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)
HEALTH MANPOWER RESEARCH

Volume II

FINAL REPORT ON
PUBLIC HEALTH SERVICE CONTRACT

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SECTION SEVEN

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IV. MIGRATION OF HEALTH PERSONNEL


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VII.A. RESEARCH INTO HEALTH MANPOWER CONTINUED


VII. B. Methodology

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VII. B. 2. METHODOLOGY: OPERATIONS RESEARCH CONTINUED


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VII. B. 2. METHODOLOGY: OPERATIONS RESEARCH CONTINUED


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.
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."


II. Investment in Human Capital—Theory and Concepts


III. Education as Investment


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.


IV. On-the-Job Training and Training Programs as Investment


V. Health and Population Control as Investments


3. The Economics of Health and Medical Care, The University of Michigan, 1964.

Part 2: W. Lee Hansen, "'Shortages' and Investment in Health Man-
power," 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.


For economists: medical-care industry considered as a market, comparison with competitive norm.


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


2. George Stigler, "Information in the Labor Market," JPE, 70 (Supple-
ment: October, 1962), pp. 94-105.


VII. Migration and Labor Mobility as Investment


VIII. Education and Other Human Capital and Economic Growth


IX. Educational Planning


49 (66-67)

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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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


Vladimir D. Chavrid, Director, Office of Manpower Analysis and Utilization, U. S. Employment Service, pp. 65-68
Subject: Selected Source Materials in Manpower Resources and Policy


2. Report of the Secretary of Labor on Manpower Research and Training Under the MDTA (annual since 1962).


14. Other Special Manpower Reports as:


JEP/wla
9/27/66
Subject: Selected Readings in National Manpower Policy


Council of Economic Advisers, President's Annual Reports.


Manpower Reports of the President (and the Annual Manpower Report of the Secretary of Labor under MDTA)


Employment Policy and the Labor Market (Arthur M. Ross, ed.)

Gerald G. Somers, "Retraining: An Evaluation of Gains and Costs", Ch. 9, pp. 271-298.


Paul Jacobs, "Unemployment as a Way of Life", Ch. 13, pp. 381-400.

Ch. 5, "Planning on the Demand Side", pp. 108-134.

Ch. 6, "Planning Adjustments in Supply", pp. 135-171.
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
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

Manpower Development and Training Act of 1962
" " " " Amendments of 1963
" " " " " " 1965
" " " " " " 1966
Subject: Future Manpower Requirements


"Projected Changes in Occupational Requirements as They Relate to Selected Subgroups of Workers", Part V, pp. 175-180.
Subject: National Manpower Policy

Collateral Readings

I. The Great Policy Debate: The Aggregate Demand vs. the Structural View

A. The Aggregate Demand Deficiency View


B. The Structural Deficiency View


C. Evaluation and Analysis


Seymour Wolfbein, Employment, Unemployment and Public Policy, pp. 5-18, 31-68.


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.


II. High Level Employment and the Employment Act of 1946


III. Role of Federal Manpower Training Programs


Garth L. Mangum, "The Role of Job Creation Programs," pp. 107-205.


John B. Parrish, "Next Steps in Manpower Policy" (mimeo).

Council of Economic Advisers.


Manpower Reports of the President.


1966: pp. ii-xix
Men Without Work (Stanley Lebergott, ed.)

Sar Levitan, "Training Programs for the Unemployed," pp. 147-152.

IV. Selected Other Readings


Economics 441

References: Unemployment in a Prosperous Economy
A report of the Princeton Manpower Symposium,
May 13-14, 1965. The Industrial Relations

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


**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


C. Human Capital

T. Schultz, "Reflection on Investment in Man," *JPE Supplement,* pp. 1-8,

D. Manpower in Economic Growth


II. Occupational Choice

A. General


B. Entry and Discrimination


III. Labor Force Participation

G. Bancroft, "Labor Force Growth and Job Opportunities," (private copies)

IV. Shortages in Labor Markets

Blank and Stigler, The Demand and Supply of Scientific Personnel, NBER, pp. 19-33.

V. Surpluses in Labor Markets

VI. Mobility and Information in Labor Markets

A. Mobility


B. Information

G. Stigler, "Information in the Labor Market," in JPE Supplement, pp. 94-104.
R. Lester, Manpower Planning, pp. 45-84.

VII. Education and Training

A. General


B. Training and Retraining

VIII. Migration and Investment in Education


IX. Education and Economic Development


X. Manpower and Education Policies

A. General


B. A Related Question - Military Manpower Policy

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<tr>
<td>HB 539 F54</td>
<td>Fisher, Irving</td>
<td>The Theory of Interest.</td>
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<tr>
<td>Call Number</td>
<td>Author</td>
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<td>Economic Value of Education (Columbia 1963)</td>
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<tr>
<td>HB 601 S74</td>
<td>Studenski, Paul</td>
<td>The Income of Nations, Part II (NYU Press, 1958);</td>
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<td></td>
<td>U.S. Dept. of Commerce</td>
<td>Economic Benefits from Public Health</td>
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<td>U.S. Public Health Service</td>
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</table>
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. Redistributional aspects of government programs—expenditures on human investment
18. Redistributional 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 1

General Bibliography Relevant to Research Paper

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).
I. Introductory and Background Material

General


Economic Growth Emphasis


E. F. Denison, The Sources of Economic Growth in the U.S., Chaps. 1-4


Income Distribution Emphasis


II. Investment in Human Capital---Theory and Concepts

Gary S. Becker, *Human Capital*, Chapters I and II.

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

D. Novick, Program Budgeting, Chaps. 1, 2, and 9.
R. McKean, Efficiency in Government Through Systems Analysis, see Parts I, II, & III.
J. Hirshleifer, et. al., Water Supply, Chap. VI.

For several representative studies, see:

B. A. Weisbrod, Economics of Public Health.
IV. Population Quantity and Quality

G. S. Becker, "An Economic Analysis of Fertility," in Universities-NBER Conference, Demographic and Economic Change in Developed Countries.
V. Economics of Health


Luther Terry, Public Health Reports, 1964.


B. Weisbrod, Economics of Public Health.


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

"Information in the Labor Market," JPE Suppl.


VII. Other


Course Description

ECONOMICS 303

MANPOWER AND LABOR PROBLEMS

Prerequisites:

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
Part I. Manpower and Education

1st Week

Lectures:
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:

No Precepts.

2nd Week

Lectures:
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:

or
2nd Week (continued)


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:


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".
Assignment:


Precept Topic:

Selective manpower policies -- choices and impacts.
5th Week

Lectures:

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:


Precept Topic:

Economic forces and their influence on manpower problems.

6th Week

Lectures:

Oct. 25   Issues in National Manpower Policy I

Oct. 27   Issues in National Manpower Policy II
Assignment:


2. Lester, Richard A., Manpower Planning in a Free Society, Chapters 6, 7, and 9, pp. 135-191, 207-212.


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:


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:


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:

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 Week

Lectures:

Nov. 29  Collective bargaining and technological change.

Dec. 1  The impacts of collective bargaining.

Assignment:


Precept Topic:

The impact of collective bargaining on the economy.

12th Week

Lectures:

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:


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:


13th Week (continued)


Precept Topic:

Discussion of special projects.
Human Capital and Education


Human Capital and Externalities


Professional Labor Markets


Professional Labor Markets (Continued)


Poverty


Discrimination


AGH:ah
9/19/66


Cressey, P. G. The Taxi-Dance Hall. Chicago, 1932.


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.


Hollingshead, August B. "Climbing the Academic Ladder," ASR, 1940, 5.


Nimkoff, M. "Opportunities for Prestige in Six Professions," ASR, 8.

Occupational Factors and Marriage.


Essays in Sociological Theory. The Professions and Social Structure, 185-199.


Weinberg, Kirson, and Henry Arnold. "The Occupational Culture of the Boxer," AJS, LVII


A - lv

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

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

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)

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)
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 (8957.638)
Wilson, The Academic Man, Chapters II-III (6574.975)
Wolfe, 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

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

Carr-Saunders and Wilson, The Professions, pp. 394-418. (HT 687.C23)

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 Marketplace (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 (HM51.55)
Moore, Conduct of the Corporation, Chapters 9, 13, 18 (HD 2741.M78)
Wilson, The Academic Man, Chapter IV (6574.975)

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.

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.
Dubin, Human Relations in Administration (2nd. ed.), Ch. 7.
Blau, Ch. 2.
Whyte, Ch. 1.

Text, Ch. II and pp. 407-410.
Borow, Ch. 2.
Whyte, Ch. 2.
Mills, Ch. 10.
Miller and Form, Ch. 16.
Hughes, Ch. 3.

4. Occupational Status and Prestige.

Text, Ch. VIII.
Mills, Ch. 11.
Gross, Ch. 4.

5. Occupational Choices, Aspirations, Socialization.

Text, pp. 297-306.
Caplow, Ch. 9.

6. Occupational Mobility.

Text, Ch. X and pp. 307-317.
Caplow, Chs. 3 and 4.
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.


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.


Text, Ch. XV.
Caplow, Ch. 11.
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


   B. Labor Markets and Normative Systems

   Reader, Chapter 5, pp. 112-117; Nosow; Bell.

   C. The Assessment of the Occupational Structure: Theoretical Issues and Methodological Problems

   Reader, Chapter 4.


Murphy, Raymond and Morris, R. T., "Occupational Situs, Subjective Class Identification, and Political Identification," *ASR*, XXVI (June, 1961).


Recommended:


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.


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.


Reader, Chapter 9, Wilensky.

B. Pre-Occupational Commitments and Occupational Choice


Rosenberg, Morris, Occupations and Values (entire book).


Recommended:

Nye, F. Ivan and Hoffman, Lois W. (eds.), The Employed Mother in America, Part I, "Why They Work," (includes Chapters 1, 2, 3).

C. Similarities and Differences of Socialization into Professional Careers


Thielens, Wagner, "Some Comparisons of Entrants to Medical and Law School," in Merton, *et al., The Student Physician,* pp. 131-152.


Recommended:


Recommended:

Hughes, Everett; Strauss, Anselm; and Becker, Howard, *Boys in White*.


D. Extra-Occupational Activity and Career Success


Reader, Chapter 15, Ross, Dyer, William H. Whyte, Jr.

Recommended:


Kornhauser, William, Scientists in Industry.


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.


Hall, Oswald, "The Stages of a Medical Career," AJS, LIII (March, 1948), pp. 327-336.

Hall, Oswald, "Types of Medical Careers," AJS, LV (1950).


III. The Institutional System, Control of Occupational Behavior, and Social Change

A. Colleagueship and the Occupational Community: Cohesion and Potential Strains


Wilensky and Lebeaux, Chapter 11, section on "Norms Governing Colleague Relations," in their Industrial Society and Social Welfare.


Reader, Chapter 9, Katz.


B. The Occupational and Professional Association: History, Membership, Function, and Relationship to Other Systems

Reader, Chapter 6, Readings 1 through 4, pp. 157-188.


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?"


Reader, Chapter 12, pp. 403-407; 436-440; Chapter 15 (Hughes).
Recommended:


"The Professions," Daedalus, (Fall, 1963), Entire Issue.
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
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, descriptions

Readings:

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
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. Youth

Manpower Report of the President, Chapter 6

8. Farm workers

Manpower Report of the President, Chapter 7

9. Social Security

Social Security Programs in the United States
Social Insurance, Some Problems for Statistical Research

10. 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 3

IV. Technology and the working force

Readings: Jaffe and Stewart, Chapters 14 and 15
Bright, Automation and Management, Chapters 12 and 13
Jaffe, "Education and Automation"
Report of the President on Automation

V. Mobility of the working force

Readings: 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"
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 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., 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.)
### Sociology 328: Sociology of Professions and Other Occupations

**T.-Th. 10:45-12 - Todd 102**

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<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>References</th>
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<tbody>
<tr>
<td>Th.-Sept. 29</td>
<td>Introduction</td>
<td><strong>Lecture</strong></td>
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<tr>
<td>T.-Oct. 4</td>
<td>The Meaning of Work</td>
<td>Mills, Chapter 10</td>
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<tr>
<td>Th.-Oct. 6</td>
<td>Occupational Implications of Scientific and Technological Developments</td>
<td>Michael, Chapter 10 Technology and the American Economy, Chapters 1 and 10</td>
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<tr>
<td>T.-Oct. 11</td>
<td>Occupational Requirements of Work Organizations</td>
<td>Miller &amp; Form, pp.105-111, 144-159.</td>
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<tr>
<td>Th.-Oct. 13</td>
<td>Occupational Status Levels</td>
<td>Mills, Chapter 5</td>
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<td>T.-Oct. 18</td>
<td>Special Assignment</td>
<td>Bendix &amp; Lipset pp. 190-202, 411-425</td>
</tr>
<tr>
<td>Th.-Oct. 20</td>
<td>Labor Force, Employment and Unemployment</td>
<td>Borow, Chapter 7</td>
</tr>
<tr>
<td>T.-Nov. 1</td>
<td>Scientific and Professional Occupations</td>
<td>Henry (ed.) H. S. Becker's article.</td>
</tr>
<tr>
<td>T.-Nov. 3</td>
<td>&quot; &quot; &quot; Examination</td>
<td>Mills, Chapters 6 &amp; 7</td>
</tr>
<tr>
<td>T.-Nov. 8</td>
<td>Education and Occupation</td>
<td>Halsey, et al. Chapters 1, 3, 7, 24</td>
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<td>Th.-Nov. 10</td>
<td>&quot; &quot; &quot; Education and Occupation</td>
<td>Halsey, et al. Chapters 12, 14, 15.</td>
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<td>T.-Nov. 15</td>
<td>&quot; &quot; &quot; Education and Occupation</td>
<td>Nosow &amp; Form Chapter X: 1, 2, 3.</td>
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<td>Th.-Nov. 17</td>
<td>Occupational Mobility</td>
<td>Nosow &amp; Form Chapter X: 4, 5</td>
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<td>T.-Nov. 22</td>
<td>&quot; &quot; &quot; Occupational Mobility</td>
<td>Bendix and Lipset pp. 454-464</td>
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<td>Th.-Nov. 25</td>
<td>Thanksgiving</td>
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<th>Date</th>
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<tr>
<td>T.-Nov. 29</td>
<td>Educational and Occupational Aspirations</td>
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<td>Th.-Dec. 1</td>
<td>Occupational Choice</td>
<td>Nosow &amp; Form</td>
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<td>T.-Dec. 6</td>
<td>Occupational Associations</td>
<td>Chapter VI: 1, 2</td>
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<td>Th.-Dec. 8</td>
<td>&quot;</td>
<td>Nosow &amp; Form, Chap. VI: 3, 4</td>
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<td>T.-Dec. 13</td>
<td>Career Patterns and Strategies</td>
<td>Mills, Chapter 14</td>
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<td>Th.-Dec. 15</td>
<td>&quot;</td>
<td>Glaser monograph pp. 1-136</td>
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<td>T.-Dec. 20</td>
<td>Examination'</td>
<td>Janowitz, Part III; Mills, Chapter 12</td>
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Christmas Vacation begins at noon Wednesday, December 21 and ends noon Wednesday, January 4.

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<tr>
<th>Date</th>
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<tr>
<td>Th.-Jan. 5</td>
<td>Occupations of Women</td>
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<tr>
<td>T.-Jan. 10</td>
<td>Student Reports on Occupational Monographs</td>
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<td>Th.-Jan. 12</td>
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<td>T.-Jan. 17</td>
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<td>Th.-Jan. 19</td>
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<td>T.-Jan. 24</td>
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<td>Th.-Jan. 26</td>
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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)


Basic Reference Books

On 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*.


Reiss, A. J., Jr., *Occupations and Social Status*.

*Technology and the American Economy*, Report of the National Commission of

On 3-day reserve


In General Reference Section, Social Science Library

*Occupational Handbook*, U. S. Department of Labor
<table>
<thead>
<tr>
<th>Assigned Reading</th>
<th>Subject</th>
<th>Text Chapter</th>
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<tbody>
<tr>
<td>Rogers &amp; Sherif</td>
<td>2. Meaning of Work and Common Themes</td>
<td>Ch. 1--The Assignment of Work</td>
</tr>
<tr>
<td>Friedman, Baker</td>
<td>3. Occupational Distribution</td>
<td>Appendix--Description of American Labor Force</td>
</tr>
<tr>
<td>Miller &amp; Form</td>
<td></td>
<td>Ch. 3 &amp; 4--Vertical Mobility &amp; Other Mobilities</td>
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<tr>
<td>Rogoff</td>
<td>4. Occupational Mobility</td>
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<td>Taussig &amp; Joslyn</td>
<td>5. Occupational Organization and Structure</td>
<td>Ch. 5--Occupational Institutions</td>
</tr>
<tr>
<td>Jaffe</td>
<td></td>
<td>Ch. 8--The Labor Union as an Occupational Association</td>
</tr>
<tr>
<td>Warner &amp; Abegglen</td>
<td></td>
<td>Ch. 12--Working Conditions</td>
</tr>
<tr>
<td>Durkheim</td>
<td></td>
<td>Ch. 2--Measurement of Occupational Status</td>
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<td>Oral Report</td>
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<tr>
<td>Miller &amp; Form</td>
<td>7. Work Periods</td>
<td>Ch. 6--Occupational Ideologies</td>
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<tr>
<td>Oral Report</td>
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<td>Ch. 7--Sociology of the Labor Market</td>
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<tr>
<td>Mills</td>
<td>8. Trends in Selected Occupations</td>
<td>Ch. 9--Vocational Choice</td>
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<tr>
<td>Journal Articles</td>
<td></td>
<td>Ch. 10--Occupations of Women</td>
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<td>Ch. 11--Occupations &amp; Family</td>
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</tbody>
</table>

1. Bakke, E. Wight, Citizens Without Work (Browse)
4. Hiller, E. T., Social Relations and Structures (Ch. 22, 30, and 33)
5. Jaffe, A. J., Occupational Mobility in the U.S. 1930-1960 (Browse)
6. Miller, D.C. & W.H. Form, Industrial Sociology (pp. 125-139 and one chapter from 15-20)
7. Mills C. Wright, White Collar (Ch. 10 and 4-9)
8. Rogoff, Natalie, Occupational Mobility (Browse)
10. Warner, W. Lloyd & J.C. Abegglen, Occupational Mobility in American Business and Industry (Browse)

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

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

1. Introduction; Work in Other Times and Places


**Gross, Work and Society, Chapter 1 "The Area of Study" and Chapter 2, "Work in Other Societies: An Approach to Analysis."


2. The "Meaning of Work" and Job Satisfaction


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.


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.


3. Occupational Status or Prestige: Theories and Empirical Findings

A. The Davis-Moore Theory and 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.


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.


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.


Peter H. Rossi and Alex Inkeles, "Multidimensional Ratings of Occupations," Sociometry 20: (September, 1957), pp. 508-513. This is a very unusual theory.


Werner Cohn, "Social Status and Ambivalence," ASR 25:4 (August, 1960), pp. 508-513. This is a very unusual theory.


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.


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?)


4. Occupational Choice and Recruitment

A. Social Stratification, Family, Education, and Occupational Choice and Level of Aspiration


Herbert Hyman, "The Value Systems of Different Classes," in Bendix and Lipset, eds., Class, Status, and Power, pp. 426-442.


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.


"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.


B. Personality and Occupational Choice


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.)


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.)

C. Recruitment From the Standpoint of the Occupation Itself


Socialization Into the Occupation


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


Everett C. Hughes, "Cycles, Turning Points, and Careers," pp. 11-22 in Men and Their Work.


C. Arnold Anderson et. al., "Intelligence and Occupational Mobility," *Journal of Political Economy* 60: (June, 1952), pp. 218-239.


Lipset and Bendix, *Social Mobility in Industrial Society*, Chapter V "The Oakland Mobility Study" and VI "Intra-Generational Mobility."


7. Interpersonal Relations at Work: Problems of Norms and Social Control

A. Relations With Clients or Public


Fred Davis, "The Cabdriver and His Fare: Facets of a Fleeting Relationship," AJ S 65:2 (September, 1959), pp. 158-165. The cabdriver needs to control his clients, but since they are usually strangers this poses problems.


B. Relations With Colleagues, Fellow Workers, or Superiors

Peter M. Blau, "Cooperation and Competition in a Bureaucracy," AJ S 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," AJ S 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.


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.


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.


D. Factors Affecting Ability to Engage in Concerted Action on Broad Scale


8. The Professionalization of an Occupation

A. General on the Professions


Everett C. Hughes, "License and Mandate," in Men and Their Work, pp. 78-87.

B. The Emergence of Professions


9. Relationships Between Occupations and Ideologies and Political Behavior


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.


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."


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"


Additional recommended articles and books:
- 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.
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
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)
Goetz Brieß, The Proletariat (1937)
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)
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<tr>
<th>Call No.</th>
<th>Book</th>
<th>Author</th>
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<tr>
<td>HD/6971/.N58</td>
<td>Man, Work and Society</td>
<td>(ed.) Nosow, Sigmund, and William Form</td>
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<td>HD/8072/.S58</td>
<td>Blue Collar World</td>
<td>Shostak &amp; Gomberg</td>
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<td>HD/21/.K45</td>
<td>*Industrialism and Industrial Man</td>
<td>Gross, Edward</td>
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<tr>
<td>HD/4904/.G74</td>
<td>Work and Society</td>
<td>Caplow, Theodore</td>
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<td>301/C 172</td>
<td>*The Sociology of Work</td>
<td>Moore, Wilbert</td>
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<td>658.12/M786/1951</td>
<td>Industrial Relations and the Social Order (revised)</td>
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<td>301.4/M613/1964</td>
<td>Industrial Sociology (2d.ed)</td>
<td>Miller and Form</td>
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<td>301.4/M613</td>
<td>Industrial Sociology (1st. ed.)</td>
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<td>301.4/Sch57</td>
<td>Industrial Sociology</td>
<td>Schneider, Eugene</td>
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<td>An Introduction to Industrial Sociology</td>
<td>Spalding, Charles</td>
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<tr>
<td>331.88/P336</td>
<td>*The Rank and File Leader</td>
<td>Peck, Sidney</td>
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<tr>
<td>HD/6901/.B57</td>
<td>Alienation and Freedom</td>
<td>Blauner</td>
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<td>HD/5306/.K6</td>
<td>Industrial Conflict</td>
<td>Kornhauser, Dubin, and Ross</td>
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<td>323.3/D139</td>
<td>*Class and Class Conflict in Industrial Society</td>
<td>Dahrendorf, R.</td>
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<td>HD/6476/.G27</td>
<td>Comparative Labor Movements</td>
<td>Galenson, Walter</td>
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<tr>
<td>HD/4901/.M85</td>
<td>Labor Commitment and Social Change in Developing Areas</td>
<td>Moore and Feldman</td>
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<tr>
<td>HX/39.5/.F7</td>
<td>*Marx's Concept of Man</td>
<td>Fromm, Eric</td>
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<td>301.151/P199</td>
<td>*The Alienation of Modern Man</td>
<td>Pappenheim</td>
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<td>H/35/.H68</td>
<td>*The New Sociology</td>
<td>Horowitz, I. L</td>
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<td>658.1/F914 E</td>
<td>*Industrial Society</td>
<td>Friedmann, G.</td>
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<td>301.243/W151</td>
<td>*Modern Technology and Civilization</td>
<td>Walker, Charles</td>
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<td>338.4/M454</td>
<td>*The Human Problems of an Industrial Civilization</td>
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<td>331.88/In86</td>
<td>*Union Democracy</td>
<td>Mayo, Elton</td>
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<td>HT/658/.B4</td>
<td>*Work and Authority in Industry</td>
<td>Lipset, S.</td>
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<tr>
<td>301.243/S054</td>
<td>Adjusting to Technological Change</td>
<td>Somers and Cushman</td>
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<td>*Automation: Implications for the Future</td>
<td>Philipson, Morris</td>
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<td>*Automation and Economic Progress</td>
<td>Bowen and Mangum</td>
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<td>The World of Work</td>
<td>Dubin, Robert</td>
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<td>Handbook of Modern Sociology</td>
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<td></td>
<td>(see chpt. 17, pp. 619-679, &quot;Industrial Relations&quot; by Edward Gross. This book can be obtained from the Social Science Division Desk, 2nd floor, library)</td>
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</table>
Hart

"Industrial Relations Research and Social Theory", Canadian Journal of Economics and Political Science, (Feb., 1949, pp. 53-73.

W. H. Scott


Dunlop and Whyte


Blumer, Herbert


Kleek, Mary Van

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DEPARTMENT OF SOCIOLOGY
NORTHWESTERN UNIVERSITY

C15: Industrial Sociology
R. J. Pokrant

Course Outline
Summer Session, 1965

Abbr.

TEXTS: E. Schneider, *Industrial Sociology* Hardback
W. E. Moore, *Economy & Society* Paper

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 devise 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?
HISTORY OF THE FIELD

2. H. Landsberger, *Hawthorne Revisited*
3. Roethlisberger & Dickson, *Management & The Worker*
5. E. Mayo, *The Human Problems of an Industrial Civilization*

SOCIOLOGY AND THE STUDY OF INDUSTRY


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 Factories System*
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*
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. Witt-Poegel, *Oriental Despotism*
3. G. Sjoeberg, *The Preindustrial City*
INDUSTRIAL ORGANIZATION

1. BUREAUCRACY:
   b. T. Caplow, The Principles of Organization
   d. A. Gouldner, Patterns of Industrial Bureaucracy
   e. P. Blau, Bureaucracy in Modern Society
   f. P. Blau, The Dynamics of Bureaucracy
   g. R. K. Merton, et.al., A Reader in Bureaucracy

2. POLICIES 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:
   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
   j. Walker and Guest, Foreman on the Assembly Line

5. THE MANAGER, OCCUPATIONS AND ORGANIZATIONS;
   a. M. Dalton, Men Who Manage
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


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*


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*
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, 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.


2. Group Norms, Social Control, and Productivity

Cecil French, "Correlates of Success in Retail Selling," AJS 66: 2 (September, 1960), pp. 128-134.


(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.


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.


(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.


4. Worker Satisfaction and Productivity


5. Technological Influences Upon Individual and Group Behavior


(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, "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


(S-59) Kelville Dalton, "Conflict: Between Staff and Line Managerial Officers," in: (a) Littler; (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


(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) Sigmund Nosow 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.)


(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*
8. March, James (Editor), *Handbook of Organizations*
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*

Supplementary Readings:
1. Means, J. H., *Doctors, People and Government*
2. Greenberg, Selig, *The Troubled Calling: Crisis in the Medical Establishment*
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").


12. Parsons, Talcott, Social Structure and Personality, see especially chapters 5, 9, 10, 11, and 12.


14. Murphy, Jane M. and Alexander H. Leighton (Editors), Approaches to Cross-Cultural Psychiatry, Chapters I, II, and VIII.


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

Introduction to Operations Analysis

Spring Term 1966-67

Mr. R.B. Fetters, Room 210 Kirtland


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.

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MATHEMATICS


COMPUTERS AND DATA PROCESSING

REFERENCES

GENERAL


PROBABILITY AND STATISTICS


LINEAR PROGRAMMING


DYNAMIC PROGRAMMING


PRODUCTION SMOOTHING; ITEM INVENTORY CONTROL

John F. Magee, Production Planning and Inventory Control, McGraw-Hill, 1953.
# I.A. 120b Production Administration

## Spring Term 1966-67

### Schedule: 9:00-10:30 T, Th

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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)


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
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.
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.
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

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
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<th>Berk.</th>
<th>UCLA</th>
<th>Mich.</th>
<th>Pitt.</th>
<th>Yale</th>
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<td>1963-64</td>
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<td>1964-65</td>
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Table 6: Present work setting of 1963-64 academic year graduates from master's degree programs in medical care administration, by school

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<td>Governmental agency:</td>
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<td>Voluntary health and welfare agencies</td>
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<td>Academic institutions:</td>
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Table 9: Present type of work of 1963-64 academic year graduates from master's degree programs in medical care administration, by school

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<td>TOTAL</td>
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Table 15: Courses taken by 1964-65 academic year graduates, by frequency of enrollment

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<thead>
<tr>
<th>Course No.</th>
<th>Course</th>
<th>No. of Students</th>
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<td>PH 207</td>
<td>Group Study in Medical Care</td>
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<td>Case Studies of Medical Care Programs</td>
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<td>Public Health</td>
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<td>PH 200B</td>
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<td>PH 162A</td>
<td>Introd. to Public Health Statistics</td>
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Table 15: Courses taken by 1964-65 academic year graduates, by frequency of enrollment

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course</th>
<th>No. of Students</th>
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<td><strong>Medical Care</strong></td>
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<td>PH 202B</td>
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<td>PH 245</td>
<td>Research Methods in Community Health</td>
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### Table 15: Courses taken by 1964-65 academic year graduates, by frequency of enrollment

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<thead>
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<th>Course No.</th>
<th>Course</th>
<th>No. of Students</th>
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<td>HA 209</td>
<td>Prepayment &amp; Hospitals</td>
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<td>MH 201</td>
<td>Personality: Its Development &amp; Functioning</td>
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<tr>
<td>MH 203 III &amp; IV</td>
<td>Mental Disorders: Their Etiology, Prevention, Distribution, &amp; Control</td>
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<td>PH 207</td>
<td>Public Health Aspects of Radiation</td>
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<td>HA 204 III</td>
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Columbia (continued)

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Table 15: Courses taken by 1964-65 academic year graduates, by frequency of enrollment

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<td>Principles of Epidemiology</td>
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<td>Community Mental Health Administration</td>
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<td>Programs in Adult Health &amp; Aging</td>
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<td>Planning &amp; Organization of Community Programs for Handicapped Children</td>
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### Scientific Methodology

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<td>Biostat. 550</td>
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### PITTSBURGH

Table 15: Courses taken by 1964-65 academic year graduates, by frequency of enrollment

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<td>Medical Care--Organization for Service</td>
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<td>Health Organizations &amp; Their Social Environments</td>
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<td>PH 243</td>
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Table 15: Courses taken by 1964-65 academic year graduates, by frequency of enrollment

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<td>EPH 230</td>
<td>Applications of Probability Theory</td>
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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 interdisciplinary 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 [X]

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-metropolitan 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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<td>VII. Facilities</td>
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<td>VIII. The Iowa RCU</td>
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<td>IX. Budget</td>
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<td>Vita - Principal Investigator</td>
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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
(H.E.W. 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

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

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. The proposed project seeks to undertake a similar approach in the determination of health manpower needs.


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.


(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-


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 Study

Research Agencies

- Cooperating Research Agencies

Research Action Coordination

- ISU
- RCU
- MDC

Action Agencies

- Cooperating Health Agencies
- Cooperating Educ. Agencies

Participating Colleges and Universities in Great Plain's States Region (MRU)

Planning Steps:


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.

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. Jakulis
*** James A. Socknat
*** Carl W. Fairman
* John M. Ropes
** Dana Merrell
** Father Cyril F. Engler
* Walter M. Burnett
*** Warren Freiband

Iowa State Manpower Development Council; Iowa State University, Ames
Iowa State Manpower Development Council
Iowa State Manpower Development Council
Iowa State Manpower Development Council
Iowa State Manpower Development Council
Board of Control
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  
** D. O. Vipond  
** Stanley L. Hendricks  
* Bernard Yabroff  
* Windol Wyatt  
* Kenneth M. Wold  
* Charles Churan  
*** Helen Henderson  
** Glenn W. Sterling  
*** Albin T. Benander  
** E. Frances Stoney  
** Lew Wagner  
** John C. Bartlett  
* Robert Herman

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** Department of Health  
** Department of Health  
** Department of Health  
** Office of Educ., Washington, D.C.  
** Department of Public Instruction  
** Department of Public Instruction  
** Commissioner's Office on Alcoholism  
** Iowa Assoc. for Retarded Children  
** Iowa Commission for the Blind  
** Employment Security Commission  
** Board of Nursing  
** Bureau of Business & Economic Research - University of Iowa  
** College of Medicine - Iowa City  
** 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,


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 I

Relationship of Industrial Relation Center's Manpower Unit at Iowa State University and Iowa State Manpower Development Council

<table>
<thead>
<tr>
<th>Development Phase:</th>
<th>Manpower Research</th>
<th>Action-programs</th>
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<tbody>
<tr>
<td>I. Planning and Experimental (6/65-12/66)</td>
<td>Manpower Research Unit at Iowa State University</td>
<td>Iowa State Manpower Development Council</td>
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<tr>
<td></td>
<td>(not funded)</td>
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<tr>
<td>II. Planning for Regional Cooperation</td>
<td>Colleges &amp; universities in region; local, state and federal agencies (Proposed for 7/66 to 6/69)</td>
<td>Regional cooperation Governors offices (or representative state agencies) 1/67 to 6/69</td>
</tr>
<tr>
<td>III. Full Regional coordination</td>
<td>Colleges and universities in region; local, state, and federal agencies (7/69....) (Funding would be from non-Labor Department sources.)</td>
<td>Regional Compact for manpower action-programs (7/69.......) (Funded wholly by state legislature)</td>
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</table>

SERVICE TO: 

I. Planning and Experimental (6/65-12/66) (not funded)

II. Planning for Regional Cooperation

III. Full Regional coordination

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

Research Needs:
Requirements for knowledge of changes in region; trends, projections, identification of problem areas

Translation of research needs to research projects

Regional Research:
Colleges & Universities,
Manpower Agencies

Demand for research

Action-agencies:
Local CAP programs
State agencies
Federal regional offices
Private agencies

Adaptation of research to action

Supply of research studies

Research Uses:
1. Human Resource Planning
2. Regional coordination and planning of manpower programs
3. Identification of future problems
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.
IX. Proposed Budget

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<td><strong>TOTAL PROJECT COST:</strong></td>
<td>$14,894</td>
<td>$4,600</td>
<td>$1,000</td>
</tr>
<tr>
<td></td>
<td>$20,494</td>
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**Budget (cont.)**

**Explanatory Notes**

Line A-1: Principal Investigator - one-quarter of $20,666 annual salary for six months \(\frac{20,666}{12} \times 6 = 2,600\)

Line A-3: Two Research Assistants - salary of $300 per month for six months \(300 \times 6 = 3,600\)

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: \(12\% \times 2,600 = 312\)
- Research Assistants: \(4.5\% \times 3,600 = 162\)

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 \(\times 61.6\% = 3,820\)
One-page Summary Vita -- Principal Investigator

NAME: Edward B. Jakbauskas

Address: 1816 Maxwell Avenue, Ames, Iowa
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.


Experience:

Teaching Assistant, 1952-54, University of Connecticut.
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 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.

INDUSTRIAL RELATIONS CENTER of IOWA STATE UNIVERSITY announces

FACULTY FELLOWSHIPS for a Summer Manpower Research Institute June 12–17, 1965

* Theory relating to manpower research
* Current developments in manpower policies
* Current research needs in manpower
FACULTY FELLOWSHIPS
June 12 - June 17, 1967

ELIGIFICATIONS
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.

ARD 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.

LICATION
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

RPOSE
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.

AFF
The Institute faculty will be made up of nationally-known manpower research personnel.

RRICULUM
- 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.


Davey, Harold W. Professor of Economics, ISU

Eldridge, Eber Professor of Economics, ISU

Faltinson, 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


Williams, J. Earl Professor of Economics and Director, Human Resources Institute, University of Houston, Houston, Tex.

conference on HUMAN RESOURCES DEVELOPMENT

October 13-14 1966

Memorial Union
Iowa State University
Ames, Iowa
HURSDAY, 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
H. Alfred 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  Great Hall
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.
Iowa Business Digest

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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) 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 billion.
tion. 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.

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. Another inventory published by the Office of Economic Opportunity lists over 250 federal programs affecting low-income individuals and communities. 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 coinage 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.

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. As Professor Harbison points out, little thought has been given either to...

*President Johnson's budget message submitted to Congress for fiscal 1967.
 Ibid.
 *Inventory of Federally assisted Manpower Development Programs," mimeographed staff paper, United States Department of Labor, August 24, 1965.

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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 3.1 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 to Iowa 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 discussed, 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
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.
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 liaison 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 counseling 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 affect 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 vari-
ous 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 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
SEMI-ANNUAL REPORT

DEPARTMENT OF LABOR INSTITUTIONAL GRANT

No. 91-35-66-65

December 31, 1966

North Carolina State University

Raleigh, N. C.
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 Development 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

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1Hereinafter called the Labor Workshop.
security, Dr. Kreps is being assisted by Mrs. Stephanie Goldbery, 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
the Journal of Political Economy. 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:


(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, 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.


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. 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

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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., 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.

\[\text{\footnotesize\textsuperscript{1}}\text{Dr. C. E. Bishop recently resigned as Department Head in order to become Executive Director of the President's Commission on Rural Poverty and subsequently to become Vice-President of the Consolidated Universities of North Carolina.}\]
## APPENDIX A

Schedule of the Research Workshop in
Labor Economics and Human Resource Development

<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker</th>
<th>Topic</th>
<th>Time and Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept. 27</td>
<td>Dr. Joseph Matthews, Jr. N.C.S.U.</td>
<td>Occupational Adjustments in the South, 1940-60</td>
<td>124 Harrelso 3:00-5:00 p.</td>
</tr>
<tr>
<td>Nov. 8</td>
<td>Discussions with graduate students on dissertation and thesis topics and problems.</td>
<td></td>
<td>124 Harrelso 3:30-5:00 p.</td>
</tr>
<tr>
<td>Jan. 10</td>
<td>Dr. C. Green, N.C.S.U.</td>
<td>Negative Income Taxes and Incentives</td>
<td>124 Harrelso 3:30-5:00 p.</td>
</tr>
<tr>
<td>Feb. 12</td>
<td>Discussions with graduate students on dissertation and thesis topics and problems.</td>
<td></td>
<td>124 Harrelso 3:30-5:00 p.</td>
</tr>
<tr>
<td>Feb. 23</td>
<td>Dr. Eli Ginzaberg, Columbia University</td>
<td>Manpower Policies</td>
<td>208 Patterson 3:00-5:00 p.</td>
</tr>
<tr>
<td>March 17</td>
<td>Dr. W. Lee Hansen, University of Wisconsin</td>
<td>Occupational Choice and Investments in Education and Training</td>
<td>124 Harrelso 1:30-3:30 p.</td>
</tr>
<tr>
<td>April 11</td>
<td>Dr. Belton Fleisher, Ohio State University (Tentative)</td>
<td>Labor Force Participation of Mature and Older Males</td>
<td>124 Harrelso 3:30-5:00 p.</td>
</tr>
<tr>
<td>May 9</td>
<td>To be announced.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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
Graduate Students at N.C.S.U.

James D. Bates  
(also of the Research Triangle Institute)  
Peter Coker**  
Gideon Fishelson  
Theordore 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.
Areas of Study

The Department of Economics offers work leading to both M.A. and Ph.D. degrees in the following fields:

- Economic Theory
- Economic History
- Quantitative Economics
- Economic Planning and Development
- International Economics
- Labor Economics
- 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
ANNOUNCEMENT

Ph.D. Program in the Economics of MANPOWER

under the U. S. Department of Labor Manpower Research Institutional Grant

RESEARCH PROGRAMS

Regional and Urban Manpower Development and Projections Models

Technological Change, Human Resources, and Manpower Requirements

Unemployment

Mobility

Welfare and Social Security

Labor Relations

COURSES

Economic Theory

Economic Development

Econometrics

Urban Economics

Labor Market Theory

Economics Seminar

Seminar in Future Manpower Requirements

Economics Seminar in Income, Earnings and Public Policy

Collective Bargaining

Occupations and Professions

Leadership and Organizational Behavior

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
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:
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 mobility 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.
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
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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


"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).
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 Education), 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


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


William W. Rambo, Associate Professor of Psychology

Academic Training

Ph.D Degree, Purdue University, Lafayette, Indiana, 1957, Major - Psychology, Minor - Statistics.

Experience

Associate Professor, Oklahoma State University, Stillwater, Oklahoma, 1960-present.
Assistant Professor, Oklahoma State University, Stillwater, Oklahoma, 1956-1960.
Graduate Instructor, Purdue University, Lafayette, Indiana, 1954-1956.

Selected Publications


"The effects of order of presentation of stimuli upon absolute judgments," Psychological Reports, 1961, 8, 219-224.
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.

Selected Publications


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
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
Professor and Director, School of Industrial Education, Oklahoma State University, 1960 to Present

Selected Publications


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.

Selected Publications


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


**Solomon Sutker, Professor of Sociology**

**Academic Training**

A.B. cum laude, (Political Science) Emory University, 1947.
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**


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.


**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


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.


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


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.
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 inter-
disciplinary 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 train-
ing 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 esta-
blished 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 Posen, 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 workforce 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.
ALLEN, Roger B.

Hometown: Dallas, Texas  
Date of Birth: March 23, 1945  
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  
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  
Date of Birth: June 23, 1933  
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  
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  
Date of Birth: August 6, 1943  
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  
Grade Average: 2.46

Current Class Schedule:  
  - Advanced Soc. Principles  
  - Stat. Methods I  
  - Occupational Analysis  
  - Seminar in Manpower Analysis
UPREE, Robert L. (First semester on fellowship)

Hometown: Tulsa, Oklahoma
Date of Birth: July 14, 1940
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

Current Class Schedule:
- Stat. Methods I
- Theory of Econ. Equilibrium
- Research and Thesis
- Occupational Analysis
- Seminar in Manpower Analysis

Grade Average: 3.50

GAMBRELL, Melvin B.

Hometown: Palestine, Texas
Date of Birth: October 17, 1943
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

Current Class Schedule:
- Stat. Methods II
- Elem. Physiological Psych.
- Occupational Analysis
- Seminar in Manpower Analysis

Grade Average: 3.27
HARDT, Howard P.

- Hometown: Stigler, Oklahoma
- Date of Birth: October 25, 1941
- 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: 3.15

- 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
- Date of Birth: June 17, 1943
- 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: A

- Grade Average: 3.27

- Current Class Schedule:
  - Theory of Econ. Equilibrium
  - Stat. Methods II
  - Occupational Analysis
  - Seminar in Manpower Analysis

SAMANIE, Donald P.

- Hometown: Fort Worth, Texas
- Date of Birth: March 11, 1944
- 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: 3.73

- Current Class Schedule:
  - Elem. Physiological Psych.
  - Stat. Methods II
  - Occupational Analysis
  - Seminar in Manpower Analysis
ELEY, David R.

Hometown: Kingfisher, Oklahoma  
Date of Birth: February 7, 1944  
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: 4.00

Current Class Schedule:
- Theory of Econ. Equilibrium
- Stat. Methods II
- Occupational Analysis
- Seminar in Manpower Analysis

STIMPSON, Elizabeth J.

Hometown: Tulsa, Oklahoma  
Date of Birth: October 29, 1944  
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: 4.00

Current Class Schedule:
- Sample Survey Designs
- Soc. Theory I
- Occupational Analysis
- Seminar in Manpower Analysis

SPRINGFIELD, William L.

Hometown: Huntsville, Texas  
Date of Birth: November 21, 1942  
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: 3.27

Current Class Schedule:
- Stat. Methods II
- Soc. Theory I
- Occupational Analysis
- Seminar in Manpower Analysis
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.


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
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
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 ongoing 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.
FURTHER INFORMATION —

For further information, write individual members of the participating faculty or —

DR. ROBERT H. HAMLIN*
Harvard School of Public Health
15 Shattuck Street
Boston, Massachusetts 02115

Signed in October, 1965

Director Head:

Dr. Alonzo S. Yerby
Harvard School of Public Health
15 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 PENCHANJSKY, 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, Depart-
ment 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.
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 W. Monama, Jr.
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
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.


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.


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.


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,

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,

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.


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,

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
AGENDA

First Day - April 24, 1967

9:00 - 9:15 a.m. Introductory Remarks
Dr. Jacob J. Kaufman
Professor of Economics, and
Director, Institute for Research
on Human Resources

9:15 - 9:45 a.m. "Next Steps in Meeting
Health Manpower Needs"
Dr. Madison Brown
Associate Director
American Hospital Association

10:00 - 12:00 noon Workshop Discussion on
"Recruiting and Training
of Health Service Manpower"

Discussion Leader
Miss Eleanor McGuire
National Health Council

1. Stimulating understanding and support of health
careers and employment potential in the community

   a. What should be the role of counseling and
guidance in schools, employment offices,
other agencies in the community?

   b. What should be the role of health service
agencies in the community? What techniques
and methods should be employed to create
awareness?

2. How can former experienced health service workers, who
have withdrawn from the work force or transferred to
other employment, be reached?

3. What should be the contributions of the community
colleges and the vocational technical institutes
to training in health service occupations? Are
there differences in occupational training and in
persons undergoing training at these facilities?

4. How can training in entry occupations and in lower
level skill occupations under MDTA be made more effec-
tive? What is the role of work site and on-the-job
training - careers for nonprofessionals?

5. How can the outreach activities of the Human Resources
Development Program contribute to the expansion of the
supply of health service workers?
First Day (Continued)

2:00 - 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
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

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Dr. George T. Harrell, Jr.
Dean
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12:15 - 12:45 p.m. Concluding Remarks - Dr. Jacob J. Kaufman Adjournment
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.
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.
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
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
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
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

February 9, 1967
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
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
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  
envelope


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 classroom 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

Enclosures
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**

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<th>Week No.</th>
<th>Introduction</th>
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<td>Review of IE 418</td>
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<td>Overview of IE 665</td>
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<td>Chap. 11-12</td>
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<td>Chap. 18-21</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Week No.</th>
<th>Facilities design, layout, and costing techniques</th>
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<tbody>
<tr>
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<td>Chap. 22-23</td>
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<table>
<thead>
<tr>
<th>Week No.</th>
<th>Linear programming and other optimization techniques, resource allocation, and project management</th>
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<tbody>
<tr>
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<td>Chap. 24</td>
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<thead>
<tr>
<th>Week No.</th>
<th>Computer technology</th>
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<tbody>
<tr>
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<td>Chap. 25</td>
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<table>
<thead>
<tr>
<th>Week No.</th>
<th>Decision theory</th>
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<tbody>
<tr>
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<td>Chap. 26</td>
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<table>
<thead>
<tr>
<th>Week No.</th>
<th>Review</th>
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</table>
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

<table>
<thead>
<tr>
<th>Week No.</th>
<th>Text Reference</th>
</tr>
</thead>
</table>
| 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 |
<table>
<thead>
<tr>
<th>Session</th>
<th>Topic</th>
<th>*Assignment</th>
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<tbody>
<tr>
<td>1</td>
<td>Introduction - Discussion of the course objectives.</td>
<td>None</td>
</tr>
<tr>
<td>2</td>
<td>The need for improvement Areas for improvement</td>
<td>Ch. 1</td>
</tr>
<tr>
<td>3</td>
<td>Means of improvement The philosophy of industrial engineering in the hospital</td>
<td>Ch. 1</td>
</tr>
<tr>
<td>4</td>
<td>The role of traditions</td>
<td>Ch. 2</td>
</tr>
<tr>
<td>5</td>
<td>The role of traditions</td>
<td>Ch. 2</td>
</tr>
<tr>
<td>6</td>
<td>The matter of uniqueness</td>
<td>Ch. 3</td>
</tr>
<tr>
<td>7</td>
<td>The matter of uniqueness</td>
<td>Ch. 3</td>
</tr>
<tr>
<td>8</td>
<td>The methods improvement movement</td>
<td>Ch. 4</td>
</tr>
<tr>
<td>9</td>
<td>Indoctrination and implementation. (Deadline for selection of topic for investigation)</td>
<td>Ch. 5</td>
</tr>
<tr>
<td>10</td>
<td>Indoctrination and implementation</td>
<td>Ch. 5</td>
</tr>
<tr>
<td>11</td>
<td>Quiz No. 1</td>
<td>All previous</td>
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<tr>
<td>12</td>
<td>Establishing the professional program</td>
<td>Ch. 6</td>
</tr>
<tr>
<td>13</td>
<td>Service activities</td>
<td>Ch. 7</td>
</tr>
<tr>
<td>14</td>
<td>Service activities</td>
<td>Ch. 7</td>
</tr>
<tr>
<td>15</td>
<td>Educational activities</td>
<td>Ch. 8</td>
</tr>
<tr>
<td>16</td>
<td>Research activities, Management problems, and IE studies (Deadline for rough draft of report of investigations)</td>
<td>Ch. 9,10</td>
</tr>
<tr>
<td>17</td>
<td>Quiz No. 2</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Begin presentations of results of investigations</td>
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*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.
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

Enclosures
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/1c
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
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)
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) 70:296-302.
   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.
    A. Recruitment
    B. Mobility: Social and Geographical
    C. Socialization
Sociology 455
Occupations and Professions
M. Jay Crowe

Text: Nosow and Form: Man, Work, and Society

Week of: Subject Text Chs.
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
April 26
May 3
May 10
May 17
May 24
May 31
The institutional complex of occupations VIII
The articulation of the occupational structure and individual occupations with other segments of society IX, XIII XI, XII XV
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.
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
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

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Source(s)</th>
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<tbody>
<tr>
<td>January 3</td>
<td>Concept and Measurement of Unemployment</td>
<td>Wolfbein, pp. 19-30; Gordon, pp. 327-348</td>
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<tr>
<td>January 5</td>
<td>Mid-term Exam</td>
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<tr>
<td>January 10</td>
<td>Patterns of Unemployment</td>
<td>Wolfbein, pp. 5-18; Gordon, pp. 191-226</td>
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<tr>
<td>January 12</td>
<td>Characteristics of the Unemployed</td>
<td>Wolfbein, pp. 31-67</td>
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<td>January 17</td>
<td>The Costs of Unemployment</td>
<td>MRP, pp. 49-65</td>
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## III. Manpower Development Policies

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<tr>
<td>January 19</td>
<td>Unemployment and Public Policy</td>
<td>Gordon, pp. 227-262; MRP, pp. 1-9</td>
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<tr>
<td>January 24</td>
<td>Underemployment and Public Policy</td>
<td>MRP, pp. 61-85</td>
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<td>January 26</td>
<td>Programs for Youth</td>
<td>MRP, pp. 87-118</td>
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<tr>
<td>January 31</td>
<td>Programs for Farm Workers</td>
<td>MRP, pp. 119-146</td>
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## IV. Toward an Active Manpower Policy

<table>
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<th>Date</th>
<th>Topic</th>
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<tr>
<td>February 2</td>
<td>Manpower Information</td>
<td>Wolfbein, pp. 121-142; Lester, pp. 3-44</td>
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<td>February 7</td>
<td>Manpower Development</td>
<td>Wolfbein, pp. 143-161</td>
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<tr>
<td>February 9</td>
<td>Improvement of Employment Services</td>
<td>Wolfbein, pp. 162-197; Lester, pp. 45-107</td>
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Manpower Economics

Economics 441

Winter Quarter, 1966

Mr. Jakubauskas

Textbooks:


   (To be distributed in class)

Class Meeting

I. 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
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.
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,

Hector Correa

HC/iwk
Enc.
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.
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
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
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,

(L)inda Case  
(Miss) Linda Case  
Secretary to Dr. Thomas Rockwell
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