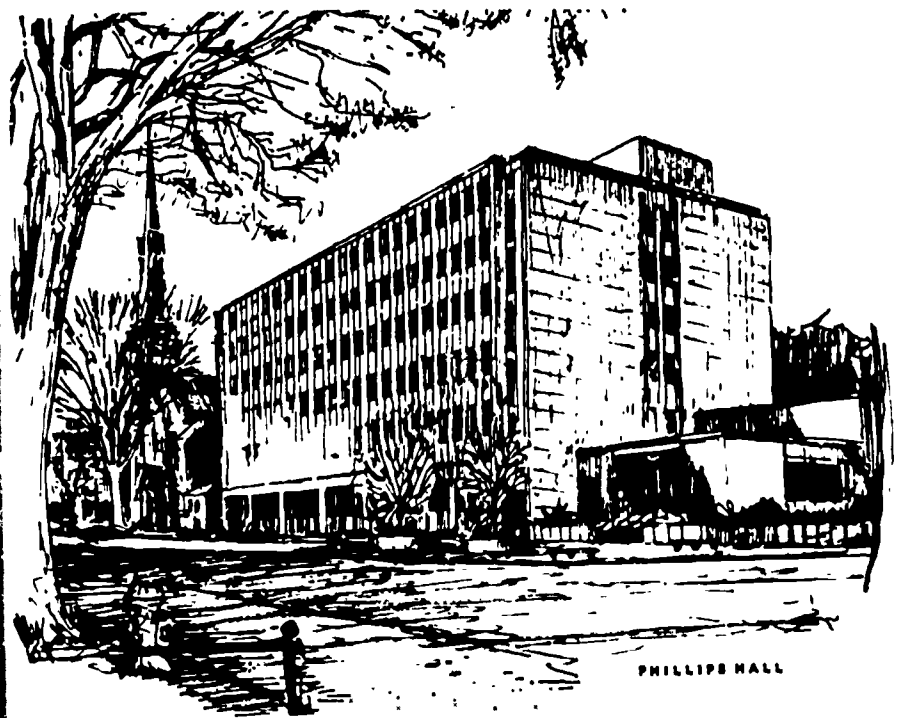
The rural-to-urban shifts, the declining agricultural labor force and the rapid industrialization of Iowa are typical of the changes taking place in the Great Plains. Continued lack of opportunity for minority groups also indicates a need for skill development. More leisure time and the growth of the number of people in the older citizens groups also create a need for the total development of the human resource. These changes cry out for continuous adjustments in programs to assure human resource development and utilization. This conference will attempt to explore new dimensions and directions for meeting these challenges.



BUREAU OF BUSINESS AND ECONOMIC RESEARCH • COLLEGE OF BUSINESS ADMINISTRATION
THE UNIVERSITY OF IOWA • IOWA CITY

Human Resource
Development

Iowa Business Digest



OCTOBER 1966

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Iowa Business Digest

OCTOBER 1966 VOLUME 37 Nos. 9 & 10

BUREAU OF BUSINESS AND ECONOMIC RESEARCH
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THE IOWA STATE MANPOWER DEVELOPMENT COUNCIL

by EDWARD B. JAKUBAUSKAS* and DONALD E. MITCHELL**

The background and objectives of the Iowa Manpower Development Council are described in this article.

The Iowa State Manpower Development Council grew out of a need felt by Governor Harold E. Hughes for a state agency to coordinate work in Iowa on the flood of federal legislation dealing with manpower and related areas. In the spring of 1965, Governor Hughes signed a contract for \$192,950 with Secretary of Labor W. Willard Wirtz for the establishment of the experimental and demonstration project now known as the Manpower Development Council. The contract has a finite life of eighteen months—from June 18, 1965, to December 18, 1966.

The Manpower Development Council (MDC)

*Associate Professor of Economics, Department of Economics, Iowa State University, Ames, and currently, director of the Iowa State Manpower Development Council. Professor Jakubauskas received the B.A. and M.A. degrees from the University of Connecticut and the Ph.D. degree from the University of Wisconsin. Formerly he was an assistant professor of Economics and a member of the staff of the Industrial Relations Research Institute at the University of Wisconsin. He was also employed as a research economist with the United States Department of Labor, where his work included writing and research on the implications of technological change on employment; retraining; and case studies of automated plants. Previously published articles have appeared in the *Monthly Labor Review*, the *Personnel Journal*, the *Quarterly Review of Economics and Business*, and the *Iowa Business Digest*. Dr. Jakubauskas has also been a consultant to the United States Office of Economic Opportunity and the Armour Automation Fund Committee.

**Chief, Higher Education Branch, Iowa State Manpower Development Council. Mr. Mitchell received the A.A. degree from Santa Ana (California) College and the B.A. degree from The University of Iowa. Formerly he was a desk editor of The Associated Press in Des Moines and was an assistant city editor of the *Des Moines Register*. In 1959 he was editor of the *Iowa Official Register*.

has five functions: coordination, technical assistance, information, liaison, and special projects. To execute these functions, the Council was organized into six branches: Special Projects, Rural Manpower, Disadvantaged and Handicapped (institutionalized or socio-economically deprived), Vocational Education and Training, Higher Education, and Research. Each branch was organized to help coordinate on-going work of Iowa agencies and groups; to offer technical assistance where needed; to provide information on programs and legislation; and to offer the service of liaison between Washington and Iowa and between Des Moines and the 99 counties of Iowa.

The Council is a state agency operating directly from the Office of the Governor and concerning itself with human resource development on a broad scale—considering those persons with the most modest abilities and those with the highest level skill. Fruition of the human resource development work of the Council will be development of a State Human Resource Development Plan. This plan will be based upon the premise that the maximum development of each citizen's capabilities is a function of the willingness of society to allocate a growing portion of its resources to health, welfare, and educational programs.

VAST INCREASE IN FEDERAL PROGRAMS

The need for a state agency to assist state and local groups and agencies, public and private, becomes obvious after an examination of the rapid increase in federal programs.

The federal administrative budget for 1965 for health, labor, and welfare totaled \$5.8 billion. In fiscal 1966 this grew to \$8.3 billion, and estimates for 1967 virtually doubled since 1965 to \$9.9 bil-

tion.¹ In addition to this, the education budget grew over the comparable period from \$1.5 billion in 1965 to \$2.3 billion in 1966 and is estimated at \$2.8 billion for fiscal 1967.²

From another point of view, a United States Department of Labor inventory of federally assisted manpower development programs lists 34 laws which are relevant for job training alone.³ Another inventory published by the Office of Economic Opportunity lists over 250 federal programs affecting low-income individuals and communities.⁴ Whether one considers the growth of federal expenditures in this field, or the number and variety of programs, the role of the federal government in health, welfare, education, and manpower is truly impressive.

With this growing role of the federal government in the manpower development field, there has been a concurrent realization that the effectiveness of these programs would be enhanced through more efficient coordination. Coordination, in turn, involves the elimination of duplicating programs, but more importantly, it implies linkages of two or more programs to better serve the citizenry of the country. To meet this goal of efficiency, numerous varieties of administrative organizations evolved. At the national level, inter-agency cooperation has emerged to a great extent in processing and developing various project proposals. Problems remain for implementing full coordination at the federal agency level, but initial progress has been made in a number of multi-agency sponsored projects already.

LOCAL, REGIONAL, AND STATE COORDINATION OF PROGRAMS

Though coordination at the federal agency level is important for full utilization of human resource development programs, complete coordination must, in the final analysis, be developed at the local community level. It is at this point that the

various independent threads represented by federal legislation and the numerous agencies in Washington are actually brought to bear upon the individual and his multi-faceted needs.

With the enlarged extent of human resource development programs, a concept of regional coordination has developed. Foremost as an example of this is the Appalachian Regional Development Program, financed in heavy part by special legislation to assist this region, but also involving other federal programs as well. Regional development programs of this type have led to the coining of a new phrase in government circles—that of “creative federalism.” By this is meant that a redirection of federal grants-in-aid will emerge which will lessen federal requirements and regulations as to how the money is spent and also will direct funds to states organized on a multi-state regional level. State and local governments will be given the opportunity to formulate their own programs—using federal funds—with the federal government acting only if local governments fail to act. It is contemplated that with “creative federalism” an effort will be made to work through new types of structures such as area-wide bodies and private and semipublic groups.⁵

CURRENT POLICY PROBLEMS IN HUMAN RESOURCE AND MANPOWER DEVELOPMENT

For the layman (and very often for the active practitioner) manpower development programs present a confused and conflicting picture. Professor Harbison of Princeton University has noted that a lively debate has ensued in the field, with various calls for action in coordinating manpower programs, though no one has really come forth with a workable plan for coordination because no one has been able to really identify the goals that we are attempting to attain.⁶ As Professor Harbison points out, little thought has been given either to

¹President Johnson's budget message submitted to Congress for fiscal 1967.

²*Ibid.*

³“Inventory of Federally assisted Manpower Development Programs,” mimeographed staff paper, United States Department of Labor, August 24, 1965.

⁴*Catalog of Federal Programs for Individual and Community Improvement*, Office of Economic Opportunity, December 15, 1965.

⁵See: “The Challenge of Creative Federalism,” by Senator Edmund S. Muskie, *Saturday Review*, June 25, 1966. Also: “On Creative Federalism: Johnson Suggests New Intergovernmental Relations,” *Congressional Quarterly*, April 22, 1966, page 832.

⁶“Critical Issues in American Manpower Policy and Practice,” by Frederick Harbison, *Proceedings of the Seventeenth Annual Meeting of the Industrial Relations Research Association*, December, 1965.

the framework of coordination, the strategy, or the locus of power and responsibility for program development.

It takes little sophistication to observe that there is no "policy" of manpower development as such. Like "Topsy," the nation has forged ahead on all programs almost simultaneously. Training programs under the Manpower Development Training Act (MDTA) are emphasized in dealing with the problems of unemployment—yet, in 1965 the number of trainees in the country numbered 100,000 in comparison with an average level of unemployment during the year of 3.4 million. (The number of persons experiencing unemployment will, of course, be much greater over the years.) Even if we compare the number trained with the hard-core unemployed (755,000), the role of MDTA is not very significant. When we consider the fact that MDTA programs have not been geared to deal with the hard-core unemployed, the impact of this program appears to be even less significant. While much of public attention is focused upon training programs in dealing with unemployment, most economists actually are convinced that fiscal and monetary policy is of overriding importance in affecting manpower utilization.

In actual practice, manpower policy provides for programs that often operate at cross-purposes to one another. We have programs designed to keep workers from leaving rural areas—we have programs to facilitate their movement out. We have a vast network of 1,900 employment offices throughout the country—yet only a small fraction of total job placements are made through public employment offices. We have legislation designed for the unskilled and the poor, as well as legislation for those embarking upon careers in professional and sub-professional occupations. There is legislation for the establishment of permanent, specialized vocational education centers, for the utilization of private facilities for on-the-job training in industry, and for "ad hoc" institutional classroom re-training for the unemployed. We find programs for the young, the old, the urban, the rural, as well as the skilled and unskilled.

In short, manpower programs have evolved as a collection of special-purpose "tools" dealing with specific short-run problems, rather than as a part of any general pattern or conscious design. In fact,

the development of our manpower resources has been merely implicit within broader social and economic programs and goals. There has certainly not emerged an overall system for planning either at the state, regional, or federal level, for manpower and human resource development in its own right.

Each federal agency has viewed itself as a "coordinator" in the manpower field, and in some cases competition has been seen even among bureaus within the same department. At the state and local level, the effect of federal neglect has resulted in chaos, confusion, and often, rightful hostility.

THE SEARCH FOR A "COORDINATED" HUMAN RESOURCE DEVELOPMENT PROGRAM

The growth of federal expenditures on education, manpower, and welfare and the vast array of legislation, programs, and proliferation of agencies and organizations dealing with various aspects of manpower development has sharpened the need for a structure or framework of coordination for manpower development. The need is apparent, but the actual structure remains unresolved as does the nature of the decision-making process of manpower development as such. Even the questions raised have been confusing, with various proponents calling for either an "active," "a cohesive," or a "comprehensive" policy in the field. Not all of these things are identical—even if we were able to achieve a consensus as to which agency should perform the coordinating and where the coordination should take place.

Increasingly, questions of defining the meaning of manpower development (and coordination) have been evolving in discussions of the feasibility of planning manpower development programs. The concept of a plan, imposed upon the individual or community would be unacceptable within our system of government or values of society. What is suggested here is the concept of "planning"—a process rather than an achieved goal; an activity which involves the needs of people as individuals rather than the autocratically imposed will of a single individual or group; a program developed at the community and state level rather than one emanating from the federal level.

As an experiment in designing a coordinated, active, and comprehensive manpower program at

the community and state level, the Iowa State Manpower Development Council was established. Its purpose was to weave the separate programs found at the state and federal level into a purposeful fabric which would maximize effectiveness in raising the employability of the individual, and in assisting him in arriving at decisions in the labor force through knowledge and with the immediate availability of all resources enacted into law.

FORMATION OF THE MANPOWER DEVELOPMENT COUNCIL.

The immediate need for an agency at the state level—such as the Manpower Development Council—became apparent when a “weak Governor” system of government in Iowa was called on to deal with a vastly growing federal manpower program. Federal programs, developed to meet the serious problems encountered in local areas, were applied in virtually equal proportions to all 50 states, mainly for political reasons. The “mix” of programs emerging from the federal agency level, and applied to Iowa, appeared to lack the capability of spontaneously meeting the optimal mix for Iowa. In some cases, projects could be brought into the state without the approval of the Governor; in other cases, projects could be brought in over his veto. At best, the Governor’s office did not have the capability of keeping up with, and on top of, the rapidly changing federal scene. Decentralized clusters of state-agency authority—virtually autonomous of direction from the state’s chief executive—were emerging.

The Manpower Development Council was formed to meet two separate needs: 1) at the state level an agency was clearly needed to advise the Governor of developments in manpower training and to lessen the adverse effects of a “weak Governor” system which made the Governor responsible to the people but gave him virtually no power to implement his decisions; and 2) at the federal level there was much uneasiness developing at high policy-making levels regarding *not only* the effectiveness of federal programs, but also the efficient application and coordination of these programs.

The Council was established under a contract between the Office of the Governor of Iowa, and the Office of Manpower Policy, Evaluation, and Research of the United States Department of

Labor. (The authority for this grant is Title I of the Manpower Development and Training Act of 1962, amended in 1963 and in 1965. This section of the Act provides for unique and innovative projects in dealing with problems of unemployment and underemployment. It has received enthusiastic and unanimous endorsement by both parties in Congress.)

LAUNCHING THE MANPOWER DEVELOPMENT COUNCIL

On July 15, 1965, the Governor appointed the director, and the most unique experiment, not only in the manpower field, but also in federal-state relations was launched.

The first three months of operation constituted a “tooling-up” period. Office space was acquired; staff recruited and trained; and a rationale or philosophy of operation emerged. By mid-October, 1965, the Manpower Development Council was in operation. But before this took place, numerous problems had to be resolved before the Manpower Development Council could fulfill its mission.

First of all, there were the housekeeping chores of finding about 3,000 square feet of office space for a staff of 23 persons. A budgetary system and procedure for keeping financial records had to be devised to satisfy both federal and state requirements. At times these requirements worked at cross-purposes to one another, and there was little precedent available to assist those involved in coping with this unique situation. For example, the contract called for a separate and special bank account, but this was contrary to state procedures. Leasing and use of office equipment presented other problems. Federal regulations required the use of surplus equipment; this is an excellent procedure for most contracts; but for this operation the Council could not obtain the quantity of desks, chairs, and tables required at the time needed.

Over and beyond the mundane tasks of finding space and equipment, the climate in mid-1965 toward manpower and federal programs was not entirely a friendly one. The state Office of Economic Opportunity (OEO), was formed only weeks before the formation of the Development Council, and the aggressive director of that agency had attracted much attention in the press in forming community action programs and in waging the war on poverty. Some of the hostility intended for

the state OEO had been directed in correspondence to the Council and vice versa. To complicate matters even more, the state OEO director and the MDC director found many areas of overlap and duplication in their respective mandates. These were resolved very quickly, however, and a spirit of cooperation which has continued to the present time developed between the two organizations.

Staffing the Council became the major pre-occupation of the director in the initial three months. A number of serious constraints appeared in this activity. First of all, staff could be hired only for a period of twelve to fifteen months. Also, staff salaries for senior personnel were \$12,000 per year, with junior salaries up to a ceiling of \$9,600. The time of year—July to September—was not the most ideal period for recruiting.

Given numerous constraints, a remarkably intelligent and imaginative staff was recruited from July to October. Although many persons were lacking in direct knowledge of the manpower field, they had a high level of intelligence and high-spirited enthusiasm for the task at hand. The senior people who were recruited represented the following disciplines: economics, agricultural extension, geography, law, occupational therapy, social work, and journalism. Virtually all had some graduate work beyond the bachelor's degree, and the average educational level of all staff—senior and junior level—was 18 years. At the junior level were represented personnel administration, political science, theology, and education. Most of the personnel were Iowa residents; others who were non-Iowans were from the Midwest.

Since most had had little direct experience in manpower programs, an intensive training period was launched with daily seminar-type sessions on all federal statutes relating to manpower and on guidelines in preparing project proposals. Federal officials cooperated in establishing in Washington training sessions involving high-ranking federal agency officials. Therefore, by mid-November the Manpower Development Council was prepared for its task, and the varied programs leading toward state-level coordination were launched.

MISSION OF THE IOWA STATE MANPOWER DEVELOPMENT COUNCIL

The mission of the Manpower Development

Council was fivefold: 1) coordination, 2) technical assistance, 3) liaison, 4) information, and 5) special projects.

These five functions are explained below:

Coordination

The Council is attempting to bring to bear all resources available in the community and state to increase the employability of workers in the labor force; in addition, it will bring various "threads"—represented by the numerous programs in existence—into a larger and more meaningful fabric. Linkages in programs are the methods by which coordination is to be established among separate programs and agencies. The end result of the Council's activity here is to maximize the effectiveness of the various individual programs in accomplishing the mission of making workers more employable. In brief, the purpose is to maximize output per dollar of input of federal and state resources.

Some examples of coordination include the linkages of programs in dealing with hard-core unemployment—basic education plus MDTA institutional training, plus MDTA on-the-job training. Such coupled programs are now on the drawing boards.

Coordination is also contemplated in the development of a regional compact in this six-state region for a flexible on-the-job training arrangement whereby training programs could be developed on a cooperative basis. This is an experiment in the concept of "creative federalism" at the regional and community level. On-the-job training (OJT) funds would be coupled with economic development programs, area vocational schools, and institutional training. Funds not utilized for OJT in certain communities could be readily shifted to other areas of greater need.

Other examples of coordination include inter-agency meetings to discuss health occupational training needs, a pre-vocational counseling center, survey research needs for Iowa, the initiation of training institutes for various state agencies, five projects for Upward Bound for Iowa Colleges, and unique programs in the utilization of Neighborhood Youth Corps funds in assisting the mentally retarded. The basic goal in coordination has been simple: get the most "mileage" from individual

programs by combining these in meaningful linkages—this, in turn, accomplished by bringing agencies together in planning and implementation of projects.

Technical assistance

One of the major functions of the Manpower Development Council envisioned by those establishing this organization was the provision of technical assistance to public and private agencies in drafting, writing, and developing projects through to eventual funding. This was to be particularly designed to assist local communities and small organizations lacking the resources to cope with the complexities of federal guidelines.

The on-the-job contracts developed (or in the process of development) in five Iowa communities was the classic illustration of this function. The OJT contracts involved negotiation at both the regional and federal level, with ever-changing guidelines, deadlines, and operational procedures. Local communities were in no position to develop projects on their own volition in this area without a considerable expenditure of time in self-education. However, a number of problems emerged in giving technical assistance to organizations and communities. There was a tendency (not in the OJT area) for an organization to seek assistance and to permit the Council to develop a project, receive funding, and then in the final analysis to remain dependent upon the Council for on-going operational responsibility. This was not the original intent of the Council. The Manpower Development Council began to insist that organizations contribute something of their time, money, and staff in cooperating in the designing and writing of projects.

Information dissemination

Of possibly the greatest importance was the third function of providing better information regarding manpower development nationally and at the state level. To implement this task, an on-going monitoring system was developed regarding project guidelines from various funding agencies, and even monitoring of proposed legislation at the national level. It is anticipated that this information will be disseminated in a Council newsletter in the future. On a less formal basis, manpower information has been given to agencies largely in relation

to developments at the federal level.

Liaison

Closely related to the information function has been the development of better liaison with federal agencies at the regional or national level. This has been a type of "ways and means" function in which state agencies have requested assistance, not in drafting proposals, but in following through and in cutting some of the "red tape" that invariably seems to develop in federal-state relations. On a number of projects we have taken the initiative of inviting federal officials to discuss project proposals with persons at Iowa State University. (Possibly the most dramatic example of liaison is the Upward Bound program for Iowa in which \$592,000 was brought in for five Iowa colleges: a health occupational training project is another good example.)

Special projects

One mandate given to the Director of the Council by the Governor was to identify gaps in programs and areas of need for manpower development in the state. The special projects branch was instrumental in bringing in \$700,000 worth of contracts for on-the-job training and employment opportunities for about 1,200 to 1,500 hard-core unemployed. This also included a prime contract for the Council itself for \$266,000 which is being used as a demonstration project of a state-wide coordinated OJT operation. The problem is to see how a state agency can use OJT in conjunction with other manpower programs and also how to lend assistance to the cluster of OJT projects in the state. Plans for 1967 include the possibility of designing a flexible OJT program for the six-state region. Funds would flow more flexibly under this new experiment of "creative federalism."

Other special projects included the development of a Peace Corps unit for Iowa, focused upon "service employment" of older citizens, and the development of an OEO Vocational Rehabilitation sponsored alcoholism treatment and control project.

STRUCTURE AND ORGANIZATION OF THE MANPOWER DEVELOPMENT COUNCIL

The initial structure of the Council provided for five major branches. Later, the special projects branch was added as a special area in its own

right. In addition to special projects, there are others: Research, Higher Education, Disadvantaged and Handicapped, Vocational Education and Training, and Rural Manpower. Each branch is headed by one senior manpower specialist (except the Disadvantaged and Handicapped project, which has two). Also, provision was made for the training of junior specialists in the manpower field, to be used either as senior people later in the Council's work, or with other manpower agencies in the future. Each of the specialists works with a cluster of agencies in his area, carrying out the functions of coordination, liaison, information, and technical assistance.

For contract renewal, beyond December, 1966, the plan is to streamline the Council into three operational divisions (Division of Health Systems Development; Division of Social Systems Development; and the Division of Training). These divisions have, respectively, the missions of solving and removing obstacles to employability of health and other physical and mental handicaps; removal of obstacles of poverty and discrimination; and lastly, the development of more efficient methods for training those participating in the labor force, or in the case of those retiring from the labor force—more suitable means for withdrawing from the world of work with dignity and creativity. Certain staff functions are also planned: area development planning, research, information to news media and public affairs, and a part-time position for the internal housekeeping operations of finance, management, and personnel.

The major change in organization will be the replacement of the program for manpower intern training, and in its place the installation of a system for the greater use of outside consultants and part-time, short-time, and temporary personnel. These would be added according to the needs as they develop on specific projects. Another feature is the establishment of a citizens' and public agency advisory committee to help direct the work of the organization.

FROM PROJECT APPROACH TO HUMAN RESOURCE DEVELOPMENT PLANNING

One method used in the training of staff was the project approach. Each staff member was encouraged to develop ideas. These ideas were dis-

cussed, and, if found to have merit, were moved to the project stage. Individual responsibility was emphasized, and project development was considered to contribute to the training of each staff member, as well as having merit in its own right. Project work has been generated from the needs and requests of other state agencies.

Between October, 1965, and June, 1966, the Council staff generated work on 65 projects, covering varied areas of manpower and human resource development. As of this date, dollar value of the projects is \$5,065,000—although dollar value is only one measure of activity and not necessarily the most meaningful. As of this date, \$3,575,789 had been either approved or funded. (This does not include the Manpower Development Council's own budget of \$412,950 or the renewal request of \$367,000 for 1967.)

By mid-June of this year, the Council shifted away from a "project" approach to one which might be characterized as "human resource development planning." The project approach was useful as a training device and had merit in locating funds for some of the ideas; however, it can become a drawback without a general goal or philosophy of action.

The period of mid-June to October of 1966 has been designated as a "planning period." Staff members once again participated in seminars and workshops to exchange ideas and thoughts on the previous months of project development. Experiences and insights were exchanged on the activities of the various branches of the Council. The staff decided to prepare a "Manpower and Economic Report to the Governor," which will be published in September. This report is part of the Council's responsibility to report to the Governor the "state of the State."

The Council plans to use knowledge of Iowa's trends as a guideline as to: 1) what Iowa will look like in the future (1980) if past trends continue; and 2) how the Manpower Development Council can implement a program for maximizing Iowa's capability in achieving the goals determined by the needs and wants of the citizens of this state.

Keynote of planning programs for 1967 and beyond is to be the Regional Conference on Human Resource Development to be held at Iowa State

University in Ames, October 13 and 14, 1966. The conference will be sponsored by three organizations: University Extension, the Iowa State University Industrial Relations Center, and the Manpower Development Council. It is hoped that this conference will set the theme for regional human resource development.

IDENTIFICATION OF PROBLEM AREAS;
EVALUATION OF INITIAL EIGHTEEN MONTHS;
WHERE DO WE GO FROM HERE?

A discussion of problem areas uncovered by the Council would fall into four main areas:

1. The problems of the hard-core unemployed and the underprivileged continue in the main to be treated with single one-shot remedies. Continuing efforts need to be made to link together a wide variety of programs to treat the illness instead of the symptoms. Persons in the above two categories need counseling and often health care, in addition to basic education, training, and placement. Many of these resources are now available but need to be brought together in a chain.

2. Minority group problems continue to be among the most distressing in and out of the labor force. Of particular concern is the general inability of minority group members to enter apprenticeships with labor unions; many find it difficult to find employment with contractors. The problems of women are equally distressing in the areas of equal wages, advancement, and opportunity to enter traditionally "male" occupations. This, perhaps, is as true among college educated women as it is among those with high school educations.

3. Older citizens continue to leave the labor force and to enter into an ambiguous existence which in some cases robs life of its meaningfulness. Older citizens need to be trained and brought into service occupations—where there is a great unmet need. Therefore, pre-retirement counseling centers have been suggested as one approach to dealing with this problem, perhaps utilizing the wide range of resources available in colleges and universities and coupling them with resources already available but unlinked.

4. Rural citizens, particularly youth, continue to have special problems in Iowa. The continuing decline in farm occupations means new opportunities will have to be made available to those in

rural areas. An outreach system has been suggested to convey apprenticeship and training information to rural areas; in addition, vocational counseling needs to be strengthened. Area Vocational Schools will bring new training opportunities to rural youth, but the opportunities will be of no avail if information about them is not disseminated widely.

An evaluation of the work of the Council since its inception reveals strengths and weaknesses:

Coordination

As a system coordination has worked well but it will not become a smooth process until more is done at the federal level. "Creative federalism" will tend to help overcome weaknesses by eliminating certain bureaucratic procedures and by allowing states and regions to move forward toward meeting their own special and particular needs. Iowa is moving toward this approach but it will not be smooth until state reorganization is accomplished.

Liaison

The Council has achieved excellent results in this area by staying in close touch with Washington officials and with representatives at the regional level. The Council has been able to use a number of resources in this area which are unavailable to some other agencies—extensive travel, and perhaps closer relationships because of the quasi-federal nature of the Council. Continued contact with upper echelon Washington officials has given Iowa a distinct advantage in applying for federal funds in relation to other states.

Technical assistance

The Council has been successful in this area with some limitations. One suggestion is that federal guidelines and regulations need to be made lucid and understandable enough that they can be comprehended at the local level. Even in local communities where guidelines are understood, confusion ensues anyway because guidelines are changed so often.

Information

This is a continuous function of the Council that has been successful to some extent but requires

more work and constant attention. Newspaper coverage has been generally favorable but limited in scope. The Council's OJT project and work with minorities received excellent notice in the mass media, but a general and continuing understanding of the function and role of the Council has been lacking. More information needs to be made available to target group leaders—perhaps through newsletters and occasional intrastate regional meetings.

Special Projects

The Council has had a number of successful operations in this area, the most notable perhaps being the OJT projects. More creativity and innovation in state operations are needed. Better coordination perhaps will bring about imaginative special projects, and better information might lead to better coordination.

An overall evaluation of the Manpower Development Council raises some important questions:

1. Do we need a Manpower Development Council? The answer to this question seems to be "Yes." Even with efficient and productive state government organization, it will still be necessary to have both a coordinator and a planner.

2. Should all 50 states have Manpower Development Councils? The answer here seems to be "No." They are necessary as part of overall human resource development programs, but regional approaches would be more efficient than limited programs within each state.

Weaknesses which are the most readily apparent include the "weakest-link-in-the-chain" effect. It is difficult to move faster than other agencies. Salary restrictions and personnel "raiding" restrictions within state government retard maximum efforts. Observing political preserves when hiring personnel—a handicap in many states—is limiting.

Two liabilities can be seen—the short-term contract (18 months) and problems of having to deal with an agency with a "finite" life. The shortness of the contract makes good planning difficult. Other agencies are aware of the shortness of the life of the Council and do not react as effectively as they would, perhaps, to a permanent agency or to one with a life of three or more years.

Strengths of the Council include the establishment of the value of planning—coordinated and continuous planning, using all available data and resources.

The training of personnel in Iowa who have developed expertise in manpower areas is of great value. The staff has been aggressive and creative, yet has proved itself able to work with other agencies—some of them quite old-line organizations—and has brought together agencies which previously did not work together.

The Council has also provided the Governor with a "listening post" which better enables his staff to stay in touch with emerging patterns and programs in manpower and human resource development.

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PROGRESS REPORT

MANPOWER RESEARCH
INSTITUTIONAL GRANT

THE UNIVERSITY OF MAINE

Project Personnel

David H. Clark, Project Director
Associate Professor of Economics

Roderick A. Forsgren
Assistant Professor of Management

Stephen L. Finner
Assistant Professor of Sociology

William F. Stone
Assistant Professor of Psychology

Professor Finner began working on the project during the summer, upon notification of the research contract. The other project members began at the start of the 1966-67 academic year. All are devoting 2/3 of their time to the project except for Professor Stone, who, because of prior commitments at the Department of Psychology, was able to devote only 1/3 of his time. Each participant professor intends to devote 2/3 of his time to the project beginning the second semester.

Currently, four graduate students are serving as research assistants. Their primary responsibility has been to review and synthesize literature relevant to the project. Salient articles have been summarized and duplicated for distribution among the project members and graduate students. A classification system has been developed to enable quick identification of resource literature. The educational background of the graduate students has been sent to Dr. Howard Rosen in a separate letter.

Project Activity: Contact with manpower development persons in the State

One of the first steps was to establish liason with other groups, public officials and individuals concerned with manpower problems within the State. The project members have made initial contacts with representatives of management, labor and public officials in the State in order to make them aware of our research program.

The next step was to organize meetings in several communities so that the project team might identify and become better acquainted with the local variations in manpower development and manpower problems. Members of management, labor, schools, and town

Officials were invited to participate in these meetings. The topics discussed included the local manpower situation, possible pockets of underutilized workers, training programs of local industries, education and aspirations of local youth, the counselling of high school students for career choices. Also, attempts were made to ascertain the attitudes of local officials.

Four of these local meetings have been held, with two more scheduled for early 1967. These meetings have been valuable in acquainting the project members with different local problems. The discussions were basically expression of attitudes and opinions of selected community members. The existence of stereotyped beliefs and lack of information was apparent. For example, in one community it was a common consensus that, "young people don't know what work is today". At several of the meetings representatives of management were not fully aware of the operations of the regional vocational school. In one community, the discussion revealed that local industry did not make use of the local employment service. The firms made little or no contact with the local high school counselor in the process of recruiting workers. The most valuable results of the local meetings were the general information we collected, and impressions of the varying conditions in the State, rather than statistical data. We have tentatively decided to conclude the group interviews with the two meetings now being planned.

Manpower Research Seminar

The seminar has been established as a regular academic graduate course. Eleven graduate students from economics, sociology, psychology, and education are enrolled in the course for credit. The majority of both student and project members time has been spent on reviewing the literature and identifying for the members of each discipline concepts and insights useful for studying manpower problems.

The course outline of the semester is attached including the term topic chosen by each of the students. Each student was asked to review the literature in his specific area and to develop possible hypotheses or problems for investigation. It is

expected that these hypotheses will be coordinated with the project and pilot studies will begin in the second semester. Many of the students have expressed an interest in developing their subjects into a Masters' thesis.

The organization, direction and preparation for the seminar has taken more time than was originally planned. It is felt, however, that the main objective of an interdisciplinary seminar has been accomplished. That is, it has enabled us to coordinate our efforts and has given direction to the study.

Identification and Measurement of Underutilization

The review of literature and conceptualizations of underutilization by the project members and graduate students has resulted in defining underutilization as a problem in the efficient use of human talents. Conditions of underutilization arise under conditions where individuals are trained in skills they are not using or where individuals have aptitudes for which they have not been trained. The intervening variables which delimit the increased efficiency of human manpower are many and complex. Considerable discussion in the seminar has centered around the effect of personal choice and individual satisfaction as it may effect utilization. For example, the trained engineer or school teacher who elects to become a Maine lobsterman is an example of underutilization from a societal point of view. On the other hand, it appears to those in the project there are more numerous instances where people who have skills or who desire increased training and have the aptitude are not being identified or trained. It is this second area where the project intends to place most of its emphasis.

Presently a series of utilization indices are being developed which would help in identifying the individuals described in the second situation described above. These indices would thus enable quantifiable comparisons of jobs and training, jobs and potential, and training and job potential.

Migration

A study of migration patterns within the State and to and from places outside the State has been completed. Working primarily from published census data, the study

examines sex and age specific migration rates for the years 1950-1960 and 1955-1960. Movement patterns from one part of the State to another have been analyzed. The study has also attempted to estimate differentials in socio-economic characteristics of migrants versus non-migrants. A draft copy of the study has been prepared, and a final version, suitable for publication, will be ready by May 1, 1967. Besides offering a detailed description of migration patterns, the study has generated some ideas for pilot projects.

Motivation and Underutilization

Discussions of work and motivation were initiated early in the seminar, and attempts were made to view the concepts of ability, skill, motivation and incentive in proper relationship. It was suggested that an underutilized individual is one who is working below his capacity because of 1) lack of education or training, 2) insufficient motivation or 3) low incentive for change (low wage scales, undesirable working conditions, lack of knowledge of opportunities, etc.) 4) lack of more appropriate employment opportunities.

Although all four factors will be considered in the final model, motivation constructs seem particularly appropriate for study at this time. The theory of achievement motivation presented by Atkinson in his book, Introduction to Motivation (1964) takes into account a number of factors which would appear to be important to a thorough description of underutilization. The tendency to strive for success is related to the individual's motivation for success, his fear of failing, his subjective probability of success, and incentives. A large body of literature attests to the utility of the theory, whose terms allow the investigator to take into account the effects of aspirations of the individual's abilities and past experiences.

Proposed Research Activities for the Coming Semester

Our timetable for the next semester calls for a series of pilot studies directed by individual project members.

- 1) An inventory of training, skills, and individual potential within specific

areas in Maine. Data relating to an individual's training, job or earnings, and potential as measured by the General Aptitude Test Battery, along with other characteristics including age, industry and community identification will be collected.

- 2) Development of an underutilization index. Various indices will be developed, using data collected in project #1, in an attempt to relate jobs to potential. One such index which has been suggested involves the ratio of the individual's present job's skill rating to his potential as measured by the GATB.
- 3) The reasons for moving. Data from the completed migration study has suggested several hypotheses regarding the reasons for moving or not moving. Also of interest are the net effects of selective migration on the quality of the labor force.
- 4) Achievement Motivation and Occupational Aspiration. Our interest in motivation has suggested a number of pilot studies which will explore differences in motivation as a function of regional economic development and growth, and of differences in motivation between groups differing in "utilization". This approach is potentially fruitful because of the growing knowledge concerning the origins of achievement motivation. It is hoped that Dr. D. C. McClelland, author of The Achieving Society will be able to make a consulting visit to advise us.

The concerns of these projects are highly interrelated. Knowledge of differences in skill levels between areas of the State, for example, will have implications concerning selective migration, economic development and achievement motivation. It is expected that a high degree of interdisciplinary effort on these projects will have fruitful results for the understanding of underutilization and in furthering the project objectives.

Summary

The major activity of the project began in the Fall of 1966. The initial step

as to contact selected State representatives involved in manpower development in order that we might make them aware of the objectives of the project. A two semester graduate seminar, approved by the graduate faculty, was developed which explored various concepts of underutilization and reviewed relevant literature. Currently the project is at the stage of formulating tentative hypothesis and problem areas which will be investigated via small pilot projects this next semester. It is anticipated these pilot projects will identify and test data sources and aid in formulating and sharpening definitions.

Our objectives have always included working together as an interdisciplinary team as contrasted to separate unrelated research activities. This interdisciplinary cooperation has been fruitful for project research activities, students, and the individual project members themselves.

Seminar in Manpower Resources

Course Outline

Introduction

Discussion of the Definition of Underutilization

The Concept of Work

Labor Force Definitions and Measures

- a. **Secular Changes in the Occupational and Industrial Composition of the Labor Force: United States and Selected States**
- b. **Definitions of Unemployment and Underemployment**
- c. **Changes in Employment and Unemployment Patterns**

Patterns of Spatial Migration

- a. **Secular Trends in Interstate Movements**
- b. **Interstate and Intrastate Migration in Maine 1950-1960**

Individual Aspiration and Achievement

Organizations, Management and Underutilization

How and Why do people select occupations:

- a. **Family and Peer Influences**
- b. **Secondary School Education**
- c. **Post High School Education**
- d. **Other Economic Factors such as Level of economic development**

How and Why do People Change Occupations

- a. **Employment exchanges**
- b. **Unions**
- c. **Technological change**

Some Suggested Working Hypotheses

Manpower Research Seminar

Term Paper Topics

Impact of High School Composition and Community Type on Occupational Choice
on Occupational Choice Among Workers From Low Income Families

Levels of Aspiration and Job Choice

Factors Affecting Post-High School Choice: Education vs. Work

Factors Affecting the Decision of Women to Enter the Labor Force

The Role of Money as a Motivator

Management Attitude Toward Skill Development of Job Seekers

Why People Move: A Consideration of Studies of Voluntary Migration

The Costs of Moving

The Impact of Technological Change on Job and Occupational Choice

The Effects of Labor Unions on Job Training

The Costs and Benefits of Investment in Job Training

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SEMI-ANNUAL REPORT
DEPARTMENT OF LABOR INSTITUTIONAL GRANT
No. 91-35-66-65

December 31, 1966

North Carolina State University
Raleigh, N. C.

SEMI-ANNUAL REPORT

DEPARTMENT OF LABOR INSTITUTIONAL GRANT

NO. 91-35-66-65

NORTH CAROLINA STATE UNIVERSITY

RALEIGH, N. C.

December 31, 1966

This report summarizes the progress made under Labor Department Institutional Grant No. 91-35-66-65 since the inception of the grant on July 1, 1966. The original grant proposal contemplated both research and instructional activities. Progress had been made in each area during these first six months. Research and instructional activities are discussed in turn.

Research Activities

Three separate research projects are being conducted with direct support from DOL Grant No. 91-35-66-65. Several other research projects have benefitted indirectly via the Research Workshop in Labor Economics and Human Resource Development¹ which was established under the aegis of the grant.

I. Directed Supported Research

A. Framework for Lifetime Allocation of Leisure, Income, and Work

During the Fall Semester, Dr. Juanita Kreps began to develop a research outline for the analysis of the lifetime allocation of leisure, income, and work in the American economy. This activity represents both a continuation and an extension of her previous efforts in the area of old age assistance and social

¹Hereinafter called the Labor Workshop.

security, Dr. Kreps is being assisted by Mrs. Stephanie Goldbe ry, a graduate assistant at Duke. Dr. Donald Pursell, a recent Ph.D. from Duke University, will join the research team on February 1, 1967.

B. Labor Force and School Participation of Teenagers

Professor Robert M. Fearn of North Carolina State University is continuing his research on the labor force and school participation of teenagers under the grant. This study, an econometric analysis of the determinants of school and labor force participation among U.S. teenagers, employs a unique model of teenage decision making and seeks to amplify and test the work of Dr. W. G. Bowen and Dr. T. A. Finegan of Princeton University and Vanderbilt University, respectively, and of Dr. Beverly Duncan of the University of Michigan. Preliminary results of the teenage regressions for white males and white females by single years of age in the 100 largest SMSA's in the United States in 1960 are currently being reviewed by Dr. H. Gregg Lewis of the University of Chicago.

C. Wage Levels, Skill Requirements, and U.S. Trade and Protection

A portion of Professor David Ball's research is being supported by the DOL Grant. Professor Ball, a recent addition to the Faculty at N.C.S.U., is investigating the role of human skill differentials in international trade patterns. This aspect of Professor Ball's research has its analytical origins in the finding by Dr. Wassily Leontief, Harvard University, that U.S. exports are labor intensive contrary to our theoretical expectations. Some of Professor Ball's research into the Leontief Paradox already has been presented in his Ph.D. dissertation at the University of North Carolina at Chapel Hill and in

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the Journal of Political Economy.¹ A new article containing results of his more recent research and entitled "U.S. Effective Tariffs and Labor's Share" will appear in a forthcoming issue of the JPE.

II. Indirect Support for Manpower Research

Through the informal arrangements of the Labor Workshop, research support has been afforded to several other activities including the following:

- (1) Research Report 1966-10 of the Equal Employment Opportunity Commission.
- (2) An examination of the labor mobility project sponsored by the North Carolina Fund.
- (3) Research in vocational education and occupational change being conducted by the Center for Occupational Education, N.C.S.U.

Under the auspices of the Workshop, Dr. Donald Osburn, formerly of N.S.C.U. and now at the University of Missouri, was employed by the Research Division of the EEOC for the purpose of preparing a study of Negro employment in the textile industries of the Carolinas. This study, Negro Employment in the Textile Industries of North and South Carolina,² is being used as a background paper for the textile industry - EEOC forum on Negro employment opportunities being held in Charlotte, N. C. on January 12-13, 1967.

Professor Fearn contributed selected materials to the study; and Dr. James Maddox, Dr. Paul Johnson, and Professor Fearn reviewed and discussed various aspects of the report with Dr. Osburn and with Dr. Phyllis Wallace, Acting Chief of Technical Studies at EEOC.

¹"Factor Intensity Reversals in International Comparisons of Factor Cost and Factor Use," Journal of Political Economy, February 1966.

²Copies are available at EEOC, Washington, D. C.

The Labor Workshop has served also as a medium for pre-publication review of other research in labor economics and human resource development. Dr. Joseph Matthews, N.C.S.U., presented a draft of part of his work on occupational adjustments in the South to the Workshop on September 27th. Mr. Richard Robbins, a graduate assistant working with Dr. Johnson on the North Carolina Fund Project, has discussed his difficulties in assessing the economics of return migration, and Dr. Gideon Fishelson, a graduate student working with Dr. Loren Ihnen, has discussed his preliminary results and research problems at Workshop sessions. Mr. Fishelson is attempting to assess the separate contribution of research and education to farm productivity.

Instructional Activities

I. The Research Workshop in Labor Economics and Human Resource Development

The Research Workshop in Labor Economics and Human Resource Development is intended to contribute both to research and to instruction.¹ Specifically, the Workshop represents:

- (1) A place for informal student-faculty interchange on prospective dissertation topics and knotty research problems,
- (2) A forum for preliminary pre-publication review of papers by graduate students and faculty members engaged in contract or personal research, and
- (3) A forum for visiting speakers on topics which are within the area of interest but have a more narrow appeal than those generally presented at the regular Departmental Student-Faculty Seminar.

Four visiting speakers have addressed or will address the Labor Workshop during the current academic year. Visiting speakers are a particularly effective

¹See the Labor Workshop Schedule in Appendix A.

means of stimulating interest in manpower research and of isolating areas of critical concern.

II. A Seminar in Human Capital Theory

As indicated in the grant proposal, the Economics Department at N.C.S.U. plans to establish several graduate course offerings in manpower economics. The first of these, a seminar in Human Capital Theory, will be initiated in the Fall Semester, 1967-68 and will tentatively be offered jointly by Dr. L. Ihnen and Professor R. Fearn. Further course offerings in manpower economics are contingent largely upon the acquisition of an additional faculty member. Dr. William Toussaint, the new Head of the Department of Economics at N.C.S.U.,¹ has under consideration a number of prospective candidates. Even though the market for qualified candidates is thin, it is hoped that the personnel gap can be filled in the near future.

¹Dr. C. E. Bishop recently resigned as Department Head in order to become Executive Director of the President's Commission on Rural Poverty and subsequently to become Vice-President of the Consolidated Universities of North Carolina.

APPENDIX A

Schedule of the Research Workshop in
Labor Economics and Human Resource Development

<u>Date</u>	<u>Speaker</u>	<u>Topic</u>	<u>Time and Place</u>
Sept. 27	Dr. Joseph Matthews, Jr. N.C.S.U.	Occupational Adjustments in the South, 1940-60	124 Harrelson 3:00-5:00 p.
Nov. 8	Discussions with graduate students on dissertation and thesis topics and problems.		124 Harrelson 3:30-5:00 p.
Dec. 13	Dr. Phyllis Wallace, Equal Employment Oppor- tunity Commission	Racial Discrimination in Employment	208 Patterson 4:00-5:00 p. (Joint with EC 590)*
Jan. 10	Dr. C. Green, N.C.S.U.	Negative Income Taxes and Incentives	124 Harrelson 3:30-5:00 p.
Feb. 12	Discussions with graduate students on dissertation and thesis topics and problems		124 Harrelson 3:30-5:00 p.
Feb. 23	Dr. Eli Ginzberg, Columbia University	Manpower Policies	208 Patterson 3:00-5:00 p. (Joint with EC 590)
March 17	Dr. W. Lee Hansen, University of Wisconsin	Occupational Choice and Invest- ments in Education and Training	124 Harrelson 1:30-3:30 p.
April 11 (Tentative)	Dr. Belton Fleisher, Ohio State University	Labor Force Participation of Mature and Older Males	124 Harrelson 3:30-5:00 p.
May 9	To be announced.		

Although the sessions of the Labor Workshop are open to all faculty members and graduate students, the following persons receive advance copies of papers to be presented at the Workshop.

Faculty (N.C.S.U. unless otherwise indicated)

David S. Ball**
A. J. Bartley
David Brown, UNC at Chapel Hill+
Adger B. Carroll, C.O.E., N.C.S.U.
Robert M. Fearn**
Christopher Green
Loren Ihnen

Paul Johnson
E. W. Jones, N.C.S.U.
and N.C. State Planning Commission
Magdi M. El-Kammash
Juanita Kreps, Duke University**
James G. Maddox
Joseph Matthews, C.O.E., N.C.S.U.

Graduate Students at N.C.S.U.

James D. Bates
(also of the Research Triangle Institute)
Peter Coker**
Gideon Fishelson
Theodore Lianos
William Pace
Richard Robbins

*EC 590 is an interdisciplinary seminar concerned with poverty in contemporary America.. It is intended primarily for Kellogg Fellows, but is open to all qualified graduate students in economics, sociology and psychology. Dr. James Maddox of Economics, Dr. Howard Miller of Psychology, and Dr. Selz Mayo of Sociology serve as instructors.

**Denotes those persons currently receiving direct support under DOL 91-35-66-65.

+Dr. Brown currently is on leave from UNC to the University of Minnesota, where he is serving a one year administrative internship. He is scheduled to participate in research activities under the DOL grant upon his return.



OF THE COMMONWEALTH SYSTEM OF HIGHER EDUCATION
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The Department of Economics offers work leading to both M.A. and Ph.D. degrees in the following fields:

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- Monetary Theory and Policy**
- Public Finance and Fiscal Policy**
- Welfare Economics**
- Urban Economics**

Admission

The requirements for admission normally are (1) a satisfactory academic record, (2) enough course work in economics, mathematics, and statistics to indicate ability to do satisfactory graduate work in economics, (3) satisfactory scores on the Graduate Record Examinations, and (4) recommendations of professors.

To obtain application forms for admission and for financial assistance write directly to the Dean of the Graduate School, Temple University, Philadelphia, Pennsylvania 19122.

Fellowships

Outstanding students are eligible for several fellowships carrying minimum stipends of \$2,400 plus tuition. Among these are fellowships provided by the National Defense Education Act, National Science Foundation, National Aeronautic and Space Agency, and the U.S. Department of Labor Manpower Research Institutional Grant.

Assistantships

Graduate assistants receive stipends of \$2,400 plus tuition. Appointments are available for beginning graduate students of promise as well as for qualified advanced graduate students. Duties involve teaching, research, or other assistance to department faculty. Teaching appointments with higher stipends may be available to those with a Master's degree or its equivalent.

Tuition

Tuition for full-time students currently is \$450 per academic year for Pennsylvania residents and \$1,350 for non-residents. Tuition scholarships may be available.

For Further Information:

Write to the Chairman,
Department of Economics
Temple University
Philadelphia, Pennsylvania 19122

A N N O U N C E M E N T

Ph.D. Program in the Economics of

MANPOWER

under the U. S. Department of Labor Manpower Research Institutional Grant

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A LIMITED NUMBER OF FELLOWSHIPS ARE AVAILABLE TO GRADUATE STUDENTS INTERESTED IN THE FIELD OF MANPOWER STUDIES. CONSULT THE ATTACHED ANNOUNCEMENT FOR FURTHER INFORMATION CONCERNING THE GRADUATE PROGRAM IN ECONOMICS FOR 1967-1968.

FOR FURTHER INFORMATION, WRITE:

DR. LOUIS T. HARMS
DIRECTOR
MANPOWER RESEARCH INSTITUTIONAL GRANT PROGRAM
SPEAKMAN HALL
TEMPLE UNIVERSITY
PHILADELPHIA, PENNSYLVANIA 19122

PROGRESS REPORT
MANPOWER RESEARCH INSTITUTIONAL GRANT
NORFOLK STATE COLLEGE
Grant Number 91-49-66-66

Introductory Statement

The manpower research activities under the present grant started with an orientation and study period in Washington, D. C. at the Office of Manpower Policy Evaluation, and Research. Dr. James H. Gadson, Jr. spent the month of August and Dr. J. D. Holmes spent two weeks of the same month in Washington. The other members of the research team began working at the beginning of the academic year, September 1966.

Preliminary activities were concerned with such matters as organizing, selecting personnel, providing physical facilities, and assembling a library. The rest of the period was devoted to the following activities: making community contacts with individuals and organizations interested in manpower problems of the area; planning a three year course of action for the team; weekly meetings of the team to discuss such matters as specific problem areas, literature in the manpower field, statement of the research problem and designing a research procedure.

Organization

An organization, entitled Norfolk State Manpower Research Institute, was created having as its members an interdisciplinary research team and other personnel as follows:

J. H. Gadson, Jr., Director
Professor of Business Administration

Lyman B. Brooks
Provost of Norfolk State College

James A. Bowser
Professor of Industrial Education

Frank T. Cherry
Professor of Sociology

William M. Cooper
Special Consultant

Valmore R. Goines
Professor of Economic

Herbert A. Marshall
Director of Instruction and Professor of History

(Mrs.) Vivian W. Johnson
Secretary

The decision was made to carry on research in the manpower field as an interdisciplinary team since this type of research seems appropriate for such problems, especially the underutilization aspects thereof.

During the weekly team meetings a tentative schedule of activities to be covered during each of the years was planned.

Research Activities for the First Year

The first year is being devoted to exploration of the manpower situation in the Tidewater Community; to a determination of some special areas of underutilization; to the selection of problems for pilot and intensive studies; and to the development of research design and procedures.

The purpose of this initial engagement is to structure a frame of reference to properly assess the manpower field in the Tidewater area.

This structural frame takes into consideration economic, educational, political, psychological and sociological spheres.

Types of secondary data gathered are: (a) the existing resources in Norfolk by various categories and skills; (b) the areas of shortage by categories and skills; (c) employment levels by industry; (d) employment by occupation; (e) analysis of population by sex, race, educational level, and family status; and (f) vocational education and its availability--is the quality of the fore mentioned different for Negroes and Caucasians?

The research team has begun to gather meaningful data. In addition to the above, the team would substructure economic and educational gathering of data. The study would also substructure what Dr. Rosen and his committee labeled "the opportunity structure." Under this substructure, the psychological and sociological spheres are being employed to gather and analyze data relating to educational agencies. Moreover, the study proceeds further to examine the motivations and aspirations of the community by sex and race. In summary, the initial phase of the study centers around the drawing up of a structural frame of reference which will serve as a base from which the research into specific problems can be conducted.

Present Concern for the Team

At the present time the team is exploring concepts and definitions upon which a frame of reference for the study will be built. For example, how shall "underutilization" and "unemployed" be defined in this study.

Some of the problems mentioned above become the foci of attention in the initial phase of the study, that is, in the sampling of neighborhoods. The team believes that the research design should include some

awareness of the necessity of a class-wise stratified sample, and that the sample should be taken from lower and middle socio-economic levels. Kinds of neighborhoods also will be taken into account. For example, there is concern for what is to be referred to as a natural neighborhood, vis a vis, the artificial neighborhoods as exemplified by subsidized housing projects.

Leading Ideas. To what extent is it true that underutilization results from the fact that a white-only situation exists in certain shops and tends to deter Negro apprenticeships. To what extent is it true that certain occupations which go unfilled have an uncomplimentary image, and thus have a negative attraction for young Negroes as well as whites.

To what extent is it true that underutilization of labor results from the fact that industrialists prefer to maintain the status quo-cost-profit ratio and deter the hiring of additional personnel although they could be utilized.

Another leading idea is to what extent does living in a federal housing project in which maximum family income must be kept at a certain level deter full labor force participation. Most individuals are influenced by their associates and by certain norms concerning labor force utilization and underutilization. The relationship between poverty, health, and employment is an important one. There is perhaps a casual chain. Poor people have high morbidity due to inability to afford medical care, preventative care, especially; and lack of awareness or an indifference to available free public health services. They therefore miss numerous days of work because of illness.

Models. Several models of underutilization have been conceptualized and could be helpful. The models already discussed include:

- A. Subject is in an occupation and despite the fact that his abilities and skills qualify him for higher positions which exist in that occupation, he remains frozen at his present level.
- B. Subject has reached the highest position in his particular occupational structure, but has the skills and abilities to move up to a higher position in another occupational structure.
- C. Subject is in an occupational structure:
 - (a) in which he loses several days per year at work because of sickness
 - (b) in which he loses time because of seasonal changes
- D. For some reason, subject does not care to work even though he is an able-bodied person with actual or potential skills.

The above description of models and leading ideas, of course, exhausts in no way examination of other possible models and leading ideas.

Community Contact with Persons Dealing with Manpower Problems

One of the basic philosophies of the research team was that the research should be intimately related to agencies, employers, community leaders, and local government officials.

Six conferences were held with representatives from governmental agencies, industries, and educational institutions either engaged in manpower research or interested in manpower problems. The purpose of these meetings was to acquaint these persons with the program of the Manpower Research Institute and to find out what research has been done, is being done presently, or is being contemplated for the near future.

The team learned that a "Manpower Needs Survey" is being conducted by the State Employment Service to provide information on current employment and on prospective demand for human resources in the Norfolk-Portsmouth Metropolitan Area for the next five years. The team is to be

supplied with the results of this survey for background information.

Another conference revealed that the naval installations in the Tidewater areas are initiating studies, on a pilot scale, to assess the pockets of underutilization among its 31,000 civilian employees.

A conference was held with a representative from the University of Maine, a fellow grantee institution, to establish liaison and to discuss manpower problems of mutual interest. Several additional conferences were held with professors, engaged in manpower research at New York University and Old Dominion College. Plans for additional contacts are in the making.

Second Year Plan

Critical Points of Departure from the Structural Frame. In this second phase of the study, critical points of departure are to be made from the structural and substructural frames of reference. Here an attempt is to be made in exploring sources and causes of underutilization among men and women by sex and race. In this particular setting, the committee has suggested that an attempt be made at an early stage, say the sixth grade, to determine if factors influencing underutilization can be identified at an early age. For example, does the fact that a young Negro or Caucasian boy who begins working at a gasoline station ultimately lead to that youth being underemployed by the time he reaches the age of twenty-eight? Important to this second phase of the study is the structuring of the sampling areas. Just what areas are to be sampled? The team set forth no hard and fast rules here. One fine scholar in the Department of Labor suggested that the sample be fairly large, but not to the extent of trying to interview each person in the sample. He further suggested that we might want to end up with a thousand Caucasians

and a thousand Negroes from the sixth grade to age twenty-eight. Moreover, from these Caucasians and Negroes, you might select every third Caucasian and every first and second Negro. Wherever the researchers spot something unusual, they should bear down at that point. Needless to say, the second phase of the study represents the heart of the research.

Third Year Plan

Critical Analysis and Policy Consideration. Here the researchers will interpret their findings, analyze their results, formulate meaningful policies which could lead to better utilization of manpower in the Tidewater area.

Projections for the Next Period

Continuing Dialogues. In addition to continuing dialogues on manpower concepts, definitions, and techniques of research, the team is planning to initiate its neighborhood survey described above.

Curriculum Studies. The Manpower Institute plans to make an exhaustive study of curriculum offerings by the College in the manpower field and suggest additional course offerings to strengthen the program.

Student Participation. The Manpower Institute is in the process of selecting students from the various disciplines to participate in the research activities of the group. These students will learn through training and experience research methods, and the potential for careers in manpower research.

One-Day Symposium. Dr. Eli Ginzberg has agreed to be guest of the Manpower Institute for a one-day symposium to be held on the campus of Norfolk State College March 16, 1967. The team is inviting some 100 to

150 leaders and representatives from industry, education, and government to attend the symposium and participate in the discussion of manpower problems of the area.

Newsletter. An editor for a periodic newsletter has been chose.

The first issue is scheduled for February.

A PROPOSAL FOR A MANPOWER RESEARCH PROGRAM

OKLAHOMA STATE UNIVERSITY

I. PURPOSES AND GENERAL PROCEDURES

The purposes of this program are (1) to train manpower specialists in a two-year program culminating in an M.S. degree, and (2) to promote further manpower research. Accomplishment of the training function will be through an interdisciplinary combination of existing curriculum, new courses, and student research experience. Although students will take a core of courses cutting across various subject areas and will participate in a program of manpower seminars, they will nevertheless specialize in individual disciplines such as economics, industrial education, psychology, or sociology. A group of two-year manpower fellowships will be established in order to attract students to the program; other graduate students will be encouraged to participate.

A considerable amount of research in specialized manpower fields is already underway at Oklahoma State University. The research function will be accomplished initially through bringing into closer contact a nucleus of staff with competence in the manpower field to develop manpower seminars and to evolve new ideas for research. Involvement of other staff, and the acquisition of at least two additional specialists, will add to the breadth of the program. The program will be administered by a committee of professional staff operating through a center for manpower research.

II. REVIEW OF PRESENT CURRICULA, RESEARCH, AND FACILITIES

To a large measure, Oklahoma State University currently has the basic staff, programs, and facilities necessary for the development of the proposed

manpower program. Although the curricula and research work described below represent relatively separate activities not involving an integrated focus upon the broad issues of manpower analysis and policy, they will provide a basic framework enabling an efficient and rapid development of the new and expanded program.

CURRICULA

The extent of the curricula available in departments closely related to manpower research is illustrated by the existence of well-established programs leading to the doctorate. Ph.D. programs are offered in sociology, economics and psychology; the Ed.D. can be earned with a specialization in industrial education. The general commitment of the University to graduate curricula is indicated by the fact that approximately 1,900 graduate students were enrolled during the fall semester, 1965-66. Projected graduate enrollment by 1970 exceeds 3,000 students.

MANPOWER-RELATED RESEARCH

The following list of research projects recently completed or currently underway emphasizes strong interest in manpower problems on the part of staff members in several departments. Most of the projects either have or anticipate financial assistance through grants from governmental or other organizations external to the University. However, all have received assistance from the University's Research Foundation, and some have been fully financed with University funds through this agency.

1. A School Dropout Project.--An extensive project establishing and evaluating an experimental vocational and academic training program for recent high school dropouts in Oklahoma City has been underway since 1963 and will

continue into 1967. The program is financed by the Ford Foundation. It is directed by J. Paschal Twyman, Ph.D., Associate Director of the Oklahoma State University Research Foundation, in association with Victor O. Hornbostel, Ph.D., and John Egermeier, Ed.D., both Associate Professors of Education.

2. Demographic Research.--Several demographic studies currently in process by James Tarver, Ph.D., Professor of Sociology, are extremely relevant to manpower analysis. In cooperation with the Economic Research Service, USDA, Dr. Tarver is analyzing internal migration flows among the 509 Census State Economic Areas of the United States, with special reference to migration to and from the predominantly agricultural and rural areas. He is also working on a study of population changes in southern towns and cities, with special reference to changes in farm trade and service centers. In the last several years Dr. Tarver has done extensive work in estimation and projection of county populations.

3. Roles and Role Conflicts of Oklahoma Vocational Teachers.--Professor Solomon Sutker, Ph.D., of the University's Department of Sociology, together with Drs. Twyman and Egermeier (see No. 1 above), is engaged in a study of the role of public school vocational teachers and the identification of specific forms of role conflict experienced by such teachers.

4. Training Vocational Agriculture Teachers in Distributive Education and in Off-Farm Agricultural Occupations.--One of the most important manpower problems of Oklahoma has involved the rapid and pronounced reduction in employment opportunities in agriculture. In a currently supported project, William E. Hull, Ed.D., Assistant Professor of Agricultural Education, is constructing workshop curricula and conducting summer institute programs aimed at upgrading the skills of vocational agriculture teachers with respect to training students for more realistic job opportunities.

5. Labor Force Participation Rates in the Ozark Low-Income Area.--Robert L. Sandmeyer, Ph.D., and Larkin Warner, Ph.D., both Associate Professors of Economics, and Barry Kinsey, Ph.D., Associate Professor of Sociology, have prepared a research proposal to identify, through sample field survey techniques, the factors related to the relatively low labor force participation rates in the Ozarks, with special reference to eastern Oklahoma. Professors Sandmeyer and Warner are currently examining the same problem with statistical analyses of census and other published data.

6. Occupational Analysis Relative to Electro-Mechanical Technology.--A project which will identify the skill and knowledge requirements of technical occupations involving both electrical and mechanical technologies and which will develop a planning guide for relevant engineering technology curricula is currently underway. It is being conducted by Maurice W. Roney, Ed.D., Professor and Director, School of Industrial Education.

7. Public Welfare in Oklahoma.--Professor J. J. Klos, Ph.D., of the Department of Economics has recently completed a monograph on welfare programs in Oklahoma and their impact on selected features of the State's economy.

8. Evaluation of Effectiveness of ARA Training Programs.--A recently completed study by J. Paschal Twyman evaluates the effectiveness of selected retraining programs for unemployed workers in eastern Oklahoma.

9. Occupational Research and Coordinating Unit.--A clearing house to coordinate research work in the field of vocational education for the State of Oklahoma has been established with a grant from the U. S. Office of Education and is directed by William Stevenson, Assistant Professor of Education.

10. Home Economics Training for Gainful Employment.--In a recent completed study, June Cozine, Ph.D., Professor of Home Economics, evaluated the

effectiveness of home economics courses with respect to their relevance in preparing students for various employment opportunities. Professor Cozine now has support pending on a project to develop and experiment with materials and procedures in employment-related programs in home economics for high school students.

UNIVERSITY FACILITIES AND RESOURCES

The Oklahoma State University has experienced relatively rapid, balanced growth during the past decade. It is probable that growth, particularly at the graduate level, will be sufficient during the next four years so that a manpower research and training program similar to that described herein could be continued without federal funds. Although no attempt is made to review in detail the numerous facilities and resources which will help to make the proposed program successful, a general overview of the university's enrollment, faculty and faculty salaries, and relevant physical facilities is presented.

Enrollment.--Table I contains current and projected figures for university enrollment. Graduate training will take on increased importance at the institution. Graduate students currently account for 12.7 per cent of main campus enrollment; within ten years this proportion will have risen to over 17 per cent.

Faculty and Faculty Salaries.--Table II contains current figures for a number of faculty members by rank, salary, and college. Since the academic year 1964-65, the mean salary increased \$848, or 7.6 per cent, at the professor rank; \$533, or 5.6 per cent, at the associate rank; \$493, or 6 per cent, at the assistant rank; and \$507, or 8.4 per cent, at the instructor rank, for the six colleges of the University--the Colleges of Agriculture, Arts and Sciences, Business, Education, Engineering, and Home Economics. The percentage of increase

(a range of 5.6 per cent to 8.4 per cent) was higher in all ranks than for 1964-1965 (a range of 4.3 per cent to 6.1 per cent), which was to be expected in the first year of a biennium. The improving state of mean salaries at Oklahoma State University is revealed by the fact that the mean salary for all ranks is above the "AAUP B Minimum" and assistant and instructor means fall within the "AAUP A Minimum." For three colleges (Business, Home Economics, and Engineering), the low salaries for instructor and assistant given are above "AAUP B Minimum." When compared with "AAUP Average," the Oklahoma State University mean salary ranks as follows: professor, D+; associate, C+; assistant, B; instructor, B-.

Physical Facilities.--The university's library contains about 800,000 volumes, half of which have been acquired in the last decade. It is a Federal Depository library containing a vast amount of source material relevant to work in the manpower field. The Computer Center has recently obtained an IBM 7040 computer. A new College of Business building will be completed by the fall of 1966 and will house the Departments of Sociology and Economics. Adequate space will be available in that building for a manpower research center.

III. PROCEDURES

The purposes of the program will be achieved through the establishment of a manpower research center, and the development and administration of a curriculum for training manpower specialists.

MANPOWER RESEARCH CENTER

Although the administrative framework of the program will be kept at a minimum, some coordinating organ will be necessary. A Manpower Research

Center will be established and housed in the new College of Business building. One faculty member, a newly-added specialist in manpower statistics, will act as the program's coordinator. In addition, there will be a steering committee composed of one staff member from each of the Departments of Sociology, Economics, Psychology and Industrial Education.

The primary functions of the steering committee and the coordinator will be to administer the curriculum for the manpower trainees, to stimulate and relate University manpower research, and to administer and assist in a program of financial support involving small grants to faculty. These grants will be for research preliminary to the preparation of proposals to obtain grant funds from outside sources, for expenses involved in student and faculty research activities, and for the support of small projects. The Research Foundation will provide financial support for this aspect of the program.

PROGRAM FOR TRAINING MANPOWER SPECIALISTS

To train manpower specialists, it will first be necessary to attract top-flight students to the program, and then to provide them with a meaningful curriculum. The most important single element in the program's budget will involve the establishment of twelve, two-year manpower fellowships at approximately \$3,000 per year per student. It is hoped that it will be possible to cycle two sets of manpower fellows through the program during a four-year period. The institution is aware of the Department's intention to make grants in support of three-year programs. Various programs were considered which would cycle several groups of students through during a three-year period. However, these programs either involved too few students or a training period which appeared too short. A training program lasting for less than two years would not allow for the academic, research, and internship experience which the

manpower specialist needs. It is suggested that the Department of Labor may wish to examine the whole program as it nears the end of its third year. At that time, consideration might be given to renewing support for an additional year.

Because the student's program will last two years, it is unlikely that many will be able to participate on a self-supporting basis. However, it is possible that business firms or government agencies may find it desirable to support certain relatively young employees in such a program.

Certain basic assumptions have been made prior to the design of the program's curriculum. First, individuals involved in any type of manpower work should have a broad background in the social and behavioral sciences and should be well prepared to develop and analyze quantitative information relevant to particular manpower problems. Second, the variegated nature of manpower problems requires competence in an area of specialization as well as the ability to maintain a general, interdisciplinary perspective. Hence the program is designed to permit the students to specialize in economics, psychology, sociology or industrial education. To this end, fellowships will be allotted so as to provide a balance between applicants expressing intent to specialize in each of the four fields. Third, although the program goes considerably beyond the normal departmental requirements for the M.S. degree, students will find the receipt of such a degree to be an attractive feature.

CURRICULUM

The curriculum is divided into four types of activities: (1) core courses, (2) courses leading to specialization in one of the four above-mentioned fields, (3) manpower research seminars, and (4) internship work. A minimum of 48 semester credit hours will be taken over a period of either

21 or 24 months. Students will normally enroll in 11 or 12 hours per semester; the balance of what would be a normal 15-hour load will be used for the various internship activities described below. The first year will be devoted primarily to core courses, the first summer to internship activity, the second year to the field of specialization and the preparation of a thesis or extensive research paper. Each semester, a two-credit hour manpower seminar will be offered. The following outline presents the proposed curriculum and offers a rationale for selected features.

Outline of Proposed Curriculum

1. Core courses.--Depending upon the student's initial preparation in statistics the core will consist of between 15 and 21 hours from the following courses.

a. Statistics (9 hours)

(1) Basic statistical methods (6 hours). Unless a student is well-prepared in basic statistics, he will take the two semester sequence in basic statistics with emphasis on applications offered by the University's Department of Mathematics and Statistics.

(a) Statistics 403 (3 hrs.) - Basic experimental statistics, basic probability distributions, methods of estimation, tests of significance, linear regression and correlation, analysis of variance of one way classification, two way classification, and nested classification.

(b) Statistics 413 (3 hrs.) - A continuation of 403. Basic concepts of experimental unit and experimental unit and error. Analysis of variance of disproportionate data, covariance, split plot techniques. Factorial arrangements

of treatments, multiple regression in estimation and analysis of variance, curvilinear regression, enumeration data.

(2) Statistical methods in manpower analysis (3 hours).

New Course.

There are numerous statistical sources with which anyone working in the manpower field should be familiar. In addition, there are important statistical tasks specially related to such manpower problems as identifying the occupational characteristics of labor supply and demand. A specialist will be hired to develop this course and serve as coordinator for the whole program. One-half of this individual's salary will be derived from the grant funds.

b. Economics: Labor Economics

(1) Economics 343 (3 hrs.) - Union organization and structure, union-management relations, collective bargaining, labor market social insurance, public policy.

c. Industrial Education: Occupational analysis (3 hours). New Course.

This new course will focus on general techniques for analyzing occupational skill and knowledge requirements and the development of appropriate educational devices to cope with shifting manpower requirements. An additional staff member will be hired to work in this area, with one-half of his salary coming from grant funds.

d. Psychology: The Psychology of Business and Industry

(1) Psychology 323 (3 hrs.) - Experimental literature in area of employee motivation. Techniques useful in measurement of employee attitudes and opinions.

e. Sociology: Theory and Techniques of Social Research

(1) Sociology 463 (3 hrs.) - Use of scientific method in sociological research. Formulation of research designs, hypothesis testing, sampling, interviewing, observation, coding, use of documents, questionnaires, and scales.

2. Courses in Field of Specialization (16 hour minimum).--Specialization will occur in economics, sociology, psychology, or industrial education. Within each discipline, emphasis will be placed on those courses most relevant to problems of manpower analysis.

3. Manpower Seminars (2 hours per semester for 4 semesters).--The purpose of these seminars will be to bring students, staff, and outside experts together to analyze and discuss manpower problems. Various departments have sponsored lectures by visiting scholars (see the enclosure entitled Economics Lecture Series). These lectures have brought the students and faculty into contact with off-campus experts in the various disciplines. It is because of the success of these short programs that we believe the manpower seminars will be the major vehicle by which students and faculty may explore manpower policy problems with experts for periods of up to one week. It is anticipated that many of the guest participants in the manpower seminar will come from off-campus. However, on-campus researchers from such fields as Industrial Engineering and Agriculture Economics will also be asked to participate.

Although the prime function of these seminars will be to enrich the experience of the students, great benefit will develop as a result of the interaction of staff members from the various disciplines. All involved should gain perspective with respect to existing problems and research work, and should develop awareness of new problems and approaches in the manpower field. The

seminars will also be used as vehicles for engaging students in research activities aimed at the preparation of master's theses.

4. Internship Activities.--Students will be exposed to a variety of research and practical experiences in manpower throughout their two-year programs. An 11-12 hour course load will permit such activity during the academic years. Because of the number of manpower-related projects underway at the University, it will be possible for students to gain experience by working with staff members on projects in several different fields. During the first summer, students might participate in field work associated with a project or projects underway at the University. They might also gain various work experiences through the Oklahoma Employment Security Commission, or at hiring points of several of the State's large firms. Such off-campus activities will involve careful supervision by staff personnel.

IV. DETAILED COMMENTS CONCERNING BUDGET

Period of Time: The budget is presented for a three-year period during which one set of 12 manpower fellows would proceed through a two-year program and a second set of 12 would complete the first year of a two-year program.

Direct Costs:

A. Student Fellowships.

1. Number of Fellowships.

Because one of the primary purposes of the proposed program will be the training of students capable of specialized work in manpower, the most important budget item relates to the provision of fellowships for a dozen persons. The intention has been to maximize the number of fellowships granted consistent with the needs associated with developing an appropriate program.

2. Recruitment and Retention of Fellows.

Brochures will be prepared giving wide publicity to the program throughout the nation's universities and personnel offices of selected corporations. The U. S. Department of Labor may find it desirable to participate in the dissemination of information about the program to promising young employees who have not had graduate training.

Fellows must meet the requirement for formal admission to the Oklahoma State University Graduate College. Because the stipends are competitive with programs such as those of NDEA and NSF, it is anticipated that the program will attract top flight applicants with good undergraduate backgrounds in one of the four areas of specialization. At the end of each year, fellows' performance will be reviewed by the program's steering committee.

3. The Determination of Stipends.

The budgeted figure of \$3,000 per fellowship is an estimated average. The basic stipend for a single fellow will be \$2,400 per annum with an allowance of \$500 per dependent, up to a maximum of three dependents.

B. Additions to the Staff.

The two persons listed would be newly-hired staff members with established professional competence. Emphasis will be placed on obtaining persons who have research and teaching interests in manpower-related areas and who will be capable of teaching the new, specialized courses described in the discussion of the curriculum. The specific qualifications associated with filling these positions

must nevertheless be viewed flexibly. It is conceivable that the manpower statistics specialist or the occupational analysis specialist could be drawn from the professional ranks of any of the four disciplines involved. However, it would appear most likely that the manpower statistics specialist would be either an economist or a sociologist, and that the occupational analysis specialist would be from industrial education or psychology.

The salary figures indicate university participation in the hiring of these individuals. Salary estimates allow for the hiring of first-rate personnel. These persons would be permanent additions to the university staff whose work in manpower-related subjects will continue after the cessation of grant support.

C. Cost of Initiating Pilot Projects.

As indicated in the main body of the proposal, the Oklahoma State University Research Foundation stands ready to make small grants to cover the salary costs of part-time release from teaching duties for staff members with worthy projects relating to manpower problems. This budget item relates only to supplies, necessary travel, and computer expenses which faculty or fellows might require in relation to small projects or the preparation of proposals for larger manpower-related projects.

D. Participants for Manpower Seminars from Outside the University.

Grant funds will not be used to pay on-campus staff who participate occasionally in the manpower seminars. However, some participants from off-campus would require either travel expenses, or an honorarium and travel expenses.

E. Secretary, Manpower Research Center.

This program will involve sufficient clerical work to justify the employment of a full time secretary. The University will cover the entire cost of this person.

ATTACHMENT B

BIOGRAPHICAL INFORMATION CONCERNING FACULTY
PARTICIPATING IN PROGRAM

(Note the earlier discussion concerning the hiring of two new faculty members with specialized skills in manpower. The following list of faculty is presented in alphabetical order and contains a cross-section of interested members from the four departments with primary involvement in the program.)

Barry A. Kinsey, Associate Professor of Sociology.

Academic Training

Ph.D. Degree, University of Nebraska, Sociology, 1962.

M.A. Degree, University of Nebraska, Sociology, 1957

A.B. Degree, Oklahoma State University, Sociology and History, 1953.

Experience

Associate Professor, Department of Sociology, Oklahoma State University, 1962-present.

Consultant to Dr. James O. Whittaker, Gustavus Adolphus College, Alcohol and Standing Rock Sioux Tribe, 1961.

Ph.D. Research, University of Nebraska, Dr. James M. Reinhardt, 1961-1962.

Research; Community Reactions to Crisis (publication), University of Nebraska, Dr. James M. Reinhardt, 1957.

Selected Publications

"The Police and Public Opinion: A Study of Adverse Community Reaction to the Starkweather Case; I. General Factors," Police, Vol. 4, No. 2, Nov.-Dec., 1959.

"The Police and Public Opinion; II, Individual Psychological Factors," Police, Vol. 4, No. 4, March-April, 1960.

"Integration of Ex-Mental Patients into the Community: A Social Survey of Selected Areas of Tulsa," Mimeo., Oklahoma Department of Mental Health, Nov., 1964.

The Female Alcoholic: A Social-Psychological Study (Charles E. Thomas, Springfield, Ill.) (Accepted for Publication).

Attachment B, Page 2

John C. Egermeier, Associate Professor of Education

Academic Training

B.S. degree, Oklahoma State University
 M.S. degree, Cornell University
 Ed.D. degree, Oklahoma State University

Experience

Research: Associate Director, The Rehabilitation of School Dropouts in Oklahoma City (Sponsored by Ford Foundation), 1964-1966
 Co-Director, A Study of Roles and Role Conflicts of Vocational Teachers (Sponsored by U.S. Office of Educa.), 1965-1966
 Consultant, University of Arkansas project on Assessment of Aspirations and Abilities of Rural Arkansas Youth, 1965-1966
Teaching: Educational Tests and Measurements, 1964-1965
 Group Dynamics, 1964

Selected Publications

- Egermeier, John C. "The Motivation to Work." Arkansas Agricultural Economist, 1964, 6, 3.
- Egermeier, John C. "Construction and Validation of A College Dropout Prediction Scale for the Minnesota Counseling Inventory." Doctoral dissertation Oklahoma State University, 1963. (Oklahoma State University Summaries of Theses, 1963. pp. 65-66)
- Twyman, J. Paschal and Egermeier, John C. "Area Redevelopment Act Training Programs in Oklahoma: A Preliminary Assessment." Journal of Technology, 1963, 3, 12-19.
- Twyman, J. Paschal and Egermeier, John C. An Assessment of Selected Area Redevelopment Act Training Programs in Oklahoma. Stillwater, Oklahoma: The Research Foundation, Oklahoma State University, 1962.

Joseph J. Klos, Professor of Economics

Academic Training

Ph.D. Degree, University of Wisconsin, Madison, Wisconsin, 1954, Major - Economics, Minor - Sociology.
 M.S. Degree, Oklahoma State University, Stillwater, Oklahoma 1941, Major - Economics, Minor - History
 B.S. Degree, Oklahoma State University, Stillwater, Oklahoma, 1940, Major - Economics, Minor - History and Statistics.

Experience

Assistant, Associate Professor, and Professor, Oklahoma State University, Stillwater, Oklahoma, 1950 to present.

Graduate Student, University of Wisconsin, Madison, Wisconsin, 1948-1950.

Instructor, Oklahoma State University, Stillwater, Oklahoma 1946-1948.

Selected Publications

Public Welfare in Oklahoma, Oklahoma State University College of Business, Economic Research Series No. 2, 1965.

William W. Rambo, Associate Professor of PsychologyAcademic Training

Ph.D Degree, Purdue University, Lafayette, Indiana, 1957, Major - Psychology, Minor - Statistics.

A.M. Degree, Temple University, Philadelphia, Pennsylvania, 1954, Major - Psychology.

A.B. Degree, Temple University, Philadelphia, Pennsylvania, 1952, Major - Psychology.

Experience

Associate Professor, Oklahoma State University, Stillwater, Oklahoma, 1960- to present.

Assistant Professor, Oklahoma State University, Stillwater, Oklahoma, 1956-1960

Graduate Instructor, Purdue University, Lafayette, Indiana, 1954-1956.

Selected Publications

"Stimulus spacing and successive interval scale values," Journal of Applied Psychology, 1962, 42, 147-152

"The distribution of successive interval judgments of attitude statements," Journal of Social Psychology, 1963, 60, 251-254.

"The prediction of subjective judgments from a consideration of stimulus distinctiveness," Journal of General Psychology, 1963, 68, 99-106.

"An empirical comparison of two theories of judgment," Journal of General Psychology, 1962, 66, 169-178.

"Absolute judgment of a restricted series of context stimuli," Journal of General Psychology, 1962, 66, 235-240.

"The effects of order of presentation of stimuli upon absolute judgments," Psychological Reports, 1961, 8, 219-224.

Attachment B, Page 4

Richard J. Rankin, Associate Professor, Department of Psychology

Academic Training

Ph.D. Degree, University of California, Berkeley, California, 1957, Major - Educational Psychology.

M.A. Degree, University of California, Berkeley, California, 1954, Major - Educational Psychology.

A.B. Degree, University of California, Berkeley, California, 1953, Major - Psychology.

Experience

Associate Professor, Department of Psychology, Oklahoma State University, Stillwater, Oklahoma, 1961 to present.

Instructor to Assistant Professor, Chico State College, Chico, California, 1958 to 1961.

Statistician, University of California Medical Center, San Francisco, California, 1958.

Carnegie Study of Higher Education, University of California, 1957-1958.

Selected Publications

"The Influence of an International Crisis upon Manifest Anxiety", Rankin, R. and Jones, B. Psychol. Reports, 12, 763-766 (1963).

"Nonfunctioning Taylor Manifest Anxiety Items", Rankin R. Psychol. Reports, 12, 912 (1963).

"Influences of Age and Sex on the IES Test", Rankin, R. and Johnston, J. Percept. mot. Skills, 15, 775-778 (1962).

"Auditory Discrimination and Anxiety", Rankin R. Psychol. Reports, 11, 391-394 (1962).

"Anxiety and Visual Acuity", Scofield, R. and Rankin, R. Percept. and mot. Skills, 14, 18 (1962).

Maurice W. Roney, Professor and Head, School of Industrial Education

Academic Training

Ed.D, University of Maryland

B.S. and M.S., Oklahoma State University

Attachment B, Page 5

Experience

Instructor, VEND/ESMWT Program, 1940-1944
 U. S. Navy Instructor of Electronics, 1944-1946
 Instructor, Oklahoma A. & M. Technical Institute, 1946-1947
 Assistant Professor, Oklahoma A. & M. Technical Institute, 1947-
 1953
 Oklahoma State University Point IV Contract, Ethiopia, 1953-1955
 Associate Professor; Administrative Assistant, Oklahoma State University
 Technical Institute, 1955-1957.
 Associate Professor; Acting Director, Oklahoma State University Technical
 Institute, 1957-1960
 Program Specialist, Technical Education Branch, Division of Vocational
 and Technical Education, U. S. Office of Education, 1960-1963 (on leave)
 Professor and Director, School of Industrial Education, Oklahoma State
 University, 1960 to Present

Selected Publications

"Occupational Criteria and Preparatory Curriculum Patterns in Technical
 Education Programs," U. S. Department of Education, OE-80015.

"Technical Education for Teachers - A New Dimension in Industrial Teacher
 Education," Technical Education News, November, 1960.

"Trends in Technical Education," School Shop, March 1963.

"Electronic Data Processing-I," U. S. Office of Education, OE-80024.

"Mathematics and Science in Technical Education," The Journal of Technology
 Vol. 4, No. 1, Spring 1964, Oklahoma Technical Society, 1900 N.W. Tenth
 Street, Oklahoma City, Oklahoma.

Robert L. Sandmeyer, Associate Professor, Department of Economics

Academic Training

Ph.D. Degree, Oklahoma State University, Stillwater, Oklahoma, 1962,
 Major - Economics.

M.S. Degree, Oklahoma State University, Stillwater, Oklahoma, 1958,
 Major - Economics.

B.A. Degree, Fort Hays Kansas State College, Hays, Kansas, 1956,
 Major - Economics.

Experience

Assistant Professor, and Associate Professor, Department of Economics, Oklahoma State University, Stillwater, Oklahoma, 1962 to present.

Assistant Professor, Department of Economics, Arizona State University, Tempe, Arizona, 1961 - 1962.

Instructor, Department of Economics, Iowa State University, Ames, Iowa, 1958 - 1959.

Instructor, Department of Economics, Fort Hays Kansas State College, Hays, Kansas, 1957 - 1958.

Selected Publications

"Baumol's Sales Maximization Model," American Economic Review, (December, 1964).

"Oklahoma Tax Effort and Service Effort: A Study in Interstate Comparisons," Mimeo., (with Ansel M. Sharp), Oklahoma State University Research Foundation, 1961.

"Indexes of Economic Ability, 1950-1970," Mimeo., Arizona Governor's Tax Study Committee, 1962.

Arizona's Tax Structure: Revenues Needs and Sources, Arizona Academy, 1962.

"A Study of Expenditures and Sources of Revenue for Mental Health and Retardation Services in the State of Oklahoma: 1962," Mimeo., Oklahoma State Department of Health, 1964.

Robert W. Scofield, Professor, Department of Psychology

Academic Training

Ph.D. Degree, The University of Chicago, (Human Development).

M.A. Degree, The University of Chicago, (Human Development).

B.S. Degree, Teachers College of Connecticut

Experience

Formerly Research Assistant for W. Lloyd Warner on his study on business executives.

Research Assistant on Chicago Area Project.

Participated in Herbert Thelen's study on group dynamics, Human Dynamics Laboratory, The University of Chicago.

Psychological Consultant to Federal Reformatory, El Reno, Oklahoma.

Selected Publications

"Task Productivity of Groups of Friends and Non-Friends," Psychological Reports, 1960, 6:459-460.

Attachment B, Page 7

"A Comparative Study of the Differential Effect Upon Personality of Chinese and American Child Training Practices," The Journal of Social Psychology, 1960, 52:221-224, which Cattell characterized as "brief but a highly significant contribution"; Editorial.

"A Creative Climate," Educational Leadership, 1960, October issue.

Solomon Sutker, Professor of Sociology

Academic Training

A.B. cum laude, (Political Science) Emory University, . . .
M.A. (Sociology) University of North Carolina.
Ph.D. (Sociology) University of North Carolina..

Experience

Instructor, Department of Sociology, University of North Carolina, Summer, 1948.
Instructor Department of Sociology, William and Mary College 1948-49.
Assistant Professor, 1949; Associate Professor, 1953; Professor, 1957;
Department of Sociology, Oklahoma State University
Visiting Professor of Sociology, Vanderbilt University, Summer, 1958.

Selected Publications

Two articles on Jewish life in Atlanta, Georgia. In Marshall Sklare, (editor), The Jews: Social Patterns of an American Group, a Free Press Reader issued in January, 1958.

The Current Status of Negro Suffrage in North Carolina, a report for the Southern Regional Council, done in the summer of 1956.

"The Jewish Organizational Elite of Atlanta, Georgia," Social Forces, December, 1952.

Junior author with Gordon W. Blackwell and others, Church and Community in the South, Richmond: John Knox Press, 1949.

James D. Tarver, Professor of Sociology

Academic Training

B.S. Degree, Texas A. & M. College, Rural Sociology, 1947.
M.S. Degree, University of Wisconsin; Rural Sociology, 1948.
Ph.D. Degree, University of Wisconsin, major in Rural Sociology, minor in Agricultural Economics, with an outlying field in Population, 1951.

Experience

Assistant Professor, Department of Rural Economics and Sociology, University of Arkansas, July 15, 1950, to June 30, 1951.

Assistant Professor Department of Sociology and Rural Life, Oklahoma State University, July 1, 1951 to 1953.

Associate Professor, 1953 to 1957.

Professor, September 1, 1957 to August 31, 1962

Professor, Department of Agricultural Economics, September 1, 1962 to December 31, 1963

Professor, Department of Sociology and Rural Life from January 1, 1964 to present.

Selected Publications

A Component Method of Estimating and Projecting State and Subdivisional Populations, Oklahoma Agricultural Experiment Station Miscellaneous Publication MP-54 Stillwater, 1959.

Projections of the Population of Oklahoma to 1970, Oklahoma Agricultural Experiment Station Bulletin No. B-545, Stillwater, 1960.

Estimates and Projections of Oklahoma's Population, By State Economic Areas And Age-Race-Residence-Sex Groups, 1950 to 1970, Oklahoma State University Publication, Arts and Sciences Studies, Social Studies Series No. 5, 57, Stillwater, 1960.

IBM 650 Program Instructions For Making State, County, and City Population Projections by the Component Method, Oklahoma Agricultural Experiment Station Processed Series P-353, Stillwater, 1960.

Tarver, James D., "Predicting Migration," Social Forces, 39 (March, 1961), 207-213.

"Computer Programs For Estimating and Projecting County, City, and Other Local Subdivisional Population," Behavioral Science, 28, No. 2 (April, 1963) 154-156.

Larkin Warner, Associate Professor, Department of Economics

Academic Training

Ph.D. Degree, Indiana University, Bloomington, Indiana, 1961, Major - Economics.

A.M. Degree, Indiana University, Bloomington, Indiana, 1958, Major - Economics.

A.B. Degree, Ohio Wesleyan University, Delaware, Ohio, 1956, Major - History, Minor - Economics.

Experience

Associate Professor, Department of Economics, Oklahoma State University, Stillwater, Oklahoma, 1963 to present.

Assistant Professor, Department of Economics, Oklahoma State University, Stillwater, Oklahoma, 1961 to 1963.

Teaching Associate, Indiana University, Bloomington, Indiana, 1958 to 1959.

Selected Publications

"Railroad Rates and the Growth of Coal Trucking in Ohio," Land Economics, (August, 1962).

"Locational Developments in the Electric Utility Industry," Quarterly Review of Economics and Business, (Spring, 1964).

"Unregulated Transport in the History and Administration of Oklahoma Motor Carrier Law," Tulsa Law Journal, January, 1966.

Source Notes and Explanations to County Building Block Data for Regional Analysis, Arkansas, Iowa, Kansas, Missouri, Nebraska and Oklahoma, (with W. Nelson Peach, Richard W. Poole, James D. Tarver, and Lee B. Zink), Stillwater, Oklahoma.

REPORT OF ACTIVITIES AT OKLAHOMA STATE UNIVERSITY
UNDERTAKEN IN CONNECTION WITH THE INSTITUTIONAL GRANT
FROM THE OFFICE OF MANPOWER POLICY, EVALUATION AND RESEARCH:
JULY 1, 1966 - JANUARY 30, 1967

Selected activities undertaken in connection with the institutional grant from the Office of Manpower Policy, Evaluation and Research to the Oklahoma State University are described in this report. The purposes of this program are (1) to train Manpower specialists in a two-year program culminating in an M.S. degree, and (2) to promote further Manpower research. The implementation of this program operates through an interdisciplinary framework involving primarily the Departments of Economics, Industrial Education, Psychology, and Sociology. The evolution of the organizational structure of the University's Manpower Research and Training Center will first be described. Then the report will outline some of the activities centering around the twelve students receiving fellowships under this program. Other functions such as promotion of research in the Manpower field, coordination with work undertaken by other investigators, and plans for the future development of the program will also be reviewed.

Organization of the Manpower Research and Training Center

Notification of the grant was received July 1, 1966. On July 5 a meeting of key administrators involved was held, and initial plans for the implementation of the program were discussed. Administrators from the four departments involved coordinated their efforts in designing and implementing two new courses, a Manpower Research Seminar and a course in Manpower Statistics. The Manpower Research and Training Center was established as the administrative organization for the implementation of the program. Space for the Center's offices was provided in the new College of Business building.

It was determined that students receiving fellowships under the program should be paid a flat amount of \$3,000 per student over an eleven-month period.

Prior to the beginning of the fall term, attempts were made to fill two staff positions provided for in the program. (1) Dr. Paul Braden (Ph.D., Michigan State University) was hired by the Industrial Education Department to work with the program and specialize in the aspects dealing with occupational analysis. (2) The position of Director of the program who is to be a specialist in manpower statistics in the Department of Economics has at this date still not been filled, although intensive efforts have been undertaken to hire such a person. It has become evident that there is a manpower shortage in the field of manpower specialists; hence, the program itself is a temporary victim of the very shortage that it is designed to help alleviate. It is anticipated that the post of permanent director will be filled within the next month to six weeks.

The absence of a permanent director to coordinate the program, teach the manpower seminar, and develop a program in manpower statistics has created some minor staffing problems. These, however, have not been serious up to this time. A coordinating committee was established consisting of representatives from economics, industrial education, psychology, and sociology. This committee consists of Dr. Paul Braden (Industrial Education), Dr. Solomon Sutker (Sociology), Dr. Nicholas Pollis (Psychology), and Dr. Robert Sandmeyer (Economics). During the first semester Dr. Sandmeyer served as Acting Director of the Manpower Research and Training Center. The interdisciplinary manpower seminar was taught by Dr. Larkin Warner of the Department of Economics. Dr. Warner received considerable assistance in the seminar from Dr. Paul Braden. Because of

the pressing nature of the administrative problems associated with the program, it was determined that, in the absence of a permanent director, the acting director should operate with official released time for his duties during the second semester. Dr. Warner will serve in this capacity and continue to direct the seminar in manpower analysis.

Manpower Fellows

The task of identification of capable students to receive the twelve fellowships had to be accomplished by the department heads during the month of August. Because of the short lead time in this matter, department heads relied primarily on contacting their better beginning masters students and finding those willing to make a commitment to the program. A longer lead time might have permitted wider publicity and the identification of some fellows who had initially had a deeper interest in manpower policy. Nevertheless, their first semester's work indicates that the current fellows are capable students. Students' specific grades are presented in the attached appendix. The steering committee has determined that any fellow not having a cumulative point average of 3.0 (based on a 4 point system) at the end of two semesters of work will be dropped from the program.

The program which the three students from each of the four departments are undertaking is for a period of two years. Therefore, there is only a very limited possibility for cycling new students into the program before September of 1968. Thus no formal publicity has been distributed concerning these fellowships during the current academic year. However, during the 1967-68 academic year, brochures will be prepared describing the program and there will be wide dissemination of information concerning the fellowships available for the 1968-69 academic year.

One of the most important elements of the student's program relates to various types of "internship" activities. This involves work with ongoing research projects during the academic year and intensive association with special projects or work situations during the summer. Because the students were just getting oriented during the first semester, it was determined that it would be best that the three students in economics work with ongoing projects in economics, the three students from sociology work in the field of sociology, etc. It is the intention that during the second semester the students will rotate around among the four departments and become familiar with ongoing research in other disciplines. It has become clear that student association with projects in this phase of the internship activity requires considerably more administration than had initially been assumed. Activities of the students in connection with research projects must be coordinated carefully so that the student can gain maximum benefit from his experience without at the same time causing serious inconvenience to the researcher. It is anticipated that this will be one of the key tasks performed by the Acting Director of the Center during this coming semester.

It appears as though there are almost unlimited opportunities for summer internship work on the part of the students. Personal data sheets have been prepared for each of the twelve students, and these have been mailed to a group of specialists working in the field of manpower training for various large business concerns and government agencies who have been serving in an advisory capacity relative to an ongoing research project in the Department of Industrial Education. Contact has also been made with the National Aeronautics and Space Administration at Houston, the Oklahoma Employment Security Commission, and the Tinker Air Force Base in Oklahoma

City. Drs. Warner and Braden visited with the Personnel Office at Tinker Air Force Base and were quite impressed with the potentiality for a wide variety of experiences for students at that installation, which employs some 23,000 civilian workers. It is hoped that it will be possible to provide some alternative experiences and give the Manpower fellows some freedom of choice with respect to the type of experience to which they are exposed during the summer.

A copy of the list of the names and backgrounds of the students receiving the fellowship is attached in an appendix to this report. It might be noted parenthetically that one of the fellows, Tipton McCubbins, has resigned his fellowship and has been accepted for duty with the Peace Corps. An excellent replacement for him has been found. There is also some danger at the end of this academic year that one or two of the fellows will be drafted. In several instances it has been necessary to write letters to local draft boards indicating the national importance of the type of program in which the students are involved.

Related Activities

A. Guest Lecturers. Three lecturers were on campus during the fall semester to appear in connection with the Manpower Research and Training. The first was Dr. Kenneth M. McCaffree, Professor of Economics, University of Washington. Dr. McCaffree spoke September 22 on the subject "Union Response to Unemployment." On October 26 Dr. Howard Rosen, Assistant Director for Manpower Research, Office of Manpower Policy, Evaluation and Research, U. S. Department of Labor, delivered a lecture dealing with the "Importance of National Manpower Policy" while he was on campus viewing the operations of the Center. On December 15 Professor F. Ray Marshall of

the University of Texas appeared to discuss the Negro and apprenticeship training.

More intensive effort will be undertaken during the coming semester to bring relevant speakers to campus to deliver public lectures and also to spend time in private sessions with the Manpower fellows. It will be important to get speakers from disciplines other than economics, although initial contact has been made with Sar Levitan of the Upjohn Institute and an attempt will be made to bring him to campus later in the spring.

B. Promotion and Coordination of Research in the Manpower Field. In September Drs. Warner and Sandmeyer discussed the importance of studying the training activities of the Bureau of Indian Affairs ^{with} a doctoral level graduate student in economics, Mr. Paul Blume. Mr. Blume prepared a proposal for a doctoral dissertation grant and submitted it to the Office of Manpower Policy, Evaluation and Research. Everyone was most gratified that Mr. Blume was able to receive this grant, and it is expected that his work will add important insights to the body of knowledge concerning upgrading the labor skills of culturally deprived groups.

The Steering Committee is also working with Mr. Harry Hoerner, a doctoral student in agricultural education. Mr. Hoerner is preparing a research design to test the effectiveness of counseling MDTA trainees after they have completed their training programs and are on the job. It appears that some support for travel and miscellaneous expenses in connection with Mr. Hoerner's efforts may be forthcoming from the Manpower Research and Training Center or from the University's Research Foundation.

As was indicated above, it appears that some very fruitful relationships may be developed with Tinker Air Force Base. When Drs. Warner and Braden visited that installation, they learned of several research problems

of serious concern to personnel officers. As a result of the transmittal of some of this information, Mr. Ray Grimes, a doctoral student in economics, has become interested in undertaking a commuting and demographic study of the work force at Tinker Air Force Base. On February 10, Dr. Warner, Dr. Joseph Klos, and Mr. Grimes have an appointment to visit further about this matter with staff at Tinker. If suitable arrangements for this project can be worked out, it is hoped that funds for Mr. Grimes' research work can be forthcoming from the Air Force Base.

Publicity has been circulated to the faculty of Oklahoma State University concerning opportunities for research in the field of manpower. There are a considerable number of research projects currently under way in a diverse set of departments at this university. Because those already engaged in research normally need little encouragement to continue, the focus during the coming semester will be to broaden the base of faculty involvement in manpower research. A number of interesting topics, many of a somewhat regional nature, have appeared to the principals involved during the last six months. The Acting Director of the program will attempt to contact potential research people personally and discuss topics for research and opportunities for support.

An attempt will also be made to inventory and update the status of the numerous current research projects under way at the university relating to the broad problems of human resource development.

C. Public Service and Related Efforts. Drs. Braden and Warner have determined that it will be desirable to attempt during the spring semester to visit with key persons in business and government throughout Oklahoma to inform them of the variety of programs being undertaken at the university and to review the operations of the Manpower Research and Training

Center. Principals involved have also appeared before several civic groups for the purpose of discussing the program.

As the functions of the Center become more widely known within the university, principals associated with the project are finding that they are becoming more involved in a set of miscellaneous contacts with public groups coming to the university with problems having some bearing on manpower. For example, Drs. Sandmeyer and Warner met on December 14, 1966, with a group from Lawton, Oklahoma, associated with Goodwill Industries. These people were interested in exploring the possibilities of studying the use of handicapped workers for trade area survey work. It was suggested to the people from Goodwill Industries that household interviews and similar survey research work might not be the most appropriate type of job in which to involve handicapped persons. Nevertheless, this seemed to have the seeds of an interesting research project, and the need to study the problems of handicapped workers has been suggested to the manpower fellows.

Summary

The first half year of work with the institutional grant has clearly involved a great deal of experimentation. All parties involved have been getting their feet wet. Possibly the most encouraging results can be seen in the reactions of the Manpower fellows themselves. Faculty members participating in the program have observed that the students are communicating with each other much more easily than was the case in the beginning. There is also some indication that the students are becoming more "interdisciplinary" than their instructors. This, of course, poses quite a challenge for those guiding the program.

BIOGRAPHICAL SKETCHES

Manpower Fellows -- Spring 1967

ALLEN, Roger B.

Hometown:	Dallas, Texas	Major:	Psychology
Date of Birth:	March 23, 1945	Marital Status:	Single
Undergraduate Degree:	B.S. in Education, North Texas State University		
Last Semester's Grades:	Psych. of Business and Industry		B
	Elem. Physiological Psych.		C
	Manpower Seminar		A
			<hr/>
	Grade Average		2.88
Current Class Schedule:	Methods of Soc. Research		
	Stat. Methods I		
	Labor Problems		
	Occupational Analysis		
	Seminar in Manpower Analysis		

ANDERSON, David A. (First semester on fellowship)

Hometown:	Stillwater, Oklahoma	Major:	Industrial Education
Date of Birth:	June 23, 1933	Marital Status:	Married
Undergraduate Degree:	Electronic Technology, Oklahoma State University		
Last Semester's Grades:	Tech. Ed. Program Planning		B
	Stat. Methods I		B
	Psych. of Business and Industry		C
	Procedures & Algorithmic Processes		C
	Manpower Seminar		B
			<hr/>
	Grade Average		2.57
Current Class Schedule:	Methods of Soc. Research		
	Stat. Methods II		
	Occupational Analysis		
	Seminar in Manpower Analysis		

BOEN, Ed L.

Hometown:	Muskogee, Oklahoma	Major:	Sociology
Date of Birth:	August 6, 1943	Marital Status:	Single
Undergraduate Degree:	B.A. in Political Science, Northeastern State College		
Last Semester's Grades:	Methods of Soc. Research		C
	Industrial Soc.		B
	Soc. Stratification		C
	Manpower Seminar		B
			<hr/>
	Grade Average		2.46
Current Class Schedule:	Advanced Soc. Principles		
	Stat. Methods I		
	Occupational Analysis		
	Seminar in Manpower Analysis		

DUPREE, Robert L. (First semester on fellowship)

Hometown:	Tulsa, Oklahoma	Major:	Economics
Date of Birth:	July 14, 1940	Marital Status:	Single
Undergraduate Degree:	B.A. in History, Oklahoma State University		
Last Semester's Grades:	Econ. History of U. S.		A
	International Econ. Relations		A
	Ancient and Medieval Philosophy		B
	Governments of Europe		B
	Grade Average		<u>3.50</u>
Current Class Schedule:	Stat. Methods I		
	Theory of Econ. Equilibrium		
	Research and Thesis		
	Occupational Analysis		
	Seminar in Manpower Analysis		

FREED, Robert V.

Hometown:	Homestead, Oklahoma	Major:	Industrial Education
Date of Birth:	April 8, 1943	Marital Status:	Single
Undergraduate Degree:	B.S. in Industrial Arts, Northwestern State College		
Last Semester's Grades:	Methods of Soc. Research		C
	Psych. of Business and Industry		C
	Special Problems in Ind. Ed.		A
	Stat. Methods I		A
	Manpower Seminar		A
	Grade Average		<u>3.08</u>
Current Class Schedule:	History and Philosophy of Ind. Ed.		
	Stat. Methods II		
	Interviewing Techniques		
	Occupational Analysis		
	Seminar in Manpower Analysis		

GAMBRELL, Melvin B.

Hometown:	Palestine, Texas	Major:	Psychology
Date of Birth:	October 17, 1943	Marital Status:	Married
Undergraduate Degree:	B.A. in Psychology, Harding College		
Last Semester's Grades:	Labor Problems		B
	Stat. Methods I		B
	Methods of Soc. Research		A
	Manpower Seminar		B
	Grade Average		<u>3.27</u>
Current Class Schedule:	Stat. Methods II		
	Elem. Physiological Psych.		
	Occupational Analysis		
	Seminar in Manpower Analysis		

HARDT, Howard P.

Hometown:	Stigler, Oklahoma	Major:	Industrial Education
Date of Birth:	October 25, 1941	Marital Status:	Single
Undergraduate Degree:	B.S. in Technical Education and Associate Degree in Electronic Technology, Oklahoma State University		
Last Semester's Grades:	Stat. Methods I		B
	Methods of Soc. Research		C
	Psych. of Business and Industry		A
	Special Problems in Ind. Ed.		A
	Manpower Seminar		B
		Grade Average	<u>3.15</u>
Current Class Schedule:	Stat. Methods II		
	Psych. of Personality Adjustment		
	Trade Tech. Ed.		
	Occupational Analysis		
	Seminar in Manpower Analysis		

NOYES, John S.

Hometown:	Sioux Falls, South Dakota	Major:	Economics
Date of Birth:	June 17, 1943	Marital Status:	Single
Undergraduate Degree:	B.S. in Business/Economics, University of South Dakota		
Last Semester's Grades:	Advanced Macro. Analysis		A
	Stat. Methods I		B
	Methods of Soc. Research		B
	Manpower Seminar		B
			Grade Average
Current Class Schedule:	Theory of Econ. Equilibrium		
	Stat. Methods II		
	Occupational Analysis		
	Seminar in Manpower Analysis		

SAMANIE, Donald P.

Hometown:	Fort Worth, Texas	Major:	Psychology
Date of Birth:	March 11, 1944	Marital Status:	Married
Undergraduate Degree:	B.A. in Biology/Psychology, Harding College		
Last Semester's Grades:	Psych. of Business and Industry		A
	Methods of Soc. Research		A
	Stat. Methods I		B
	Manpower Seminar		A
		Grade Average	<u>3.73</u>
Current Class Schedule:	Elem. Physiological Psych.		
	Stat. Methods II		
	Occupational Analysis		
	Seminar in Manpower Analysis		

SELBY, David R.

Hometown:	Kingfisher, Oklahoma	Major:	Economics
Date of Birth:	February 7, 1944	Marital Status:	Married
Undergraduate Degree:	B.S. in Economics, Oklahoma State University		
Last Semester's Grades:	Advanced Macro. Analysis		A
	Labor Problems		A
	Stat. Methods I		A
	Manpower Seminar		A
		Grade Average	

Current Class Schedule: Theory of Econ. Equilibrium
Stat. Methods II
Occupational Analysis
Seminar in Manpower Analysis

SIMPSON, Elizabeth J.

Hometown:	Tulsa, Oklahoma	Major:	Sociology
Date of Birth:	October 29, 1944	Marital Status:	Married
Undergraduate Degree:	B.A. in Sociology, Oklahoma State University		
Last Semester's Grades:	Methods of Soc. Research		A
	Industrial Soc.		A
	Soc. Stratification		A
	Manpower Seminar		A
		Grade Average	

Current Class Schedule: Sample Survey Designs
Soc. Theory I
Occupational Analysis
Seminar in Manpower Analysis

SPRINGFIELD, William L.

Hometown:	Huntsville, Texas	Major:	Sociology
Date of Birth:	November 21, 1942	Marital Status:	Married
Undergraduate Degree:	B.A. in Philosophy, University of Arkansas		
Last Semester's Grades:	Stat. Methods I		B
	Methods of Soc. Research		A
	Industrial Soc.		B
	Manpower Seminar		B
		Grade Average	

Current Class Schedule: Stat. Methods II
Soc. Theory I
Occupational Analysis
Seminar in Manpower Analysis

Report to the U. S. Department of Labor
Office of Manpower, Automation and Training
Washington, D. C. 20025

OVERVIEW OF OPERATIONS

Operations of the Center for Manpower Studies at Atlanta University during the first five months revolved around the following activities: (1) recruitment of staff, (2) definition of major objectives, (3) definition of immediate manpower research problems, (4) recruitment of committees, (5) planning for regional institute on manpower, and (7) the selection of Manpower Research Fellows.

Recruitment of Staff

Regarding the recruitment of staff members, the Center is proud to announce that it has been successful in securing the services of three highly qualified persons as follows:

-Dr. Cleveland Dennard, Principal of George Washington Carver Vocational School, Atlanta, will serve as a consultant to the Center. Dr. Dennard is eminently qualified by experience and training to bring fresh insights into problems of manpower. He holds the B. S. degree from Florida A. and M. University with a major in Vocational Industrial Education, the M. S. degree from Colorado State College and the Ed. D. degree from the University of Tennessee. His occupational experience includes apprenticeship with Stewart Shoemaker, Inc., member of the staff of the Alabama State Department of Education in the Division of

Vocational-Technical Education and Associate Professor of Education at Alabama A. and M. College.

-Mr. Benjamin M. Trooboff, formerly Director of Manpower Training Programs for the Atlanta Public Schools, has been appointed to the faculty of the Graduate School of Business Administration to work with the Manpower Research program. Mr. Trooboff has also served as Program Planning Consultant for Special Federal Programs of the Vocational Division of the Georgia State Department of Education. He holds the B. S. degree from Brooklyn College and the M. B. A. from Georgia State College and presently engaged in doctoral study in business administration at Georgia State College.

-Dr. K. K. Das, Professor of Business Administration, Graduate School of Business Administration, will also work with the program. Dr. Das has a keen interest in the manpower area. He holds the Doctorate from the Harvard Business School.

Definition of Objectives

Major objectives which will claim the attention of the Center are:

1. To prepare Master's degree candidates for career positions and manpower analysts and Manpower Research Specialists.
2. To develop an interest among the various disciplines in the problems concerning manpower; to develop an interdisciplinary approach to manpower studies.
3. To institute studies relating to manpower for the dissemination of information concerning such matters and as a vehicle in the development of interested specialists.

Implementation of Objectives

In the implementation of the above objectives it has been decided to help prepare master's degree candidates with the ability to (1) make objective data analysis, (2) analyze personal experiences of job seeking minority group, (3) study variables used in developing data pertaining to employment of Negroes and other minorities, (4) determine employment opportunities and (5) determine and analyze problems of employment or unemployment. Graduate students are presently being involved in manpower studies.

The Seminar in Business Administration course in the School of Business Administration has been given three emphases--business, economic, and manpower. Three professors handling the course lecture and work with the students in the three areas. After the initial presentations, those students interested in research in any one of the above areas are assigned to the professor responsible for research in his interest. Already several students have indicated an interest in the manpower field and have submitted thesis topics for research. Some of the topics which have been approved include:

1. A Survey of Occupational Perceptions, Aptitudes, Interest and Opportunities of Junior and Senior High School Students at Carver Vocational School with A View of Evaluating the Trade Curriculum As It is Now Offered at Carver High School, Atlanta, Georgia.
2. The Identification of Work Attitudes Among Manpower Development Training Enrollees at Atlanta, Georgia

3. **Barriers of Discrimination to Apprenticeship Programs on the Employability of Negro Youth in Atlanta, Georgia.**
4. **The Effects of Rural Population Changes in Employment in the City of Atlanta (1950 - 1965).**

It is expected that as the seminar moves into the second semester, other research interests will be generated.

As the Center for Manpower Studies organized its work, it was decided that an interdisciplinary approach would be most fruitful. The following disciplines have been enlisted in an attempt to conceptualize the extent of the problems involved in developing the human resources of disadvantaged minority youths and adults. Areas of the university that are included in the work of the Center include: (1) sociology, (2) business administration, (3) guidance and counseling, and (4) education.

As for curriculum implications, opportunity will be provided to create programs to develop critically needed competencies in Manpower Analysts and Research Specialists by including the (1) social perspectives -- demographic sensitivity and implications for manpower, unemployment and community tensions, social groupings and employment dead-ends, career development in professional and sub-professional vocations, and dynamics of inter- and intra-group behavior. (2) Economic perspectives -- small business development and entrepreneurship, management skills, cooperative development as an economic force and dynamics of the labor market. (3) Guidance and counseling perspectives -- job development in

the public and private sectors, occupational information, career guidance development, recruitment, referrals, placement, personal adjustments, dynamics of industrial behavior. (4) Educational perspectives -- types of educational programs available in the community, impact of the university complex upon existing and emerging educational programs in the Atlanta community, implications for institutions of higher education, role of public school goals and supervisory manpower, evaluation of instructional methods and materials in light of current needs, and relevance of curricular patterns to labor market demands.

The Center is presently planning a series of multidisciplinary seminars as follows:

1. **Inter-Disciplinary Advisory Council.** This group is made up of the staff of the Center for Manpower Studies, Dr. Tilman C. Cothran, Chairman of the Department of Sociology, Dr. Huey Charlton, Professor of Counseling and Guidance, and Dr. Harding B. Young, Dean, School of Business Administration.

This group is charged with the responsibility of evaluating program planning of the Center, the initiation of thesis studies and the coordination of regular graduate student seminars.

2. **Community Resource Conference Seminar.** This group will include interested and concerned persons from the following: (a) colleges and universities, (b) federal, state, and local agencies, and (c) private business and industrial sectors.

3. Establishment of an Inter-Community Advisory Council.

This group will work to identify community needs that can be met by the Center for Manpower Studies. The university is pleased to announce that a very high level Advisory Council has been established as follows:

Dean James M. Hund, Emory University Business School

Dr. Mack A. Moore, Associate Professor of Economics, School of Industrial Management, Georgia Institute of Technology

Dr. Hilliard Bowen, Superintendent, Area One, Atlanta Public Schools

Dr. Vivian Henderson, President, Clark College

Dr. Cleveland Dennard, Principal, Carver Vocational School, Atlanta

Dr. Emory Viah, Southern Regional Council

Mr. Harold Arnold, Executive Director, Atlanta Urban League

It is anticipated that the Center for Manpower Studies will issue, for the information of those concerned, the following types of material:

(1) narrative reports and graphic analyses concerning pertinent subject matter, (2) interim reports of center activities, (3) completed documents of research findings, and (4) publications of proceedings of seminar presentations.

Immediate Manpower Research Problems

Members of the staff have decided that the following research projects will claim top priority:

1. **Assessment of the Perceptions of Tenth and Twelfth Grade Students of the Occupational Educational Opportunities Available to Them in Metropolitan Atlanta**
2. **Relevance of Proposed Occupational Offerings of the New Area Vocational School Curriculum to Labor Market Demands**
3. **An Analysis of Employment Experiences of a Selected Group of Vocational Technical School Graduates of Metropolitan Atlanta Schools**

Other Studies Which Have Been Discussed

1. **Analysis of data of the Atlanta Human Resources Study for possible studies relating to (1) training needs, (2) perceptions regarding employment and training aspirations, (3) determinants effecting employability**
2. **Analysis of composition and effectiveness of institutional MDTA programs in metropolitan Atlanta for period 1962-1966 with implications and projections for program planning.**
3. **Analysis of composition and effectiveness of OJT programs under MDTA in metropolitan Atlanta for period 1962-1966 with implications and projections for program planning.**
4. **Case studies of Vine City residents and labor market experiences in terms of age and sex groupings for insight and guidance in urban planning.**
5. **A study of employment opportunities for supervisory and managerial workers in the Atlanta area.**

Inter-Community Conference on Manpower

Plans are now being made to convene an inter-community conference on Manpower for the spring. The purposes of the conference will be to focus attention on the Center for Manpower Studies, and to provide an opportunity for leaders in the community with a manpower interest to come together for thinking and discussion. It is hoped that one of the

outcomes of this conference will be the formation of a group of people in different fields who will assume leadership for an ongoing program in manpower and economic development.

Regional Institute on Manpower

It is hoped that the Center can bring to the campus during the summer a group of high school and college teachers to become involved in manpower research. Topics for discussion will center around research needs, manpower policies and the development of research capability in manpower.

Graduate Fellowships Awarded

The Graduate School of Business Administration at Atlanta University has already awarded Manpower Fellowships to the following students:

Harold Farris, a graduate of Morehouse College, now majoring in Business Administration. Mr. Farris who has a special interest in labor problems, has financed his college education by part-time work and summer jobs.

Ernie Eerkes, studying for the M. S. in Counseling and Guidance, is a graduate of Western Washington College. His college studies were interrupted in 1958 and 1959 by service in the United States Army. He is married and has two boys. He has been a teacher in Oak Harbor, Washington for five years. Mr. Eerkes plans to write his thesis on the subject, "The Identification of Work Attitudes Among Manpower Development

Training Enrollees at Atlanta, Georgia."

Ples E. McIntyre, Jr., graduate student in Business Administration who has had to work to support himself and his widowed mother while attending school. Even with this work schedule, he has been an honor student. Mr. McIntyre plans to write his thesis on "Barriers of Discrimination to Apprenticeship Programs of the Employability of Negro Youth in Atlanta."

Prentice H. Wilkerson, graduate student in Business Administration, comes from New Orleans, Louisiana and is an honor student.

Thessalonia Ford, graduate student in Sociology from Jones, Louisiana.

Joyce Smith, graduate student in Sociology from Little Rock, Arkansas.

Samuel Steverson, graduate student in Sociology from Bolton, North Carolina.

Myrtle Wright, graduate student in Sociology from Pontotoc, Mississippi.

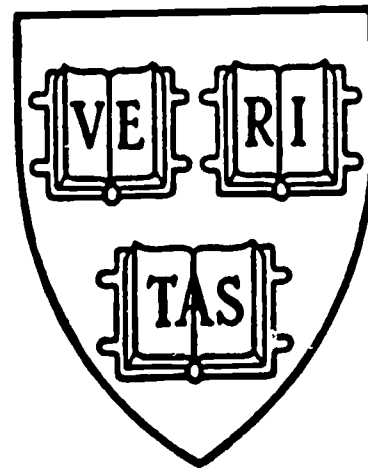
February 17, 1967

APPENDIX E

1. Brochure on Harvard Interfaculty Program in Health and Medical Care
2. Letter of George Monsma to Irene Butter
3. Letter of Frederick Harbison, Director, Princeton University Industrial Relations Center, to Irene Butter
4. Brochure on the Institute for Research on Human Resources at Pennsylvania State University
5. Announcement of health manpower conference at Pennsylvania State University
6. Announcement of Workshop on Economics of Human Resources, University of Wisconsin
7. Descriptive material on Hospitals Systems Research Group at Georgia Institute of Technology

HARVARD UNIVERSITY

INTERFACULTY PROGRAM
ON
HEALTH AND MEDICAL CARE



Programs
in
Economics and Administration of Medical Care
Public Health Administration

MARCH 1964

E-1

E-11

PARTICIPATING SCHOOLS
OF
HARVARD UNIVERSITY

School of Public Health

Medical School

Graduate School of Business Administration

Graduate School of Public Administration

Department of Economics, Graduate School of Arts
and Sciences

The Interfaculty Program on Health and Medical
Care is supported in part by a training grant from
the United States Public Health Service.

INTERFACULTY PROGRAM
ON
HEALTH AND MEDICAL CARE

OBJECTIVES —

The Interfaculty Program on Health and Medical Care, a joint effort of five schools and departments of Harvard University, is a graduate program offering training and research in the economics and administration of medical care and in public health administration to students with backgrounds in:

- Public Health
- Medicine
- Dentistry
- Hospital Administration
- Economics
- Business Administration
- Social and Behavioral Sciences
- Public Administration

Students whose prior training and experience are in public health, medicine, dentistry, and hospital administration are helped to develop their skills in analysis and decision-making in medical care programs. Instruction is also offered in the approaches and techniques of economics and the behavioral sciences, particularly as they apply to the planning and administration of medical care programs.

Students from economics, the behavioral sciences, business administration, public administration, statistics, and operations research are given a comprehensive introduction to the medical care scene so

that they can apply the knowledge and techniques of their professional disciplines to problems in the organization, administration, and provision of medical care.

To give students experience within the medical care environment, opportunities are arranged for observation and participation in on-going medical care programs. Training in research methods is augmented by student involvement in existing research projects at Harvard and in the Boston area.

PROGRAM —

The program centers on four basic areas of instruction, supplemented by related courses at the participating schools:

— A survey of present patterns, problems, and issues in the economics and administration of personal health services in the United States and other countries. Topics discussed include the character of illness and patients, components of medical care such as physicians, other medical personnel, and facilities, the cost and financing of medical care, the quality of medical care, and planning for medical care programs.

— Case study analysis of medical care problems, stressing planning and decision-making. Topics include the organization of health services in Great Britain, Chile, and India, conflicting legislative proposals for public medical care for the aged in the United States, and cost control problems in public medical care programs.

— Research in medical care, stressing both substance and methodology, the application of statistical and quantitative techniques, and the development of research skills.

— Analysis of the medical care scene as an economic market. Topics include the organization of the medical care sector of the economy, factors affecting both supply of and demand for medical care services, the impact on the medical care market of financing mechanisms, and the role of medical care in economic development.

Further training opportunities are available in research projects conducted by the program's staff. Researches recently completed or now in progress include an analysis of the factors affecting demand for medical care facilities, evaluation of a hospital-based diagnostic and emergency care program for union members, and study of the training needs of nursing home personnel. Limited funds are available to finance individual research projects.

DEGREES —

Depending on their background and qualifications, students may work toward the following degrees:

M.P.H.	Master of Public Health
S.M. in Hyg.	Master of Science in Hygiene
M.P.A.	Master of Public Administration
Dr.P.H.	Doctor of Public Health
S.D. in Hyg.	Doctor of Science in Hygiene
Ph.D.	Doctor of Philosophy in relevant discipline

FELLOWSHIPS —

A limited number of Public Health Service Traineeships are available to qualified candidates. Stipends range from \$3,000 to \$4,800 per year based on prior degrees, plus tuition and allowance for dependents.

ADDITIONAL INFORMATION —

For further information, write individual members of the participating faculty or —

DR. ROBERT H. HAMLIN*
Harvard School of Public Health
5 Shattuck Street
Boston, Massachusetts 02115

Resigned in October, 1965

Department Head:

Dr. Alonzo S. Yerby
Harvard School of Public Health
5 Shattuck Street
Boston, Mass. 02115

PARTICIPATING FACULTY

OF

HARVARD UNIVERSITY

JOHN T. DUNLOP, Ph.D.

Professor and Chairman, Department of Economics,
Graduate School of Arts and Sciences

ROBERT H. HAMLIN, M.D., M.P.H., LL.B. *

Roger Irving Lee Professor of Public Health and
Head, Department of Public Health Practice, School
of Public Health

E. ROBERT LIVERNASH, Ph.D.

Professor of Business Administration, Graduate School
of Business Administration

ROY PENCHANSKY, M.I.L.R., D.B.A.

Assistant Professor of Administration in Medical
Care, School of Public Health

OSLER L. PETERSON, M.D., M.P.H.

Visiting Professor of Preventive Medicine, Department
of Preventive Medicine, Medical School

GERALD D. ROSENTHAL, Ph.D.

Instructor in Economics, Department of Economics,
Graduate School of Arts and Sciences

*Resigned in October, 1965.

E-v

301-A Franklin Avenue
Princeton, New Jersey
November 16, 1966

Dr. Irene Butter
Bureau of Hospital Administration
The University of Michigan
Ann Arbor, Michigan 48104

Dear Dr. Butter:

• Thank you for your letter; please pardon the delay in this reply.

I am currently writing a doctoral dissertation dealing with the demand and supply of physicians. I am investigating the effects of price, income, demographic characteristics, organization of medical care, and substitution of other personnel on the demand for physicians and relating this to the supply of physicians from medical schools and immigration.

There have been no preliminary reports or publications. I would be interested in hearing about your research as it develops.

Sincerely yours,

George N. Monson, Jr.
George N. Monson, Jr.

PRINCETON UNIVERSITY
INDUSTRIAL RELATIONS SECTION

P. O. BOX 248
PRINCETON, NEW JERSEY 08540
U.S.A.

WICK H. HARBISON, *Director*
C. BENJAMIN, *Librarian*
MCBRIDE, *Administrative Assistant*

Faculty Associates
WILLIAM G. BOWEN
J. DOUGLAS BROWN
HARRY KELEJIAN
RICHARD A. LESTER
JOSEPH D. MOONEY
ALBERT REES
HERMAN M. SOMERS

October 19, 1966

Dr. Irene Butter
Bureau of Hospital Administration
The University of Michigan
Ann Arbor, Michigan 48104

Dear Dr. Butter:

Thank you for your letter of October 13. There is considerable interest here at Princeton in the field of health manpower.

We have one senior graduate student, Mr. George N. Monsma, Jr., who is working on a thesis in Economics on factors affecting the demand and supply of physicians and related personnel. We are presently in the initial stages of organization of a study of the management and utilization of manpower in hospitals. This work will probably be directed by Mrs. Anne Somers. As yet, however, our plans are not firm.

Certainly, we are encouraging graduate students to work on problems of health manpower. Several of the students in the Woodrow Wilson School of Public and International Affairs have already expressed interest in this field.

Naturally, we will be happy to place your name on the mailing list for our publications in this field.

Sincerely yours,


Frederick Harbison
Director

FH/dm

THE PENNSYLVANIA STATE UNIVERSITY
INSTITUTE FOR RESEARCH ON HUMAN RESOURCES

Activities

In addition to conducting research seminars, the Institute for Research on Human Resources has carried on, or is currently conducting, a variety of research projects, some of which are described below.

An Analysis of the Comparative Costs and Benefits of Vocational vs. Academic (High School) Education, U.S. Office of Education, 1966-1968

This study will analyze the experiences of graduates and non-graduates of high school academic and vocational programs as members of the labor force and will evaluate their success in terms of earnings, relationship of job to training, etc. The cost-benefits of different types of vocational education programs will be determined as well as the cost-benefits of vocational education programs compared with academic programs. These analyses will be made in respect to society as a whole, specific industries, and the individual.

Development of Action-Demonstration Projects for Improvement of Manpower and Job Market Services, U.S. Department of Labor, 1966-1967

An evaluation will be made of experimental and demonstration projects currently being conducted under the supervision of the United States Employment Service. Suggestions for modifications of these projects, involving such areas as counseling, testing, and older workers, will be made to improve manpower and job market operating activities and services.

A Developmental Program for an Economic Evaluation of Vocational Education in Pennsylvania, Pennsylvania Department of Public Instruction, 1965-1966

This study described and assessed the current state of cost and benefit data on vocational education for the State of Pennsylvania. It outlined the basic techniques of economic analysis for assessing these costs and benefits. It also presented recommendations of the most rewarding areas in which to conduct cost-benefit analysis for vocational education in Pennsylvania.

An Evaluation of Vocational Education in Pennsylvania, Pennsylvania Department of Public Instruction, 1966-1967

The main objective of this project is to analyze the extent to which vocational education in Pennsylvania has changed in recent years to meet the needs of industry and students. An evaluation of vocational education and academic programs will be made from the point of view of students who have graduated from these curricula. In addition, suggestions for an evaluative system for vocational education will be made.

An Experimental Program to Compare Education vs. Training for Young School Dropouts, U.S. Office of Education, 1965-1970

The main purpose of this study is to determine the economic and psychological effects, in the long run, of providing high school dropouts with the opportunity to secure a high school diploma or a comparable amount of training for a specific occupation. Related to this is an exploration of the role of a high school diploma as a barrier to employment. In addition, the current emphasis on programs for youth, which prepare them for narrow occupational skills, will be evaluated.

Observation of Experimental Education Programs Supported by the Ford Foundation, Ford Foundation, 1966-1967

During the course of this project, a survey was made of four school systems which are currently conducting experimental occupational training programs with the support of the Ford Foundation. The end product of this survey will be the development of a demonstration-research program for youth not capable of handling the existing curricula in academic or vocational programs.

Reconnaissance Studies on International Trade in Skills, University of Chicago, 1966-1967

This survey will analyze the training of students from underdeveloped countries in foreign universities with respect to the effectiveness of this training on the economic and social development of their native countries. Included in the topics to be studied are the costs and benefits of study abroad, formal university training, and on-the-job training -- all being studied within the context of investment in human resources. The project will focus primarily on U.S. training of Latin American students. However, methodologies will be developed for evaluating similar situations for students from other countries.

Research, Development, and Demonstration in Adult Training and Retraining,
U.S. Office of Education, 1964-1966

The Mon-Yough region, located in southwestern Pennsylvania is faced with a variety of social and economic problems, many of which stem from a reliance on the steel industry as the major area of employment. The Mon-Yough Community Action Committee was founded in order that the forces in this region might be organized to overcome these problems. MYCAC also served as a vehicle through which research and demonstration programs were established and conducted in the Mon-Yough Region. Using Mon-Yough as a reference point, materials relating to human resources development were collected and analyzed as a background for other related projects. The Mon-Yough Region was also used as a reference point for a series of seminars which led to the development of a guide for the allocation of research resources in the field of human resources.

The Role of the Secondary School in the Preparation of Youth for Employment,
U.S. Office of Education, 1964-1966

During the course of this study, an assessment was made of nine school systems in northeastern United States to determine how well the secondary schools are training youth to meet current manpower demands. Academic and general high school curricula were studied. However, special emphasis was placed on the vocational education curriculum, its image and usefulness. In addition, detailed studies were made of minority groups, such as Negroes and females, and their experiences in education and employment.

A Study of the Impact on the Community of the Closing of the Olmsted Air Force Base, University of Kansas, 1966-1968

Time series will be developed in such areas as employment, utilities, bank deposits, and construction to study the impact on Dauphin County, Pennsylvania, by the closing of Olmsted Air Force Base. Studies are also being made of the possible re-uses of the base facilities.

A Study to Determine the Influence of Supplemental Labor Market Information on the Job Seeking Behavior of Selected Groups of Unemployed Workers,
U.S. Department of Labor, 1966-1968.

This project is designed to measure the effectiveness of supplemental labor market information provided to job-seekers to assist them in their search for employment. One group of job-seekers will be given standard employment service information and another group will be given the standard information plus such added information as names of local firms having occupations the same as the unemployed job-seeker, the location of such firms, and the best times to apply. Follow-up data will be obtained for both groups to determine whether there are differences between them with respect to job search behavior and employment experiences.

MANPOWER REQUIREMENTS IN HEALTH SERVICE ACTIVITIES

- . Recruiting and Training
- . Optimum Utilization
- . Needed Research

A WORKSHOP SPONSORED BY

INSTITUTE FOR RESEARCH ON HUMAN RESOURCES

THE PENNSYLVANIA STATE UNIVERSITY

IN COOPERATION WITH

U.S. DEPARTMENT OF LABOR

AND

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

April 24-25, 1967

The Pennsylvania State University

University Park, Pennsylvania 16802

First Day (Continued)

12:00 - 1:30 p.m. Lunch

1:30 - 4:30 p.m. Workshop Discussion on
"Optimum Utilization
of Health Services
Personnel"

Discussion Leader

Dr. R.M. Loughery, Administrator
Washington Hospital Center

1. What are the major factors which contribute to health services personnel attrition, labor turnover, and transfers to alternative employment? How can these be minimized?
2. What new developments with respect to wages, fringe benefits, and improved working conditions are taking place in health services employment?
3. What steps can be taken to improve job advancement and promotion? What are the lines of occupational progression - career ladder? How can occupational analysis contribute to employment at highest skills?
4. What can be done to assure more effective working relationships and performance between professional and nonprofessional health services personnel?
5. How can out-service training be made to contribute toward the better utilization of employed personnel?

5:30 - Reception and Dinner

"The University Views Its
Responsibilities in the
Health Field"

Dr. George T. Harrell, Jr.
Dean
Milton S. Hershey Medical Center

Second Day - April 25, 1967

9:00 - 12:15 p.m. Workshop Discussion on
"Needed Research to Advance
Manpower Development and
Utilization of Health Services
Workers"

Discussion Leader

Dr. Louis Levine, Professor
of Economics, and Research
Staff, Institute for Research
on Human Resources

1. What research is needed to increase motivation and interest in health services employment opportunities - to attract and retain workers in this field?
2. What kinds of research can be initiated to determine the most effective techniques for the training and upgrading of health service personnel?
3. Is research needed to determine whether hiring specifications for health services occupations are improperly restrictive and unrelated to performance requirements?
4. Should research be undertaken to determine extent to which various types of health service activities lend themselves to part-time employment or to rearrangement of work schedules so that additional manpower resources may be reached?
5. What research might be needed to determine how employment in health service activities can be expanded for the severely disadvantaged, the older workers, and even retired workers?
6. What is the feasibility of cost-benefit analysis as a means for demonstrating the need for greater social investment in health services manpower development and utilization?

12:15 - 12:45 p.m. Concluding Remarks -
Adjournment

Dr. Jacob J. Kaufman

1st Day (Continued)

12:00 - 1:30 p.m. Lunch

2:30 - 4:30 p.m. Workshop Discussion on
"Optimum Utilization
of Health Services
Personnel"

Discussion Leader

Dr. R.M. Loughery, Administrator
Washington Hospital Center

1. What are the major factors which contribute to health services personnel attrition, labor turnover, and transfers to alternative employment? How can these be minimized?
2. What new developments with respect to wages, fringe benefits, and improved working conditions are taking place in health services employment?
3. What steps can be taken to improve job advancement and promotion? What are the lines of occupational progression - career ladder? How can occupational analysis contribute to employment at highest skills?
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12:15 - 12:45 p.m. Concluding Remarks -
 Adjournment

Dr. Jacob J. Kaufman

UNIVERSITY OF WISCONSIN
Department of Economics

ANNOUNCEMENT

WORKSHOP ON ECONOMICS OF HUMAN RESOURCES (ECONOMICS 968-969; also Ed. Pol. Studies 968-969).

Spring-Fall 1966. Professors W. Lee Hansen and Burton A. Weisbrod

A new workshop will be offered during the Spring and continuing into the Fall semester, under the direction of Professors W. Lee Hansen and Burton A. Weisbrod. The objective of the two-semester workshop is to stimulate research in the rapidly-developing area of the economics of human resources. The workshop will, in its first year, focus on the economics of education. In subsequent years, topics to be investigated may include health, mobility, welfare, etc.

The workshop will meet weekly during the spring semester and the following fall semester of each year. During the spring the principal emphasis will be on exposing the participants to new research developments and discussions of future research possibilities; this will be done by the directors of the workshop and will be supplemented by outside speakers. Among the major topics to be taken up this year are: (1) Investment in Man and Economic Growth; (2) Outputs of Education and Their Benefits; (3) Inputs to Education and Their Costs; (4) The Production Function for Education.

In the fall semester, some of the new work stimulated by the workshop -- begun during the first semester and continued over the summer -- should be far enough along to be reported to the workshop and thereby subjected to appraisal and constructive criticism. Thus, during the fall semester the emphasis will be on obtaining progress reports about, and developing critical, analytical discussions of, the research initiated by workshop participants.

Members of the workshop will be required to participate during both semesters. They will also be required to present a carefully-written research prospectus for approval as early as possible but in no case later than the end of the spring semester. Members of the workshop will be urged to undertake research having empirical and quantitative aspects. It is hoped that much of the research will lead to Ph.D. dissertations and/or published papers.

The workshop, which will offer graduate credit, should be of particular interest to students of economic growth, labor theory, public finance and applied welfare economics. Enrollment requires consent of one of the instructors.

GEORGIA INSTITUTE OF TECHNOLOGY

ATLANTA, GEORGIA 30332

Hospital Systems
Research Group

SCHOOL OF
INDUSTRIAL ENGINEERING

The Hospital Systems Research Group consists of professional engineers and scientists who are broadly experienced in research, education, and professional practice in the field of hospital management systems. The HSRG attempts to contribute to the cause of high-quality patient care at reasonable costs by the application of industrial engineering, operations research, and other disciplines to the complex systems of modern hospital organizations. Organized within the School of Industrial Engineering of the Georgia Institute of Technology, the Group functions in cooperation with hospitals in the Atlanta area, the Georgia Hospital Association, affiliated hospitals throughout the United States, and other health-related institutions and organizations.

The HSRG is headed by Dr. Harold E. Smalley, a pioneer and national leader in the field of hospital management systems. Dr. Smalley has specialized in the scientific treatment of hospital management problems since 1952 when he and Dr. Lillian M. Gilbreth jointly conducted what is believed to have been the first attempt to apply scientific management principles to the hospital as a total system. Prior to coming to Atlanta in 1958, he was Assistant to the Vice-Chancellor at the University of Pittsburgh, where he held academic appointments in the schools of engineering, medicine, and nursing. He has served as executive director of the Hospital Management Systems Society and a member of the Committee on Methods Improvement of the American Hospital Association and was instrumental in the organization of the Hospital Division of the American Institute of Industrial Engineers. Dr. Smalley has directed numerous hospital-related research projects and has organized educational programs and service projects for hospitals throughout the nation.

The HSRG is staffed by the director, Georgia Tech faculty members, a select group of consultants, and graduate students at both the master's and doctoral levels. Among the disciplines represented are hospital administration, industrial engineering, law, management, nursing, operations research, psychology, sociology, and systems research. Contacts are maintained with other university centers engaged in similar programs and with the rapidly increasing number of management systems practitioners in hospitals throughout the United States and abroad. Research, education, and service projects of the HSRG have been supported by the Georgia Institute of Technology and other academic institutions, the federal government, various foundations and associations, several affiliated hospitals, manufacturers of hospital equipment and medical supplies, and other organizations concerned with health care problems.

Situated in Atlanta, the Hospital Systems Research Group gains distinct advantages by virtue of the excellent educational and research facilities found in this metropolitan area. Of particular value are the services of Georgia Tech's School of Industrial Engineering, Photographic Laboratory, Price Gilbert Library, Rich Electronic Computer Center, the Georgia Tech Research Institute, and other Georgia Tech scientists and faculty engaged in hospital and health research; the faculties, libraries, and clinical situations of the Emory University Medical Center and the University of Alabama Hospitals and Clinics; the cooperation of the Graduate Program in Hospital Administration at Georgia State College; and a working relationship with the Hospital Division of the professional consulting firm, Management Science Atlanta.

9/66

GEORGIA INSTITUTE OF TECHNOLOGY

ATLANTA, GEORGIA 30332

SCHOOL OF
INDUSTRIAL ENGINEERING

1966-67

Hospital Systems
Research Group

The Hospital Systems Research Group consists of professional engineers and scientists who are broadly experienced in research, education, and professional practice in the field of hospital management systems. The HSRG attempts to contribute to the cause of high-quality patient care at reasonable costs by the application of industrial engineering, operations research, and other disciplines to the complex systems of modern hospital organizations. Organized within the School of Industrial Engineering of the Georgia Institute of Technology, the Group functions in cooperation with hospitals in the Atlanta area, the Georgia Hospital Association, affiliated hospitals throughout the United States, and other health-related institutions and organizations.

Staff Members:

Richard M. Bramblett, M.S.I.E., Assistant Director, HSRG
 Marilyn R. D'Isepo, Secretary, HSRG
 Howard E. Fagin, B.S.I.E., M.S. in P.H., Graduate Assistant
 Tee H. Hiett, Jr., M.S., Lecturer in Industrial Engineering and
 Project Engineer, Holy Family Hospital
 James B. Mathews, M.S.I.E., Project Engineer, Eugene Talmadge
 Memorial Hospital
 Humberto J. Ortega, B.I.E., Project Engineer, South Fulton Hospital
 Harold E. Smalley, Ph.D., Professor of Industrial Engineering and
 Director, HSRG
 William G. Sullivan, M.S.I.E., Project Engineer, Ponce de Leon Infirmary
 Andrew T. Sumner, B.I.E., Assistant Project Engineer, Eugene Talmadge
 Memorial Hospital

Adjunct Members:

W. Daniel Barker, M.H.A., F.A.C.H.A., Assistant Director, Crawford
 W. Long Memorial Hospital
 John T. Doby, Ph.D., Professor and Chairman, Department of Sociology,
 Emory University
 A. D. Joseph Emerzian, Ph.D., Professor and Head, Department of
 Industrial Administration, University
 of Connecticut
 John R. Freeman, M.S.I.E., Assistant Professor of Industrial and
 Systems Engineering, University of Florida
 Glenn M. Hogan, LL.B., Executive Director, Georgia Hospital Association
 Pamela H. Irwin, R.N., B.S., Nurse Consultant, HSRG
 George R. Wren, Ph.D., Director, Program in Hospital Administration,
 Georgia State College

APPENDIX F

1. Sample letters sent to professor teaching manpower courses
2. Course outlines and descriptive letters received in response to inquiries about economics, sociology, and operations research courses

The University of Wisconsin

COLLEGE OF ENGINEERING
1513 UNIVERSITY AVENUE
MADISON, WISCONSIN 53706

MECHANICAL ENGINEERING
262-3543

8 February 1967

Dr Irene Butter Research Associate
Program in Hospital Administration
School of Public Health
220 E Huron
The University of Michigan
Ann Arbor Michigan 48108

Dear Dr Butter

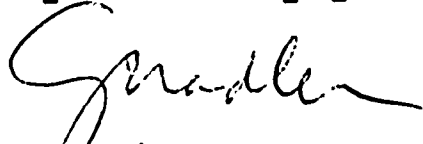
We do not teach any course in Industrial Engineering or Operations Research that deals specifically with the health field. I am certain that several courses include some mention of projects on health field areas. For example, I teach a course in Work Design in which I illustrate the applications from several industries, including health services. Illustrations from many other industries are included to show the spectrum in which Work Design can be applied.

I have two students working on health field projects. Both are graduate students, one seeking the master's and the other the doctorate. The master's candidate will probably write his thesis in this field.

Drs. David Gustafson and George Huber are professors in Industrial Engineering who are also doing work in the health field. I would suggest you contact them directly.

The work which I am concerned with will be discussed during the week of 22 May 1967. I will be talking about Work Design on 22 May at the American Hospital Association Advanced Methods Improvement Conference in Toronto. On 26 May I will be talking about a project we are undertaking at the University Hospitals here. This talk will be given at the American Institute of Industrial Engineers' Conference in Toronto.

Very sincerely yours



Gerald Nadler
Chairman - Industrial Engineering Division

pe

UNIVERSITY OF PITTSBURGH
SCHOOL OF ENGINEERING

DEPARTMENT OF INDUSTRIAL ENGINEERING,
SYSTEMS MANAGEMENT ENGINEERING
AND OPERATIONS RESEARCH
508 ENGINEERING HALL

February 9, 1967

Dr. Irene Butter
Research Associate
School of Public Health
The University of Michigan
220 E. Huron
Ann Arbor, Michigan 48108

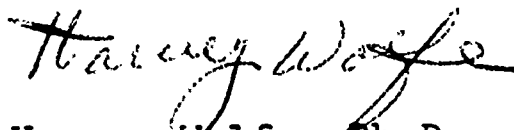
Dear Dr. Butter:

We do not teach any courses specially oriented toward Industrial Engineering or Operations Research in the health field. However, there is something about the possibility of teaching such courses in the School of Public Health in the department of Biostatistics. This is just in the formative stages.

I do have students working for me in the health field. Currently, there are two. However, this work varies from year to year. No one else in my department is involved in the health field.

If I can be of any further help, please let me know.

Yours truly,



Harvey Wolfe, Ph.D.
Assistant Professor

HW/pm

UNIVERSITY OF PITTSBURGH
SCHOOL OF ENGINEERING

DEPARTMENT OF INDUSTRIAL ENGINEERING,
SYSTEMS MANAGEMENT ENGINEERING
AND OPERATIONS RESEARCH
508 ENGINEERING HALL

February 9, 1967

Dr. Irene Butter
Research Associate
School of Public Health
The University of Michigan
220 E. Huron
Ann Arbor, Michigan 48108

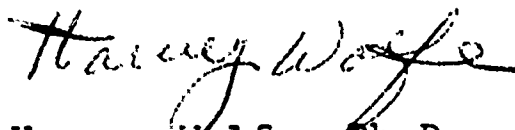
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I do have students working for me in the health field. Currently, there are two. However, this work varies from year to year. No one else in my department is involved in the health field.

If I can be of any further help, please let me know.

Yours truly,

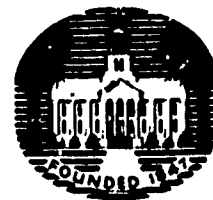


Harvey Wolfe, Ph.D.
Assistant Professor

HW/pm

THE UNIVERSITY OF IOWA

IOWA CITY, IOWA 52240



*College of Engineering
Department of Industrial and Management Engineering*

February 6, 1967

Dr. Irene Butter
Research Associate
Program in Hospital Administration
School of Public Health
220 E. Huron
The University of Michigan
Ann Arbor, Michigan 48108

Dear Dr. Butter:

We do not orient our O.R. courses toward any particular area of application and so could not really claim that the training is peculiarly suited to workers in the health services.

The only courses oriented toward the health services are a two-course sequence appreciation level offering for Hospital Administration students. The so-called "classical" Industrial Engineering methodology is presented in the first course while some of the more commonly known topics from O.R. are presented in the second. Neither of these seems to be appropriate to your interest.

We usually have someone of our people working somewhere in the health services. At the moment one of our instructors and a doctoral candidate are working on our pharmacy people's Unit Dose Project. They are concerned principally with experiment design, modeling, and data reduction and interpretation.

If I can be of further help please let me know.

Yours very truly,


W. R. Hudson
Professor

WRH:ng

TULANE UNIVERSITY

School of Business Administration

NEW ORLEANS, LA. 70118

Computer System Research

February 17, 1967

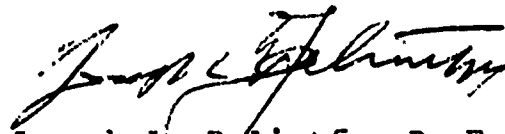
Telephone 865-7711 Ext. 226

Dr. Irene Butter
Research Associate
School of Public Health
220 E. Huron
The University of Michigan
Ann Arbor, Michigan 48108

Dear Dr. Butter:

In reply to your letter of February 1, 1967, I must inform you that presently I am not teaching any course at Tulane related to the health field. This, of course, doesn't imply that I wouldn't be interested in such teaching activity as I mentioned it to Dr. Jelinek some time ago.

Sincerely,


Joseph L. Balintfy, D. Eng.
Associate Professor of
Operations Research

JLB:lw

University of Missouri

COLUMBIA
65201

COLLEGE OF ENGINEERING
Department of Industrial Engineering

February 22, 1967

130 Engineering
Area 314 449-9669

Dr. Irene Butter
Research Associate
Program in Hospital Administration
The University of Michigan
220 E. Huron
Ann Arbor, Michigan

Dear Dr. Butter:

In response to your letter of February 1, we have courses in Industrial Engineering and Operations Research, but these are not specifically related to the health field. At this stage of our development, we are emphasizing general principles applicable to many different types of organizations and lines of endeavor.

Much of our research work is at the University Medical Center and at the Ellis Fischel State Cancer Hospital here in Columbia. This work involves projects for our Time and Motion Study courses, individual student projects both graduate and undergraduate, and some sponsored research in systems analysis and design. Enclosed is a syllabus of our courses which gives the description and outline of each course we are teaching.

Dr. Thomas Weill is in charge of a new master's program in Hospital Administration under the auspices of the Medical School. I suggest you write him directly for information on his program.

If there is any further information you desire, we will be glad to furnish it if we can.

Very truly yours,



Robert M. Eastman
Professor and Chairman

RME/df

enclosure

1. Liggett, John C. "Mathematical Foundations of Zero-One Programming".
Doctoral Dissertation. Southern Methodist University, Dallas, Texas.
2. Liggett, John C. "Mathematical Programming and Hospital Menu Planning:
Applications and Limitations". Master's Thesis. University of Florida,
Gainesville, Florida, 1965.
3. Brya, James R. "A (z, q) Inventory Model with Lead-Time for Unit-Dose Drug
Systems". Master's Thesis. University of Florida, Gainesville, Florida,
1966.
4. McKibbin, Clifford W., III. "An Investigation of the Structure of a Hospital
Information and Decision System". Master's Thesis. University of Florida,
Gainesville, Florida, 1965.
5. Hamilton, Lowell A. "Nursing Costs and the Unit Manager System: Comparative
Study". Master's Thesis. Xavier University, Cincinnati, Ohio, 1965.
6. Gue, Ronald L. and Harold C. White. "Design of Facilities for Hospital
Patient Care Research". Research Report. Research Division, J. Hillis
Miller Health Center, University of Florida, Gainesville, Florida.
7. Brya, James R. and Ronald L. Gue. "A Queueing Case Study in a Hospital".
Pending: Industrial Engineering.

UNIVERSITY OF FLORIDA

COLLEGE OF ENGINEERING

GAINESVILLE

DEPARTMENT OF INDUSTRIAL
AND SYSTEMS ENGINEERING

February 24, 1967

Dr. Irene Butter
Research Associate
Program in Hospital Administration
220 E. Huron
University of Michigan
Ann Arbor, Michigan 48108

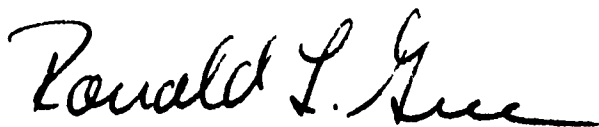
Dear Dr. Butter:

I have your letter of January 31, 1967. While I have taught an industrial engineering course for hospital administration students, that course is currently under the supervision of Dr. John R. Freeman. I am relaying your inquiry to him. I am sure that he will be more than happy to forward to you an outline of the course as well as supplemental information.

If your project is in fact interested in the training available for potential health services operations research I believe you must look beyond formal course work in operations research and industrial engineering. I personally feel that the professional training of operations researchers has to go beyond the bachelor's degree to a master's degree in order to train personnel who are capable of independent investigation.

I'm sure you realize that there is more to this training than class-room teaching. Our own philosophy here at Florida has been that most of the learning experience takes place in the laboratory setting. I currently have six students working for me on various health research projects both sponsored and unsponsored. These students have generated numerous research reports as well as three master's theses. Titles of these are appended to this letter. I'm also enclosing for your information some of our latest publications which may be of some help to you. If I can provide you with any additional information in the future, please don't hesitate to contact me.

Sincerely,



Ronald L. Gue
Associate Professor

RLG:ag

Enclosures

THE JOHNS HOPKINS UNIVERSITY**SCHOOL OF HYGIENE AND PUBLIC HEALTH****615 North Wolfe Street • Baltimore, Maryland 21205****DEPARTMENT OF
PUBLIC HEALTH ADMINISTRATION**

March 6, 1967

Dr. Irene Butter
Program in Hospital Administration
School of Public Health
The University of Michigan
Ann Arbor, Michigan 48108

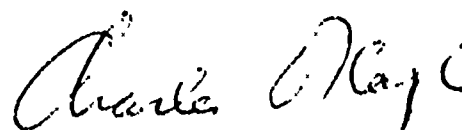
Dear Dr. Butter:

In response to your letter requesting information on our teaching programs in operations research and health, I can describe briefly our current activities. We have an Operations Research Division in the Johns Hopkins Hospital that is now ten years old. In the enclosed bibliography you can see the dissertation topics of the graduate students of that program through the years.

We are affiliated with the Department of Operations Research and Industrial Engineering in the Faculty of Arts and Sciences and in the Department of Public Health Administration in the School of Hygiene and Public Health. The details of courses and degree requirements are listed in the catalogs of the two schools, and if you do not have copies, I will be happy to have them mailed to you. This year Dr. John P. Young is giving the course in Introduction to Operations Research to the students in Public Health and I will give a companion course in Organization Theory. We are planning a course in Decision Theory, Pattern Recognition and Discriminant Analysis for those interested in problems of screening, diagnosis, and classification.

So far, our classes in the School of Public Health have been small, numbering between 5 and 12 graduate students. However, we did give some lectures on operations research in the larger, required courses of the School. In the Faculty of Arts and Sciences our classes are quite large - I have 70 students in the evening program in Management Science. Since all of my research is in the health field, I draw freely on it for illustrative material in the courses. The students of these classes are primarily industrial engineers and managers, but I have noticed with some satisfaction that each year, some of them are motivated to further their careers in hospital and other health services. I hope this information is sufficient for your studies. Please do not hesitate to call if I can be of further help.

Sincerely yours,



Charles D. Flagle
Professor

CDF:ja

NEW COURSE---SPRING 1967---TIME TBA

IE 765 Projects in Hospital Management Systems

Credit to be arranged. Prerequisite: IE 665 or consent of instructor.

Research, education, and operational projects at the graduate level carried out in actual hospital situations under faculty supervision. Emphasis is upon unusual applications of the principles and approaches of industrial engineering to the study of complex hospital management systems.

Description

This is a "project" course, similar to IE 704, 705, 706, in which graduate students specializing in the health services field of application for modern industrial engineering engage in faculty-directed projects at the graduate level. Research, education, and operational projects are carried out in actual hospital situations, and results are reported formally in written form.

NEW COURSE - WINTER 1967 - TIME TBA

IE 665 Case Studies in Hospital Management Systems

3-0-3 Prerequisite IE 418 or consent of instructor

Building upon an appreciation of industrial engineering in hospitals, this course is concerned with a variety of problems facing hospital management and with industrial engineering techniques useful in increasing systems productivity and improving managerial decisions. The major purpose is to demonstrate approaches, methods, and attainable results in actual hospital situations. Through the medium of case studies, a broad range of industrial engineering topics is covered, embracing methods and standards, sampling, job evaluation and incentives, statistics, forecasting, managerial planning and control, queuing, layout, cost analysis and engineering economy, linear programming, critical path methods, data processing, and decision theory.

Text: Smalley and Freeman, Hospital Industrial Engineering

Topical Outline

<u>Week No.</u>		<u>Text Reference</u>
1.	Introduction Review of IE 418 Overview of IE 665	Chap. 1-9
2.	Management Problems and IE studies	Chap. 10
3.	Methods engineering and paperwork simplification	Chap. 11-12
4.	Work measurement, standard data, and sampling	Chap. 13-15
5.	Job evaluation and employee motivation plans	Chap. 16-17
6.	Probability and statistical applications; planning and control; queuing theory	Chap. 18-21
7.	Facilities design, layout, and costing techniques	Chap. 22-23
8.	Linear programming and other optimization techniques, resource allocation, and project management	Chap. 24
9.	Computer technology	Chap. 25
10.	Decision theory Review	Chap. 26

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3-0-3 Prerequisite IE 418 or consent of instructor

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7.	Facilities design, layout, and costing techniques	Chap. 22-23
8.	Linear programming and other optimization techniques, resource allocation, and project management	Chap. 24
9.	Computer technology	Chap. 25
10.	Decision theory Review	Chap. 26

IE 418
Bramblett
Office-111

INDUSTRIAL ENGINEERING IN HOSPITALS
Tentative Course Outline

1966
-1

<u>Session</u>	<u>Topic</u>	<u>*Assignment</u>
1	Introduction - Discussion of the course objectives.	None
2	The need for improvement Areas for improvement	Ch. 1
3	Means of improvement The philosophy of industrial engineering in the hospital	Ch. 1
4	The role of traditions	Ch. 2
5	The role of traditions	Ch. 2
6	The matter of uniqueness	Ch. 3
7	The matter of uniqueness	Ch. 3
8	The methods improvement movement	Ch. 4
9	Indoctrination and implementation. (Deadline for selection of topic for investigation)	Ch. 5
10.	Indoctrination and implementation	Ch. 5
11	Quiz No. 1	All previous
12	Establishing the professional program	Ch. 6
13	Service activities	Ch. 7
14	Service activities	Ch. 7
15	Educational activities	Ch. 8
16	Research activities, Management problems, and IE studies (Deadline for rough draft of report of investigations)	Ch. 9,10
17	Quiz No. 2	
18	Begin presentations of results of investigations	

*Smalley and Freeman, Hospital Industrial Engineering

IE 418 Industrial Engineering in Hospitals

3-0-3 Prerequisite--Senior Standing or consent of instructor.

A study of hospital management systems and the means by which such systems may be improved through the application of industrial engineering principles and techniques. The hospital as a managerial environment, characteristics of the management systems utilized in striving toward hospital goals, and the philosophies and approaches involved in improving hospital management systems. Establishing, operating, and evaluating the hospital industrial engineering program. Procedures for conducting formal indoctrination courses for administrators, department heads, supervisors, and other hospital personnel. Approaches and techniques of modern industrial engineering and their applicability to the problems of modern hospital administration.

Text: Smalley and Freeman, Hospital Industrial Engineering.

IE 418 Industrial Engineering in Hospitals

3-0-3 Prerequisite--Senior Standing or consent of instructor.

A study of hospital management systems and the means by which such systems may be improved through the application of industrial engineering principles and techniques. The hospital as a managerial environment, characteristics of the management systems utilized in striving toward hospital goals, and the philosophies and approaches involved in improving hospital management systems. Establishing, operating, and evaluating the hospital industrial engineering program. Procedures for conducting formal indoctrination courses for administrators, department heads, supervisors, and other hospital personnel. Approaches and techniques of modern industrial engineering and their applicability to the problems of modern hospital administration.

Text: Smalley and Freeman, Hospital Industrial Engineering.

GEORGIA INSTITUTE OF TECHNOLOGY
ATLANTA 13, GEORGIA

SCHOOL OF
INDUSTRIAL ENGINEERING

February 13, 1967

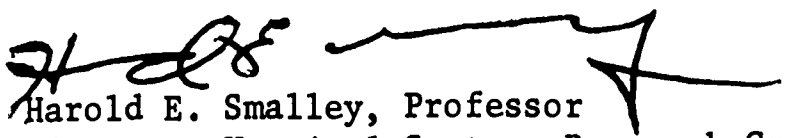
Dr. Irene Butter
Research Associate
Program in Hospital Administration
The University of Michigan
220 East Huron
Ann Arbor, Michigan 48108

Dear Dr. Butter:

In response to your letter of February 1, I am enclosing some descriptive materials on the Hospital Systems Research Group which should suggest the nature of our educational program. Our major emphasis is upon graduate programs at the master's and doctoral levels for industrial engineering students interested in the hospital field. We sometimes involve undergraduate students in our programs, but the major emphasis is upon graduate work. Most of our students include in their programs of study the hospital sequence--IE 418, Industrial Engineering in Hospitals, IE 665, Case Studies in Hospital Management Systems, and IE 765, Projects in Hospital Management Systems. Our students also may undertake special hospital projects in IE 704, 705, and 706 (Special Problems), and are expected to do either the Master's Thesis, IE 700, or the Doctoral Dissertation, IE 800, in the field of hospital management systems. I am enclosing a description of the three-course hospital sequence referred to above. All of the courses cited above are approved for graduate credit, and IE 418 is open also to advanced undergraduate students. Enrollment in IE 418 during the past two years has been about 10 students once per year. The subject matter for IE 418 is Chapters 1-9 of Hospital Industrial Engineering, by Smalley and Freeman, (descriptive brochure enclosed), and that for IE 665 is Chapters 10-26 of the same text. For additional information about our total graduate program, I am sending under separate cover a copy of our Graduate Bulletin.

From time to time, we undertake special educational programs related to health manpower. An example is described in the report and initial evaluation of the "Hospital Management Systems Analyst Training Program" dated August 1966, a copy of which is available through the Cooperative Information Center for Hospital Management Studies there at the University of Michigan (contact Professor John R. Griffith). If you need additional information, please write again.

Sincerely,


Harold E. Smalley, Professor
Director, Hospital Systems Research Group
d

Enclosures

THE UNIVERSITY OF NORTH CAROLINA
AT
CHAPEL HILL

DIVISION OF HEALTH AFFAIRS

SOCIAL RESEARCH SECTION

MILLER HALL

February 13, 1967

Dr. Irene Butter
Research Associate
Bureau of Hospital Administration
The University of Michigan
Ann Arbor, Michigan 48104

Dear Dr. Butter:

Thank you for your request for information on our course The Sociology of Health and the Health Professions, Sociology 265. This course, which is offered as a seminar, has been in operation for the past 15 years. Enrollment varies from 10 to 20 people in any given year. The course carries full credit. Since it is a seminar we have not operated with any enduring course outlines and reading lists but have instead oriented these to the composition of students and their interests in any given year. I will be pleased to provide any further information that I can.

I will refer your letter to the department of Sociology for their reply concerning the course Population Sociology 186.

Sincerely yours,



Harvey L. Smith, Ph.D.
Professor of Sociology
Department of Sociology
Director of Social Research Section

HLS/lc

THE OHIO STATE UNIVERSITY

DEPARTMENT OF SOCIOLOGY AND ANTHROPOLOGY
1775 SOUTH COLLEGE ROAD
COLUMBUS, OHIO 43210

Tel.: 293-6681

February 10, 1967

Dr. Irene Butter
Research Associate
Bureau of Hospital Administration
The University of Michigan
Ann Arbor, Michigan 48104

Dear Dr. Butter:

This is in reply to your letter to me dated February 3 in regard to the Industrial Sociology course. The course is offered three times a year and carries three credit hours. The enrollment for each quarter is approximately 35 to 45 students. I have taught the course for the past eight years and it was taught for some years before I came here. I think the following information will be useful to you.

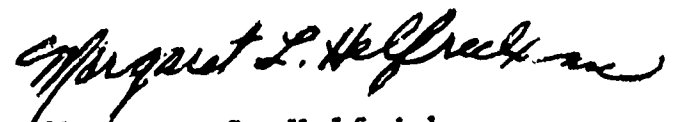
Industrial Sociology is a major area of study here and students can major in the area in either the College of Commerce and Administration or the College of Arts and Sciences. The course content varies somewhat in the two colleges.

In the College of Arts and Sciences students, of course, take more courses in sociology and related social sciences than they do in the College of Commerce. In the College of Commerce the first two years of a student's program are confined to basic business subjects. In his last two years, a student takes courses in Industrial Sociology, Sociological Research Methods, Urban Sociology, Complex Organizations, and Social Psychology, among others.

The course in Industrial Sociology is designed for juniors and seniors. Further, we offer seminars for those at the graduate level. At the present time we have approximately 15 or 20 students enrolled in the Industrial Sociology program.

I hope this information will be helpful to you in compiling your report.

Sincerely,



Margaret L. Helfrich
Associate Professor

MLH:nju

V. OCCUPATION AND PERSONALITY (Week of 7 Nov.)

Blauner (entire book)

Cottrell, S-54

VI. ROLE SETS AND SOCIAL CONTROL (2 weeks following 14 Nov.)

Whyte, S-314; Becker, S-10; Breed, S-34; Reissman, S-230;

Hall, S-110; Freidson, S-87.

Library: Talcott Parsons, The Case of Modern Medical Practice, Ch. X of The Social System (on reserve).

- A. Role Sets
- B. Professional-Client Relations
- C. Professionals in Organizations
- D. Social Control

Thanksgiving, 25 Nov.

Review. 12 week exam 2 Dec.

VII. OCCUPATIONAL COMMUNITIES (Week of 5 Dec.)

- A. Occupational Communities
- B. Occupational Associations

Outline or draft of term paper due 9 Dec. if you wish the instructor's comments before submission of a final draft. (Submission of an outline or a first draft is optional.)

Christmas Vacation 17 Dec- 2 Jan.

VIII. OCCUPATIONS AND SOCIETY (Last 3 lectures)

Term papers due Friday, 6 January.

Final Examination 3:50 p.m. 20 January (Friday)

University of Wisconsin
Sociology 643 - OCCUPATIONS AND PROFESSIONS

Fall 1966

Lecturer: Warren O. Hagstrom
Office hours: 9:55 T, 2:25W, 8123 Social Science

Texts: Theodore Caplow, The Sociology of Work (McGraw-Hill paperback)
Robert Blauner, Alienation and Freedom (Chicago UP)
Bobbs-Merrill reprints: S-10, S-34, S-36, S-54, S-87, S-110, S-111, S-126
S-127, S-219, S-230, S-273, S-279, S-314, S-425.

A major portion of the student's work this semester will involve a research paper on a particular occupation (to be selected by the student in consultation with the instructor.) Between 1/3 and 1/2 of the final grade will be based on this paper. There will also be a 6-week, a 12-week, and a final examination.

The following outline is subject to change with notice; a few additional readings will probably be assigned.

- I. INTRODUCTORY (Week of 12 Sep.)
 - Caplow, ch. 1-4
 - A. Occupations and Social Structure
 - B. Work and the Self

- II. OCCUPATIONAL ROLES AND STATUSES (2 weeks following 19 Sep.)
 - Caplow, ch. 5-8, Appendix
 - Hughes, S-126, Hughes, S-127, Inkeles and Rossi, S-425
 - Library: Hodge, Siegel, and Rossi, "Occupational Prestige..."
AJS(Nov. 1964) 70:286-302.
 - A. Role Analysis vs. Job Description
 - B. Role Differentiation
 - C. Occupational Structure: Status and Situs
 - D. The Labor Market

- III. PROFESSIONS AND PROFESSIONALIZATION (2 weeks following 3 Oct.)
 - Parsons, S-219; Bucher and Strauss, S-36; Stinchcombe, S-279.
 - Library: N. Foote, "The professionalization of labor in Detroit."
AJS (1953) 58:371-380
 - H. Wilensky, "The professionalization of everyone?"
AJS (Sep. 1964) 70:137-158.
 - A. Professions Defined
 - B. The Professionalization Process
 - C. Professional Ideologies

Review. 6 week exam October 19th

- IV. CAREERS (2 weeks following 24 October)
 - Caplow, ch. 9-12
 - Hall, S-111; Smigel, S-273.
 - Library: H.S. Becker and Carper, "The development of identification with an occupation" AJS(1956) 61:289-298.
Becker and Carper, "Elements of identification with an occupation," ASR(1956) 21: 341-348.
 - A. Recruitment
 - B. Mobility: Social and Geographical
 - C. Socialization

F - xi
Sociology 455
Occupations and Professions
M. Jay Crowe

Text: Nosow and Form: Man, Work, and Society

<u>Week of:</u>	<u>Subject</u>	<u>Text Chps.</u>
March 29	The social nature of work and related phenomena such as leisure, play, recreation, retirement, and unemployment	I, II.
April 5	The analysis of occupational structure, changes within it, and causes of these changes	III, IV
April 12		V, VI.
April 19	The institutional complex of occupations	VII
April 26		VIII
May 3		IX
May 10		X, XIII
May 17	The articulation of the occupational structure and individual occupations with other segments of society	XI, XII
May 24		XV
May 31	The study of particular occupations	XIV

Each Friday will be devoted to a seminar type of discussion of the assigned text chapters and lecture materials. The prime responsibility for the discussion is yours!!

Each student will be expected to prepare a term paper dealing with some occupation(s) of his own interest, approved by the instructor. These papers should embody the student's own research efforts and/or the most recent writings related to the subject of the paper.

Graduate students, though not required to do additional work, will be expected to perform in a manner commensurate with their status.

The course grade will be based upon the final examination (given during final exam week and constituting approximately 50% of the course grade) and the term paper and class discussion.



NEW YORK UNIVERSITY

Graduate School of Arts and Science

WASHINGTON SQUARE, NEW YORK, N. Y. 10003

AREA 212 777-2000

Department of Sociology

G93.2401. Sociology of Medicine. 3 points.

The organization of medicine; the sociological and social psychological processes involved in medical education, medical practice, hospitals, and other healing institutions in modern society.

The course was offered in the fall of 1961, '62, and '64 by Professor Eliot Freidson, and the average enrollment was 10.

G93.2411. Industrial Sociology. 3 points.

Social roles and relationships within the industrial system; formal and informal organization; the relation of industrial organization to the community and the larger society.

This course was offered in the fall of 1960, '61, and '62 by Professor Erwin Smigel, and the average enrollment was 10.

G93.2412. Sociology of Occupations. 3 points.

The professions and occupations; range, history, social origins, and social characteristics; influence of sex, education, and minority group membership.

This course was offered in the spring of 1960, '61, '62, '63, '65, and is being given this spring. Dr. Smigel teaches the course and the average enrollment has been 22.

Manpower Research Seminar

Term Paper Topics

Impact of High School Composition and Community Type on Occupational Choice among Workers from Low Income Families

Levels of Aspiration and Job Choice

Factors Affecting Post-High School Choice: Education vs. Work

Factors Affecting the Decision of Women to Enter the Labor Force

The Role of Money as a Motivator

Management Attitude Toward Skill Development of Job Seekers

Why People Move: A Consideration of Studies of Voluntary Migration

The Costs of Moving

The Impact of Technological Change on Job and Occupational Choice

The Effects of Labor Unions on Job Training

The Costs and Benefits of Investment in Job Training

University of Maine
Seminar in Manpower Resources
Course Outline

Introduction

Discussion of the Definition of Underutilization

The Concept of Work

Labor Force Definitions and Measures

- a. Secular Changes in the Occupational and Industrial Composition of the Labor Force: United States and Selected States
- b. Definitions of Unemployment and Underemployment
- c. Changes in Employment and Unemployment Patterns

Patterns of Spatial Migration

- a. Secular Trends in Interstate Movements
- b. Interstate and Intrastate Migration in Maine 1950-1960

Individual Aspiration and Achievements

Organizations, Management and Underutilization

How and Why do people select occupations:

- a. Family and Peer Influences
- b. Secondary School Education
- c. Post High School Education
- d. Other Economic Factors such as Level of Economic Development

How and Why do People Change Occupations

- a. Employment exchanges
- b. Unions
- c. Technological change

Some Suggested Working Hypotheses

February 14

Facilitating the Operation of
the Labor Market
Lester, pp. 108-171

February 16

Manpower Planning and Research
Lester, pp. 172-212

Final Examination

II. Labor Market Imbalances

- January 3 Concept and Measurement of Un-employment
 Wolfbein, pp. 19-30
 Gordon, pp. 327-348
- January 5 Mid-term Exam
- January 10 Patterns of Unemployment
 Wolfbein, pp. 5-18
 Gordon, pp. 191-226
- January 12 Characteristics of the Unemployed
 Wolfbein, pp. 31-67
- January 17 The Costs of Unemployment
 MRP, pp. 49-65

III. Manpower Development Policies

- January 19 Unemployment and Public Policy
 Gordon, pp. 227-262
 MRP, pp. 1-9
- January 24 Underemployment and Public Policy
 MRP, pp. 67-85
- January 26 Programs for Youth
 MRP, pp. 87-118
- January 31 Programs for Farm Workers
 MRP, pp. 119-146

IV. Toward an Active Manpower Policy

- February 2 Manpower Information
 Wolfbein, pp. 121-142
 Lester, pp. 3-44
- February 7 Manpower Development
 Wolfbein, pp. 143-161
- February 9 Improvement of Employment Services
 Wolfbein, pp. 162-197
 Lester, pp. 45-107

Manpower Economics

Economics 441

Winter Quarter, 1966
Mr. JakubauskasTextbooks:

1. Wolfbein, Seymour L., Employment, Unemployment, and Public Policy. (Paperback) Random House, 1965.
2. Lester, Richard A., Manpower Planning in a Free Society. Princeton Univ. Press, 1966.
3. Gordon, Robert A. and Margaret S., Prosperity and Unemployment (Paperback) Wiley Co., 1966.
4. Manpower Report of the President, March 1966
(To be distributed in class)

Class MeetingTopic and Reading AssignmentI. Labor Market Structure and Manpower Utilization

November 29

Introduction; Scope of Course
Gordon, pp. 1-12
Wolfbein, Introduction

December 1

The Determination of the General Level of Employment
Wolfbein, pp. 69-120
Gordon, pp. 15-69

December 6

Current Employment Patterns
Gordon, pp. 137-188
MRP, pp. 9-35

December 8

Future Manpower Requirements
MRP, pp. 37-47

December 13

Wages and the Allocation of Labor
(Review wage theory materials)
Gordon, pp. 265-323

December 15

The Response of Labor Supply to the Demand for Labor
Gordon, pp. 73-134

RECESS

Suggested Research Paper Topics

1. Surgeon General's Report on Smoking
2. Report of Commission on Heart, Stroke and Cancer
3. National Academy of Sciences on Quality of Environment
4. White House Report on Civil Rights
5. Automobile safety legislation
6. Acceleration of efforts to promote birth control
7. Improved labor market-job information
8. Economic effects of manpower-planning--projections
9. University post-high school provision of free education (two years)
10. Expansion of Head Start program to cover all children
11. Effects of new GI Bill
12. Obsolescence of education and training skills
13. Monetary valuation of activities of housewives
14. Malaria eradication
15. Effects of increased longevity
16. Generalized treatment of program budgeting
17. Redistributinal aspects of government programs-expenditures on human investment
18. Redistributinal aspects of government programs-transfer payments
19. Economics of military draft
20. Economics of national service
21. Investment in research-basis and applied in medical area
22. Expenditures on dissemination of research knowledge
23. Adult education and training
24. Guaranteed annual incomes or negative income tax vs. retraining, etc.
25. Safety and accident prevention
26. Promotion of mental health
27. Financing of education, via loans, scholarships, etc.
28. Community social welfare programs
29. Vocational education (high school, college, or professional level)
30. Academic education (any or all levels)
31. Morbidity
32. Discrimination

University of Wisconsin
Department of Economics

Professor Hansen
Fall 1966

COURSE OUTLINE

HUMAN RESOURCE DEVELOPMENT AND ECONOMIC GROWTH (ECONOMICS 550; also Educational Policy Studies 550).

In this course attention is given to theoretical and empirical analysis of public and private investment in people, with emphasis on contributions of education, training, health, mobility, and information to individual and societal productivity. This is a part of the Department's expanded offerings in the economics of health, education, and welfare. The subject matter of the course cuts across a variety of conventional fields in economics, namely economic theory, public finance, labor economics, and economic development.

The major topics to be covered in the course include the following:

- I. The Concept of Investment in People: Historical Development, Methodological Issues, and Some Analogues (e.g., slavery)
- II. Sources of Economic Growth; Sources of Inequality in Income Distribution
- III. The Theory of Investment in Human Capital, and Some Unresolved Issues
 - A. Specification of Benefits and Costs.
 - B. Relating of Benefits and Costs
 - C. An Analytical-Empirical Framework: Social Accounting
- IV. Applications of the Theory
 - A. Investment in Children (Quantity vs Quality Tradeoffs, etc.)
 - B. Investment in Education (Academic vs Vocational, etc.)
 - C. Investment in On-The-Job training (General vs Specific, etc.)
 - D. Investment in Health (New Knowledge vs Diffusion of Existing Knowledge, etc.)
 - E. Investment in Labor Mobility
 - F. Investment in Information
- V. A Summing Up

Students will be required to write a paper on a mutually agreed upon topic.



WAYNE STATE UNIVERSITY

COLLEGE OF LIBERAL ARTS

DETROIT, MICHIGAN 48202

DEPARTMENT OF ECONOMICS

December 29, 1966

Dr. Irene Butter
Research Associate
Bureau of Hospital Administration
Graduate School of Business Administration
The University of Michigan
Ann Arbor, Michigan 48104

Dear Dr. Butter:

Two courses on Human Resources are being taught now at Wayne State University, one by A. G. Holtmann and the other by me. I will inform Professor Holtmann of your interest.

The core of my course will be my book "The Economics of Human Resources" (North Holland Publishing Co., Amsterdam, Holland). In addition, I will use some of the publications of OECD, UNESCO, etc. The enclosed paper on "Health Planning" will be used while discussing health problems.

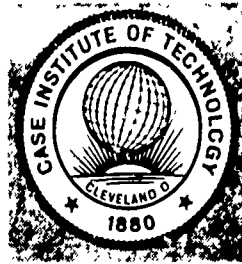
Please keep me informed of your activities. It was a pleasure to see you in San Francisco.

Sincerely,

A handwritten signature in dark ink, appearing to read "Hector Correa".

Hector Correa

HC/iwk
Enc.



UNIVERSITY CIRCLE
CLEVELAND, OHIO 44106
SWeetbriar 5-1000

CASE INSTITUTE OF TECHNOLOGY

Division of Organizational Sciences

February 6, 1967

Dr. Irene Butter
Research Associate
Program in Hospital Administration
School of Public Health
The University of Michigan
220 E. Huron
Ann Arbor, Michigan 48108

Dear Dr. Butter:

Thank you for your letter of February 1, 1967, in which you request information concerning our courses for health service operations researchers.

We are engaged in education and research in this field, involving both faculty and graduate students. In education, we provide our students with introductory and specialized courses in Operations Research, stressing the methods and techniques of Operations Research, with health service applications occurring in the courses where appropriate. We do not offer any single courses in health science applications but rather cite examples of applications in such courses as inventory theory (for use in hospital management) and information processing, stochastic processes, and queuing theory (for use in community health studies). I have enclosed descriptive material on our Graduate Programs in Operations Research.

At the research level, we have performed health service operations research studies in hospital management and the design of prepaid dental plans. In the latter field research is continuing under current NIH sponsorship, and involves a team of faculty (Dr. U. N. Bhat and myself) and graduate students.

Dr. Irene Butter

February 6, 1967

In summary, all of our graduate students in Operations Research, as well as some other Case studies, receive some contact with health service operations research methods and problems during their graduate work at Case. Our current Operations Research graduate level is approximately fifty students. In addition, we teach Operations Research to approximately 75 undergraduate students and there is some exposure to health service applications at this level. In addition, we are usually engaged in one or two operations research studies in this area at all times, involving several faculty and three to five graduate students, where the results are used by organizations and the methodology appears in the published literature or in graduate theses.

I hope that I have been of help to you in your health manpower study.

Sincerely yours,



Burton V. Dean
Professor-in-Charge
Operations Research Group

BVD/pc

Enc: Graduate Programs in Operations Research
Dental Plan Tech. Memoranda

Yale University *New Haven, Connecticut*

Department of Industrial Administration

2 Hillhouse Avenue

February 13, 1967

Dr. Irene Butter, Research Associate
School of Public Health
The University of Michigan
220 E. Huron
Ann Arbor, Michigan 48108

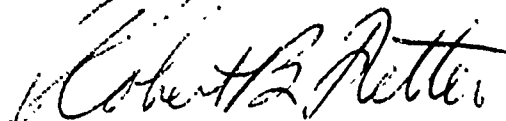
Dear Dr. Butter:

Our program includes an arrangement with the program in Hospital Administration whereby students interested in Operational Analysis may take a sequence in this area in our department. This includes at least the following two courses:

I.A. 110a Mathematics in Administration
I.A. 120b Introduction to Operations Analysis

I teach the latter course and include an outline for this term. Two students from the medical school are currently registered.

Sincerely yours,



Robert B. Fetter
Professor and Director of
Graduate Studies

RBF/ry

THE OHIO STATE UNIVERSITY

DEPARTMENT OF INDUSTRIAL ENGINEERING

SYSTEMS RESEARCH GROUP

156 WEST 19TH AVENUE

COLUMBUS, OHIO 43210

PHONE: 614-293-5061

15 February 1967

Dr. Irene Butter
Research Associate
The University of Michigan
220 East Huron
Ann Arbor, Michigan 48108

Dear Doctor Butter:

At the present we have no courses in Industrial Engineering which deal directly with the health field. Of course, in our Safety Engineering courses and our course in environmental stress and human performance. We must train the students in some depth on physiological and psychophysical functions.

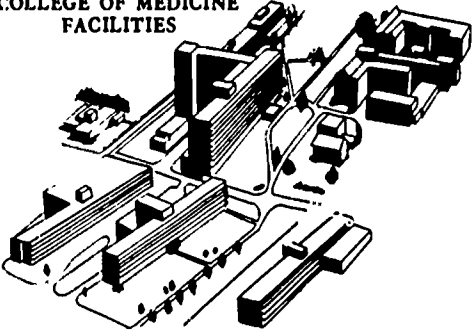
You may wish to contact Dr. Daniel Howland of The Ohio State University School of Business for additional information. He has been actively engaged in research in hospitals for many years.

Very truly yours,



(Miss) Linda Case
Secretary to Dr. Thomas Rockwell

THE
COLLEGE OF MEDICINE
FACILITIES



THE OHIO STATE UNIVERSITY HOSPITALS

DODD HALL
STARLING LOVING HALL
UNIVERSITY HOSPITAL
UPHAM HALL
WISEMAN HALL

410 WEST 10TH AVENUE
COLUMBUS, OHIO 43210

28 April 1967

Dr. Irene Butter
Research Associate
220 East Huron
The University of Michigan
Ann Arbor, Michigan 48108

Dear Dr. Butter:

I teach a three course sequence to prepare students for work in systems research, with emphasis on hospital systems. The first course is a discussion of the planning problem and approaches which have been taken to it. The second covers the concept of adaptive systems and the use of cybernetics to model them. The third course provides an opportunity for students to work with our hospital systems research team. These are three credit hour courses, and students loads have been about 10 or 15. I am currently revising my course outlines and reading list, and would be happy to provide you with copies when the revisions have been completed.

Yours very truly,


Daniel Howland, Ph. D.

DH:pm

