SEPTEMBER 1968

MATHEMATICS PUBLIC ADMINISTRATION PSYCHOLOGY DATA PROCESSING BUSINESS ADMINISTRATION HISTORY ECONOMICS ENGLISH MANAGEMENT ACCOUNTING

OTR BULLETIN

AUGUST - SEPTEMBER 1968

SECRET
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SECRET

OFFICE OF TRAINING

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                    DIRECTOR OF TRAINING
                 DEPUTY DIRECTOR OF TRAINING


   PLANS AND MANAGEMENT              REGISTRAR STAFF    CAREER TRAINING
                                                        PROGRAM STAFF

 PLANS AND
 POLICY STAFF        SUPPORT


INTERNATIONAL      OPERATIONS        SUPPORT    INTELLIGENCE    LANGUAGE
COMMUNISM          SCHOOL            SCHOOL     SCHOOL          SCHOOL
SCHOOL
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SECRET

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OTR BULLETIN

Purpose

The purpose of the Office of Training Bulletin is:

(a) To provide Training Officers, Supervisors, Managerial personnel and others with information on training opportunities within and outside the Agency.

(b) To publish special articles dealing with education and training policy, philosophy, methods and techniques, and with training-related subjects of particular interest.

(c) To provide specific procedural and organizational information for Training Officers and Assistants.

(d) To promote interest in education and training as an aid in achieving Agency goals.

Recommendations for improving this service may be directed in writing to the Registrar, OTR, 1000 North Glebe Road, or by

25X1   telephone [   ]

IN THIS ISSUE:

Course descriptions and registration
data on the CIA Off-Campus Program
are shown beginning on page 12.

See when to register for fall classes
at local universities, page 17.

Those seeking assistance in financing
a college education will find some
hints on page 9.

The Management Training Faculty
discusses Current Trends in
Management, page 20.

An analysis of the Civil Service Commission
Training Statistics FY 67 shows that
CIA is among the leaders in training
accomplishments. Page 37.

An article on Learning and the Computer
describes some advances in CAI, page 26.

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BULLETIN BOARD

DESCRIPTIONS OF OTR COURSES	Starting with this issue of the <u>OTR Bulletin</u>, the Office of Training plans to discontinue publishing the OTR Course descriptions in each issue. Instead, these descriptions will be carried periodically only. For the latest information on the OTR Courses, please refer to the June-July 1968 issue of the <u>OTR Bulletin</u>.
NON-AGENCY TRAINING	An expanded explanation of application procedures for Non-Agency Training can be found in the June-July 1968 issue of the <u>OTR Bulletin</u>.
PAI FILM	The Office of Training has recently purchased a film, "Programming is a Process: An Introduction to Instructional Technology, " by Susan M. Markle and Philip W. Tiemann of the University of Illinois at Chicago. The 32-minute film introduces viewers to the basic process of instructional technology -- programming an instructional sequence for maximum student learning. It is available now for viewing by anyone interested in the subject of programmed instruction and educational technology. To schedule a time to use or to see the film, please call the Registrar Staff, [ ]
LANGUAGE TRAINING	Detailed explanations of the procedures for preparing requests for internal language training were published in both the March-April and June-July 1968 issues of the <u>OTR Bulletin</u>. Component Training Officers have copies of those Bulletins and can offer assistance in preparing the necessary forms.

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CLERICAL
TRAINING
AND
TESTING

COURSES

OTR's refresher courses in typewriting and shorthand
will be given:

 9 September - 4 October
 14 October - 8 November
 18 November - 13 December

Before taking either course, or both, an employee is
required to take a preliminary test or tests given by
the Clerical Training Faculty (CTF). The results
are used to determine the level of the course the
employee should take. These tests are given on
Wednesday, typewriting at 9:30 a.m. and shorthand
at 10:30 a.m. Dates for the preliminary tests in the
above courses are:

 4 September
 9 October
 13 November

Submission of a Form 73 to AIB/RS for refresher training
is all that is required to initiate testing. Training Officers
are notified directly by CTF as to time and place to report.

QUALIFICATION TESTS

The CTF gives the Agency's tests in typewriting and
shorthand to employees who want to qualify as typists and
stenographers. Training Officers or Personnel Officers
must arrange registration directly with CTF, [   ]
before 5 p.m. the Thursday immediately preceding the
desired Monday testing. Qualification tests in both type-
writing and shorthand are given on the same morning,
typewriting at 9 a.m. and shorthand at 10:30 a.m. CTF
notifies Training Officers or Personnel Officers of the
results of the tests.

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Tests will be given on: 12 August, 3 September,
        16 September, 7 October,
        21 October, 12 November,
        2 December, 16 December

Applicants report to Room 416, Ames Building.

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LANGUAGE PROFICIENCY TESTING

Language proficiency tests are conducted by the OTR Language School to maintain a current inventory of the Agency's language capabilities. The following schedule is for the use of employees who have an untested claim still on the record, and for those whose previously tested proficiency is over three years old, in accordance with the Agency's Language Policy

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Training Officers should arrange tests for employees by contacting the Language School,

Tests at Headquarters may be scheduled on the following dates:

French: August   6, 9, 13, 16, 20, 23, 27, 30
            September 6, 10, 13, 17, 20, 24, 27

German: August   7, 9, 14, 16
            September 4, 6, 11, 13, 18, 20, 25, 27

Spanish: August   6, 13, 20, 27
            September 10, 17, 24

Spanish tests are offered on a space-available basis at Arlington Towers on the following dates:

            August   8, 15, 22, 29
            September 5, 12, 19, 26

Tests in all other languages are by arrangement.

OTR CALENDAR

AUGUST

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Administrative Procedures	5 - 9 Aug
	26 - 30 Aug
Challenge of Worldwide Communism	12 - 30 Aug
Intelligence Techniques	12 - 30 Aug

25X1A

Supervision	5 - 9 Aug
Vietnam Area	5 - 9 Aug

25X1C

Vietnam Station Orientation	13 - 15 Aug

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SEPTEMBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Administrative Procedures	16 - 20 Sept
Advanced Management (Planning)	22 - 27 Sept
China Familiarization	9 - 13 Sept
25X1 [ ]	16 - 20 Sept
Clerical Refresher	9 Sept - 4 Oct
Counterintelligence Operations	3 - 13 Sept
25X1 [ ]	29 Sept - 2 Oct
	30 Sept - 11 Oct
CS Desk Orientation (for CTs)	3 Sept
CS Records I (for CTs)	4 Sept
CS Records II (for CTs)	5 - 12 Sept
Effective Speaking (For NPIC)	4 Sept - 6 Nov
Field Finance and Logistics	9 - 27 Sept
Geography of Communist China	16 Sept - 4 Oct
Information Reporting, Reports & Requirements	9 - 27 Sept
Introduction to Intelligence	3 - 13 Sept
	30 Sept - 11 Oct
Management	9 - 13 Sept
Managerial Grid	15 - 20 Sept
Operations, Phase II	3 Sept - 1 Nov
Operations Familiarization	3 - 27 Sept
Operations Support	30 Sept - 18 Oct
Orientation for Overseas	3 - 4 Sept
Soviet Bloc Operations	16 - 27 Sept
Support Services Review: Trends & Highlights	10 - 13 Sept
Vietnam Area	9 - 13 Sept
25X1C [ ]	
Vietnam Station Orientation	17 - 19 Sept
Writing Workshop (Basic)	3 - 26 Sept
Writing Workshop (Intermediate)	4 - 25 Sept
Introduction to Communism	16 - 27 Sept

OCTOBER

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Administrative Procedures	7 - 11 Oct, 28 Oct - 1 Nov
ADP Orientation	1 - 3 Oct
Basic Country Survey: USSR	28 Oct - 8 Nov
Chiefs of Station Seminar	7 - 18 Oct
China Familiarization	28 Oct - 1 Nov
Clerical Refresher	14 Oct - 8 Nov
Counterintelligence Familiarization	7 - 16 Oct
CS Records I	21 - 25 Oct
CS Records II	28 Oct - 1 Nov
Information Reports Familiarization	7 - 11 Oct, 21 - 25 Oct
Intelligence Briefing	8 - 31 Oct
Intelligence Production	7 Oct - 6 Dec
Introduction to Communism	14 - 25 Oct
Introduction to Map Reading & Imagery Analysis	28 Oct - 15 Nov
Midcareer Executive Development	13 Oct - 22 Nov
Operations, Phase I	7 Oct - 17 Jan 69
Orientation for Overseas	1 - 2 Oct

25X1C

Senior Management Seminar (Planning)	20 - 25 Oct
Supervision	28 Oct - 1 Nov
Support Services (for CTs)	7 Oct - 15 Nov
Support Services Review: Trends & Highlights	15 - 18 Oct
Systems Development Process (Brandon)	15 - 17 Oct
Vietnam Area	14 - 18 Oct

25X1C

Vietnam Station Orientation	22 - 24 Oct
Writing Workshop (Basic) (for NPIC)	7 - 25 Oct

NOVEMBER

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Administrative Procedures	25 - 29 Nov
ADP Orientation	12 - 14 Nov
Challenge of Worldwide Communism	18 Nov - 6 Dec
Clerical Refresher	18 Nov - 13 Dec
Counterintelligence Operations	25 Nov - 6 Dec
CS Desk Orientation (for CTs)	18 Nov
CS Records I (for CTs)	19 Nov
CS Records II (for CTs)	20 - 27 Nov
CS Records III	4 - 5 Nov
CS Review	4 - 15 Nov
Field Finance and Logistics	18 Nov - 6 Dec
Information Reporting, Reports, & Requirements	4 - 22 Nov
Intelligence Techniques	18 Nov - 6 Dec
Introduction to Intelligence	18 - 29 Nov
Managerial Grid	17 - 22 Nov

25X1A

Orientation to Intelligence (for CTs)	4 - 15 Nov
Orientation for Overseas	5 - 6 Nov
	26 - 27 Nov
Soviet Bloc Operations	12 - 22 Nov
Conference Techniques (For NPIC)	13 Nov - 5 Feb 69

DECEMBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Administrative Procedures	16 - 20 Dec
ADP Orientation	17 - 19 Dec
Advanced Management (Planning)	8 - 13 Dec
Challenge of Worldwide Communism	9 Dec - 3 Jan 69
Counterintelligence Familiarization	9 - 18 Dec

25X1A

CS Records I	2 - 6 Dec
CS Records II	9 - 13 Dec
CS Records III	16 - 17 Dec
Information Reports Familiarization	2 - 6 Dec
	9 - 13 Dec
Intelligence Review	2 - 13 Dec
Intelligence Techniques	9 Dec - 3 Jan 69
Management	2 - 6 Dec
Operations Support	2 - 20 Dec
Support Services Review: Trends & Highlights	3 - 6 Dec
Systems Development Process (Brandon)	10 - 12 Dec
Vietnam Area	2 - 6 Dec

25X1A

Vietnam Station Orientation	10 - 12 Dec

COLLEGE EDUCATION FINANCING

Financing a college education is a burden. Even for those in the middle income (or upper-middle income) category this load can appear overwhelming. With family planning, cooperation, and research the problem can be managed. In this article the Office of Training presents some guides to help parents of college bound children assess their financial situation realistically and suggests various sources of financial assistance, indicating procedures for seeking this aid.

SOURCES OF FUNDS

In general the parents are still the principal source of funds for higher education. Colleges anticipate that, on the average, families will use savings and portions of current income to meet about half of the annual expenses.

The student is expected to contribute about one quarter of the college costs from savings and earnings. His willingness to assume some responsibility to pay part of these expenses is given favorable consideration if he is applying for a scholarship or other type of aid.

SCHOLARSHIPS AND AWARDS

To meet the rapidly rising costs of higher education, students and parents in many cases find it imperative to seek financial assistance from outside sources. One such possibility is a scholarship, or grant, by the college to the student based on scholastic achievement and need as shown on, or in conjunction with, the application for admission to the college. Another possibility is a part-time job created and funded by the college.

LOANS AND WORK-STUDY PROGRAMS

In addition to dispensing scholarships and campus jobs, many colleges participate in two federally-supported financial aid programs:

the National Defense Student Loan Program and the Work-Study
Program. Although the U.S. Government provides or guarantees
the bulk of the funds, the college has the responsibility of administer-
ing the programs and choosing the recipients.

To assist them in making their choices and determining the
amount and type of financial assistance, many colleges subscribe
to the College Scholarship Service (CSS) which analyzes the Parents
Confidential Statement and estimates the amount the family can
contribute toward annual college expenses. It is recommended
that parents obtain a Parents Confidential Statement from their
child's high school soon after the start of the Senior year and submit
the completed form to CSS by the date specified in the instructions.

LENDING INSTITUTIONS

Even in those cases where a student has been granted some
financial assistance and, particularly where none has been granted,
other money is frequently needed. Lending institutions have
established education loan funds with various conditions of eligibility,
rates of interest, and repayment terms. One of the more attractive
funds is the Federally supported Guaranteed Loan Program with its
very favorable interest rate and extended repayment features.
However, since participating banks are limited, and usually reserve
these funds for their own depositors, parents are urged to initially
inquire of their own banks for this kind of loan. Some banks,
although not participants in the Guaranteed Loan Program, have
conventional education loans with low interest rates and long-term
repayment plans.

AGENCY SOURCES

Borrowing from the Credit Union offers certain advantages. The
Northwest Federal Credit Union recently liberalized the terms for
educational loans to members.

The Educational Aid Fund (EAF) awards scholarships to
dependents of present employees and former employees. The EAF
scholarships are granted on the basis of financial need and academic
achievement. The numbers and amounts of the grants depend on the
funds available. Application is made directly to the EAF early in
the calendar year. Further information can be obtained from the
Office of the Executive Secretary, EAF, [   ]

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The Clandestine Services offers a limited number of full
and part tuition scholarships to the Massachusetts Institute of
Technology. Preference is given to dependents of Clandestine
Services career personnel. Details on the conditions attendant
to qualifying for this scholarship can be obtained from the Office
of the Chief, Technical Services Division,

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MISCELLANEOUS

Alumni groups, church groups, corporation or business
establishments, local PTA's Veterans' organizations, labor unions,
or service clubs often have money for scholarships or to lend at,
usually, low interest rates. Some family affiliation or identification
with the group is normally required.

Many states and local governments have limited scholarship
and loan programs. Information on these sources can be obtained
from the Guidance Office of the child's high school.

We present this resume at this time so that families will have
ample time to plan and to take the necessary measures to meet
the financial problems for the 1969-1970 academic year. Employees
who would like more detailed information on any of the aid programs
mentioned are invited to call the Admissions and Information Branch,
25X1 Registrar Staff, Office of Training,

OFF-CAMPUS PROGRAM

1968-1969 FALL SEMESTER

Off-Campus Programs on Agency premises during the
1968 - 1969 Academic Year again will be conducted by the
Office of Training through arrangements with George Washington
University and American University. The programs enable
Agency employees to further their professional capability by
taking courses, undergraduate or graduate, at reduced rates
and under convenient conditions. These programs also provide
an opportunity for components to meet extensive requirements
for particular categories of training.

Each three credit-hour course will cost $132. All classes
will start during the week of 23 September and will continue for
15 weekly sessions. Only overt employees may participate.
A person may enroll on his own or, if the course is approved
as job-related or developmental, under Agency sponsorship. All
instructors are Agency employees accredited by the universities.
A majority of the courses will be conducted in the Headquarters
Building.

Registration for the fall term will be in the Auditorium at
Headquarters on Tuesday, 6 August, from 10 a. m. to 3 p. m.
A representative from George Washington University will be
present to answer questions. American University will provide
counseling on request. Further information on the courses or
the Off-Campus Programs in general may be obtained by calling

25X1 [   ] of the OTR Registrar's office, [   ] 25X1

It is expected that the following courses will be offered on
the days indicated. All elements of the program including the
days listed, are tentative, however.

GEORGE WASHINGTON UNIVERSITY

Accounting

1 Introductory Accounting
Basic principles underlying accounting records,
preparation of the work sheet and financial state-
ments, accounting for single proprietorships and
partnerships. Monday.

215 Survey of Managerial Accounting
Nature, preparation, analysis, and interpretation of
accounting reports; cost accounting; business budgeting,
and internal accounting controls and their use in the
management process. Prerequisites: Accounting 1 or 2
or 115 or permission. Monday.

Business Administration

102 Fundamentals of Management
Planning, organizing, directing, coordinating, and
controlling activities of the administrative unit; evolution
of management thinking. Wednesday.

Business and Public Administration

207 Human Behavior in Organizations
Individual group, intergroup, and other human behavior
and development; application of social science research
to administration. Practical applications emphasized.
Wednesday.

Economics

1 Principles of Economics
Survey of the major economic principles, institutions,
and problems in contemporary life (These two semesters
are prerequisites for all other economics courses).
Thursday.

251 Theories and Problems of Economic Growth
Special attention to the underdeveloped countries.
Thursday.

English

1 English Composition
Analysis and practice of expository techniques with
emphasis on unity, development and organization.
Monday.

11 The Writing of Reports
Theory and practice in the writing of technical reports.
Prerequisites: English 1 & 2. Tuesday.

History

71 Civilization of the United States
Political, social, economic and cultural forces of the
United States in their world setting from 1492 - 1865.
Monday.

145 History of Russia
Rise and revolution of Russia.
First semester: Old Regime, 869 - 1900. Tuesday.

Mathematics

23 Calculus III
Vector concepts, improper integrals, polar coordinates,
infinite series, and solid geometry. Prerequisite:
Math 22 (Calculus II) Tuesday.

171 Vector Analysis
Vector algebra, differentiation vectors, vector integral
calculus, applications to dynamics and differential
geometry. Prerequisite: At least Calculus IV. Monday.

Political Science

5 Introduction to Political Science
Structure, powers, and processes of the American
political system: Congress, the President, and the
Supreme Court; elections, political parties, and pressure
groups; state and local governments. Thursday.

212 Seminar - Comparative Government and Politics
Selected topics in comparative political institutions and
politics. Each semester is devoted to a selected country
or significant institutional or policy problem. Attention
is directed to questions of method. Friday.

Psychology

1 General Psychology
Fundamental principles underlying human behavior.
Monday.

22 Introduction to Educational Psychology
Consideration of individual and group differences,
adjustments, and the psychology of learning in relation
to education and training. Friday.

Public Administration

252 Problems in Planning, Programming and Budgeting
Intensive analysis of developments in federal planning,
programming, and budgeting, application of new tools
in the decision-making process, evaluation of the systems.
Friday.

AMERICAN UNIVERSITY

Economics

19.305 Introduction to Quantitative Economics
Selected topics from analytical geometry, calculus, linear
algebra statistics, and their application to problems in
economic research and analysis. Prerequisites: 41.100
and 19.101 (Introduction to Economics) Thursday.

19.703 Price Analysis I: Price and Production
The theory of demand. The theory of production and
distribution. The theory of supply. Prerequisite:
19.300 (Intermediate Economic Analysis) Tuesday.

Mathematics

41.100 Survey of Mathematics I
Linear equations and relations, sets, compound state-
ments, counting; probability, and functions, with
applications in the social and management sciences.
Prerequisite: Two years of high school mathematics.
Wednesday.

41.110 Fundamentals of Mathematics
Mathematical logic; number of systems; polynomials;
algebraic fractions; exponents and radicals; sets;
equations; inequalities; matrices and determinants;
functions and relations; algebraic functions. Prerequisites:
Three years high school mathematics or 41.100. Thursday.

69.400 Managerial Statistics
Survey of first-year basic and business statistics.
Prerequisite: 41.100 or graduate status. Tuesday.

Automatic Data Processing

55.410 Introduction to Data Processing
An introduction to the problems, principles, and
methods of data processing. The course will generally
survey types of data processing instruments, methods,
systems, and the types and potentials of their applicational
use. Tuesday.

55.530 Automatic Data Processing Systems
Survey of the systems aspect of ADP. Emphasis is placed
on the computer organization and equipment operation, the
concept of programming, data processing equipment,
information and data systems, systems analysis, equipment
acquisition and utilization, and data communications systems.
Prerequisite: 55.410 or equivalent experience. Tuesday.

55.411 Introduction to Management Mathematics
For those students whose undergraduate mathematics
preparation does not include advanced algebra. This
course will cover mathematical logic, elementary point
set theory, finite probability, Markov chains, vectors and
matrices and matrix games. Prerequisite: 41.101. Thursday.

55.511 The Systems Approach
Introduction to the systems analysis approach to the study
and design of managerial and operational organization and
process. This course is fundamental for anyone who expects
to be responsibly concerned with the managerial, operational,
or control organizations and processes of business or
government. Wednesday.

55.560 Systems Design for Business Operations
The mechanization and automation of office operations. A
practical course in the capabilities, applications, and
design and use of systems for handling administrative data,
cases, and processes. Prerequisite: 55.530. Wednesday.

1968 - 1969 FALL SESSION SCHEDULES
WASHINGTON AREA UNIVERSITIES

Note to Training Officers: External Training Branch, OTR, must
have requests for Agency sponsorship of employees (Form 136) in
courses at the following universities a minimum of three weeks prior
to registration. Retroactive approval, by regulation, is not allowed.

AMERICAN UNIVERSITY

> 12 - 14 September 1968: Registration
> 18 September 1968: Classes Begin
> 25 January 1969: Classes End

CATHOLIC UNIVERSITY

> 16 - 17 September 1968: Registration
> 18 September 1968: Classes Begin (Undergraduate)
> 23 September 1968: Classes Begin (Graduate)
> 28 January 1969: Classes End

DUNBARTON COLLEGE

> 3 and 4 September 1968: Registration
> 5 September 1968: Classes Begin
> 17 January 1969: Classes End

DISTRICT OF COLUMBIA TEACHERS COLLEGE

> 3 September 1968: Registration
> 6 September 1968: Classes Begin
> 24 January 1969: Classes End

DEPARTMENT OF AGRICULTURE GRADUATE SCHOOL

> 7 - 14 September 1968: Registration
> Week of 16 September 1968: Classes Begin
> Week of 10 January 1969: Classes End

GALLAUDET COLLEGE

> 22 - 24 August 1968: Registration
> 26 August 1968: Classes Begin
> 19 December 1968: Classes End

GEORGE WASHINGTON UNIVERSITY

17 and 18 September 1968:   Registration
19 September 1968:   Classes Begin
25 January 1969:   Classes End

GEORGETOWN UNIVERSITY

16 - 17 September 1968:   Registration
18 September 1968:   Classes Begin
30 January 1969:   Classes End

HOWARD UNIVERSITY

12 September 1968:   Registration
13 September 1968:   Classes Begin
23 January 1969:   Classes End

MONTGOMERY JUNIOR COLLEGE

6, 7, 9 September 1968:   Registration
12 September 1968:   Classes Begin
22 January 1969:   Classes End

PRINCE GEORGES COMMUNITY COLLEGE

9 - 11 September 1968:   Registration
16 September 1968:   Classes Begin
17 January 1969:   Classes End

UNIVERSITY OF MARYLAND

9 - 13 September 1968:   Registration
16 September 1968:   Classes Begin
15 January 1969:   Classes End

UNIVERSITY OF VIRGINIA, NORTHERN VIRGINIA CENTER

28 August - 18 September 1968:   Registration
23 September 1968:   Classes Begin
10 January 1969:   Classes End

NORTHERN VIRGINIA COMMUNITY COLLEGE

26 - 27 September 1968: Registration
30 September 1968: Classes Begin
14 December 1968: Classes End

GEORGE MASON COLLEGE

12 - 13 September 1968: Registration
16 September 1968: Classes Begin
15 January 1969: Classes End

CURRENT TRENDS
IN
MANAGEMENT TRAINING

The systems analysis approach, which has gained considerable prominence as a form of problem solving in the technological world, is currently being applied with some success to organizational development (OD). Executive development and management training programs are being redesigned to fit into the new OD framework. The serious problems encountered in past approaches to improvement in managerial competence have left profit-squeezed business men predisposed to think in terms of total organization effectiveness rather than partial programs. The Agency now has two management courses which fit into this systems approach: The Managerial Grid and the Advanced Management (Planning).

Why the new emphasis? The older model for executive development which has been widely used since the pre-WW II period was built upon an assumption that has proved to be not completely valid: recruit professional personnel with outstanding ability and education, provide them with the appropriate training and experience, and they will in time develop a highly effective organization. The steps of the developmental ladder of this process include the following:

    1. Use psychological testing and assessment techniques to select young trainees with executive potential. (The OSS Assessment group - predecessor of the present Assessment and Evaluation Staff - served as a model which was adopted by many industries for the selection process.)

    2. Indoctrinate the junior executives in the objectives, policies and philosophy of the organization in an in-house training program; identification with the company image is a major consideration. (The Career Trainee Program fulfills this function in the Agency.)

    3. Rotate the career executives into assignments in which they can gain the experience and perspective required of top managers.

4. Send mid-careerists and senior personnel to executive
educational programs such as those at Harvard Business School
and the Alfred P. Sloan School of Management, MIT.

Recognition has also been given to the need to develop a strong
supervisory-middle-management framework in the organization which
will implement the decisions of those who succeed in becoming top
executives. In-house training courses are often used for this purpose
as are various outside workshops and seminars given by consultant
firms or universities. (The Management Training Faculty/OTR offers
its Supervision and Management Courses several times a year to support
this objective.)

A number of shortcomings have become apparent in the above model:

1. The principles of "science-based management" taught
in education and training programs are often accepted, sometimes
enthusiastically, by trainees; however, back on the job, the
returning supervisor finds an atmosphere that is unsympathetic
to the application of new approaches. Evaluation surveys design-
ed to test the effectiveness of management/supervisory training
programs have sometimes found those who were trained became
disillusioned with the negative attitude toward new ideas found
among peers and superiors who have not had similar training.

2. Serious problems in the area of planning, communication,
and inter-group rivalry still existed in organizations even after
extensive management training of individuals.

3. Frequent loss of good professionals and failure to attract
the most suitable new university graduates are also regarded as
indicators that the executive development approach is not pro-
ducing the desired degree of organizational effectiveness.

In short, selection and development of top talent whether as junior
or senior executives does not seem to be sufficient to assure that a first-
rate organization will evolve.

Since WW II a number of behavioral scientists have been doing
research on managerial effectiveness in industry and government. Vast
amounts of systematic data have been gathered and similar conclusions
have been drawn by highly knowledgeable figures. Rensis Likert,
Institute for Social Research, University of Michigan; Chris Argyris,
Yale University the late Douglas McGregor and Edwin Schein, Sloan
School of Management, MIT; and Robert Blake, of Scientific Methods, Inc.

have each concluded that management and executive training programs
can be most effective only if conducted within the context of an
organizational development program.

What are some of the implications of this new OD model for
training managers and supervisors?

First, the principles of science-based management, which are
currently the subject matter of training, would remain essentially the
same but the method of using them would be changed. Instead of pump-
ing the input into individuals in academic-type seminars it would be
injected into entire organizational systems. The assumption is that an
organization can be viewed as a dynamically operating system within
which exists an equally dynamic human organization. The latter is
characterized by all the elements of a social system within which exists
an equally dynamic human organization. The latter is characterized
by all the elements of a social system with its unique culture, values,
attitudes, expectations, and norms. Most important are values and
views on how to solve problems and manage people. To the degree that
conflicting values exist within and between the sub-systems of the
organization, people will be working at cross purposes. Ineffectiveness
and inefficiency will be evident. Conversely, it is assumed that in an
effective organization the individuals within the system and sub-systems
will have shared attitudes on the following:

- "Superordinate" or organization-wide goals
- Goals of the sub-systems which are interrelated with
the "superordinate" goals.
- Planning and problem-solving models which include
feedback and evaluation mechanisms.
- Managerial philosophies and values which promote
maximum commitment of individuals to organizational goals,
which help individuals utilize their abilities, experience,
interests and talents.

Second, research results have led behavioral scientists to focus
their attention on the manager's ability to handle groups or teams as
well as individuals. Systems analysis indicated that human organizations
in work settings are complexes of sub-systems of inter-locking groups
and that problems such as planning, communication, and motivation to
work are closely related to the individual's group membership. Thus,
competence to handle small groups (work teams) is seen as a principal
requirement of today's executives, managers and supervisors. With
ever increasing complexity in the technological world, this is expected
to become of even greater importance.

Today's management courses and seminars reflect the new OD perspectives. Two major approaches are found:

1. <u>Management by Objectives</u> - The "scientific management" school dates back 100 years. It has traditionally dealt with efficiency methods and techniques, such as procedures, coordination processes, communication systems, decision making, man-machine relationships, etc. New courses and books on the subject of "Management for Results," and "Manage by Objectives" are presently being read widely. The emphasis is on defining the organizational and sub-system goals, identifying barriers to attaining the goals, and developing alternative solutions. (This is part of the Planning, Programming, and Budgeting Systems approach. The Agency's Advanced Management (Planning) Seminar was designed to provide simulated experience in using such a problem-solving model.) Training of this type is generally done by grouping course members into five- or seven-man training teams since the basic element in the systems approach is the work team.

2. <u>Team Skills Development</u> - Here attention is directed toward developing the human organization by improving group effectiveness. Focus is on the individual manager's behavior in the work group. Most management theorists accept the proposition that the manager, to improve his effectiveness, must gain understanding of his own and other peoples'behavior and of small-group behavior. Many training courses include blocks of team problems involving analysis of perceptional distortion processes, motivation to work, and interpersonal communications. The goal is to help the individual become generally more objective in judging human behavior and specifically more conscious of his own managerial style. Alternative managerial styles are presented as models so his own can be contrasted with an ideal type which presumably could, under the proper conditions, bring about improved working effectiveness between the superior and his subordinates.

A more intensive learning experience is offered managers in sensitivity or T (Training)-Groups. (This is not being used in the Agency.) In the T-Groups,individuals spend up to two weeks together in an unstructured situation with "gaining insight into individual and group behavior" as the only stated objective. How they do it through interaction in their daily sessions is left up to their own initiative - with a trainer standing by in case they want to involve him.

Robert Blake's Managerial Grid (Phase I) which has been used extensively in this Agency devotes one day of a week-long seminar to a sensitivity feedback; however, it is restricted to analysis of each

individual's managerial style by his team members. Blake's
major emphasis is upon developing the manager's team skills
and his awareness of how an individual's behavior in teams
affects others and the team's progress.

Training courses which utilize the two current approaches,
management by objectives and team skills improvement, are merely
the first phase of organization development. Ideally, this phase started
with the full participation and support of top management. It should be
"their" program; their involvement not only assures that they understand
the importance of their role but assures all levels of the hierarchy below that
"we" are improving "our" organization, top-to-bottom, as a system and
as a culture. This program can be contrasted with the older approach in
which top management hired consultants to change "those people down in
the middle-management and first-line supervision levels."

The second phase of OD involves actual on-the-job, work-team
training. The top team of a company sits down together under the
monitorship of a trainer and addresses two questions:

1. How can we improve our ability to work as an effective
team? This includes an analysis of the barriers to effectiveness.
Personality problems of the members are not excluded.

2. What are the goals we would like to achieve in our working
relationships and in the work activities over the next six months?
These activities can get into sensitivity-type training; however,
the participants have already become predisposed to this in phase
one and the presence of a qualified monitor assures a degree of
objectivity.

After the top team completes this segment with the number one boss,
each member returns to the work group he bosses and puts them through
the same procedure. This is repeated down the hierarchy to the first
line supervisors.

A third phase is used when there are inter-group antagonisms or
conflicts. Representatives of the conflicting groups meet and address
themselves to the problems of barriers to effectiveness and what type
of a working relationship would be most meaningful to achieve "super-
ordinate" goals.

After the top management team has finished its own second phase,
it jumps to the primary effort in the OD process. The members address
themselves to the problem of the objectives and purposes of the organization.

If it is an industry, they ask themselves such questions as, "If we had had the assets we have today and had to do it all over, what business should we be in?" The end product of this prolonged search session is a new organizational blueprint which clearly states objectives, goals, assumptions, etc., and outlines the type of organizational structure and processes that represent a dynamically operating system.

Meanwhile, the managerial training program of the earlier phases has permeated the entire organization; work team skills, communications and planning theories have been well-established. The organization is now ready for it. Critiquing committees have sometimes been set up to continue the new culture once it has been created. And management/supervision training and executive development all take place within the framework of the OD so that one part of the system is re-enforcing another.

As visionary and idealistic as this OD approach may sound it has already gained momentum in industry and Government. Dr. Blake's Managerial Grid has been part of this wave and he is now finding a vast market for his system in the U.S. and has recently branched out to foreign countries. His is only one method and it is possible for an organization to start its own unique program adapted to its own needs and problems. Whatever the specific method used, OD is apt to be with us for many years and more and more management and supervisory training will be integrated into the systems approach. This forecast is made increasingly more probable by the expanding population, the high augmentation in technological invention, and by the inevitable social and economic changes that will accompany them.

LEARNING AND THE COMPUTER

by Jane Morgan

Learning is one of the major occupations of our lives. For many of us it is a joy; for many others it is a dreary chore. All of us would like to learn more than we do in less time than it now takes. We would like to see the process of learning become more efficient, quicker, and easier, so that we could emerge with far more knowledge to enjoy our other pleasures, or at least with more time available for them.

To learn we need teachers. Books that we read and people to whom we listen and whom we can question are the teachers most familiar to us. People, though, may not have time to satisfy all the students who seek their help; and a book does not respond to questions, but simply says the same thing every time a student reads it.

QUICK AND ACCURATE RESPONSE

Recently the possibility of using the computer as a teaching aid has been recognized. The computer cannot think for itself; but it can be used to store thoughts and ideas, and it can reveal those ideas in response to appropriate requests by students. It can react quickly, accurately, and repeatedly.

What would it be like to be taught by a computer? Let us take as an example a student who is having trouble with a physics homework problem. He brings the problem to a computer terminal that resembles an elaborate typewriter with special controls and signal lights. The student types "Physics 101, problem 177." After a moment the computer prints out "This is problem 177. What did you obtain for the frequency of the sound wave?"

DIALOGUE WITH A COMPUTER

The student, having had difficulty with the problem from the beginning, types "No answer." The following dialogue then takes place:

Mrs. Morgan holds a Ph.D. in physics from the University of Illinois and taught undergraduate physics for five years at Vassar College in Poughkeepsie, New York. During the summer of 1967 she worked with the Instructional Resources Center at the State University of New York at Stony Brook, assisting in the direction of computer programming for physics teaching at the college level. This article originally appeared in the Vassar Alumnae Magazine, Volume LII, Number 4, April 1967.

"That's too bad. Let's go back to the beginning of the problem. What did you find for the wavelength of the sound wave?"

"1. 3 meters."

"No. That is half the wavelength. The distance between the points of minimum disturbance in a standing wave is only half the wavelength."

The student thinks he has located his difficulty now and types a code letter meaning "give me the first question again." The question is repeated and the student answers "127 cycles per second."

"That is nearly correct. You have used the velocity of sound at 0 degrees centigrade. You should have used the velocity at 20 degrees centigrade. Try again."

The dialogue continues in this manner, the student perhaps needing help to find the required velocity of sound. Then he can obtain the correct answer to the first question.

This dialogue is a typical example of how a computer might assist with a homework problem. The computer could also be used to "lecture," leading the student by means of questions to reason his own way to an understanding of a new subject; or to drill, by dictating and correcting foreign-language exercises, for example. Young children could be drilled in such subjects as spelling or arithmetic.

". . . THE WHY AND WHEREFORE"
At many large universities no one really has enough time to discuss assigned exercises with students, though a graduate assistant may count correct answers and enter a number into a record book. Learning by solving problems can be enhanced if there is a way for the student to know exactly where he made an error, and especially if he can learn why it was an error--that is, why an idea that he has is incorrect.

A physics problem has a limited number of routes to its solution. The computer can be programmed to recognize most of those routes through recognition of key words or equations. It can then lead the student along a correct route by means of a series of question, answer, and comment sequences in which wrong answers are identified and explained.

The student should obtain not only a knowledge of the technique applicable to the problem, but also a better understanding of the physics involved in solving it. One can easily imagine that a student who knows he has arrived at the correct answer largely through goodluck might deliberately offer an incorrect answer so that the explicit comments of the computer could reinforce his own incomplete ideas.

The technical difficulties concerning the recognition and analysis of student responses are yielding steadily to the efforts of skilled programmers. There are, however, pedagogical questions that can be answered only after several cycles of trial and error; or they may simply remain subject to individual opinion.

HOW MUCH COMMENT?

One of these questions is: How much comment and detail should be offered or imposed? That is, how deep should an explanation go? Some students want to know only the technique of finding the correct answer. They could perhaps be stimulated to seek further understanding if a limited amount of simple explanation were offered at certain points. More highly motivated students might be inspired by elaboration of profound ideas that would confuse or repel the former type of student. Which students should we have in mind when we program the computer? It might be possible to make the computer discriminate successfully between students with different needs through analysis of their responses.

Another interesting question is: How should comments be made? In the example given earlier, comments were printed out at the computer terminal while the student watched and waited. How does a student react as the typewriter produces a long text, letter by letter? There is a tendency to let one's mind wander until the text is complete; and then to concentrate again and read. For this reason programmers try to limit the amount of typewritten text.

Other means of presentation are possible. The student might simply be referred to appropriate pages in his text. A slide might be projected, with text to be read, or a tape recording might be played. The disadvantage of these possibilities is that the comments are not recorded on the paper the student carries home with him.

Questions like these are exciting to ask and to try to answer. Somewhere among the great choice of possibilities there may be a key to helping a student assimilate the enormous amount of knowledge available in any one field.

COMPUTER CHARACTERISTICS

As the learning process becomes better understood, it will become clear which characteristics of the computer are needed. The computer can be infinitely patient. It can be consistent, explaining the same concept over and over, trying different words or examples, without making a slip. It can judge objectively, by analyzing errors, which ideas need to be clarified; and it remains uninfluenced by the fact that this may be the one hunred and twenty-fourth time a certain statement has been made. It can read only what it expects to read and can answer only questions it expects to be asked.

The computer seems to be especially suited to that part of the teaching job which is repetitive and which should be adjusted to the needs of the individual student. This includes drill and prolonged discussion to illustrate fundamental concepts. For the able student, the drill can be concise and the discussion can proceed quickly. The slower student can be given exercises that gradually increase in difficulty to help him develop skill in the field he is studying. Concepts can be clarified by a carefully arranged series of illustrations, which the student can study at his own pace.

We cannot expect the computer to be more than the professor's assistant, however. A creative mind is needed in the classroom and must always be available on request. The opinions and changing ideas of individual professors are part of every student's education. In some fields of study the classroom objective is the discovery of new ideas rather than the analysis of old ones. The unexpected questions of a well-prepared student lead to new growth of everyone's ideas.

The programmed computer would have little to contribute to situations like these. It will have its greatest value in disciplines like mathematics and physical science, in which there is a large body of knowledge to be absorbed before a student can contribute significant new ideas; and in disciplines like foreign languages and music, in which drill can help develop facility in a new medium of expression. The computer should help us become proficient in subject matter that is already well established, and it should leave both the teacher and the student with more time for the creative part of education.

RESEARCH IN CAI

The potential of computer-assisted instruction (CAI) has been under study at IBM for some time. Early investigations involved the use of a computer and a typewriter to teach binary arithmetic. At first only one typewriter terminal was used, and instructions to the student were given orally, by an instructor, rather than by the computer.

IBM's present concept of computer-assisted instruction has evolved from a system developed in 1961, when experiments were performed with a modified 650 Data Processing System and specially designed electrical equipment that connected student stations to the computer. IBM researchers experimented with a number of instructional techniques. For example, they developed an experimental statistics course using student-constructed answers rather than multiple-choice, and they prepared courses in German and stenotyping. In addition, techniques were explored that allowed the computer to process partially correct answers, thereby helping students work toward complete answers to problems.

Based on this early research, IBM computer systems for educational use have taken on the following basic elements:

magnetic disk files, in which are stored course materials and students records;

a central processing unit, which acts as an interface between student terminals and the course materials stored in the disk files;

a multiplexing unit, which directs messages between the terminals and the computer;

IBM 1050 data communication terminals.

Further advances in programming techniques, systems organization, and experimental methods for interacting with students have led to the development of a new system designed specifically for computer-assisted instruction. Called the IBM 1500 Instructional System, it links a computer to as many as 32 audiovisual student stations. The system includes such advanced techniques as time sharing and the use of electronic "light pens," with which students can respond by pointing to information displayed on television-like viewing screens. Student stations can project color or black-and-white slides, and they can play prerecorded sound messages.

A student can compose his responses by typing on a keyboard, as well as by using the light pen. The system can process the responses and select appropriate material for subsequent presentation. If necessary, for example, a problem can be restated in a simplified manner, or the student can be provided with review and practice material. Each course unfolds at a pace and in a manner determined by the student's ability, regardless of the progress made by other students using the system.

A printer under the computer's control can print out data on each student's performance. Using this data, the teacher can analyze the progress of students for the purpose of improving course materials and offering individual guidance. The recording of performance data also facilitates research on instructional techniques, and indeed on the learning process itself.

*   *   *   *

DDS&T/Office of Computer Services has already made a moderate beginning by adapting equipment on hand to employ training programs in a CAI effort. Demonstration programs have been developed employing the typewriter print-out technique, a combination typewriter and cathode ray tube. As time goes on, appropriate personnel will be trained in the development of additional programs for use with computer equipment toward the day when we, too, can make use of this new technology in improving our capacities to perform.

NON-AGENCY

TRAINING

This section of the OTR Bulletin contains information

on non-CIA courses or programs related to career develop-

ment of CIA employees. Attendance may be sponsored by

the Agency or it may be self-sponsored. The Training

Officer must be consulted on Agency-sponsored training.

For additional information on the courses outlined in

this section of the OTR Bulletin or on other external courses,

25X1   call AIB/RS/TR, [   ] For information on

registration, call ETB/RS/TR, [   ]   25X1

INTERAGENCY TRAINING PROGRAMS

25X1 Civil Service Commission courses and United States Department of Agriculture Graduate School Special Programs are listed below with their starting and ending dates, location, cost, and whenever possible, required GS Grade level. For course descriptions see your Training Officer or call

Civil Service Commission

Automatic Data Processing

SYSTEMS ANALYSIS FOR COMPUTER PROGRAMMERS
23 - 27 Sept   1900 E. Street, N.W. $160
    For computer programmers and newly-assigned analysts with
    programming experience.

MATHEMATICS FOR MANAGERS
25 Sept - 3 Dec   1900 E. Street, N.W. $250   GS-14 & above

OPERATIONS RESEARCH ORIENTATION
25 - 27 Sept   1900 E. Street, N.W. $ 50   GS-9 & above

ADP SYSTEMS ANALYSIS SEMINAR
25 Sept - 13 Nov   1900 E. Street, N.W. $175   GS-9 & above

EXECUTIVE SEMINAR IN MANAGEMENT INFORMATION THEORY
26 - 27 Sept   1900 E. Street, N.W. $ 90   GS-14 & above

MANAGEMENT INTRODUCTION TO ADP
7 - 8 Oct
21 - 22 Nov   1900 E. Street, N.W. $ 50   GS-11 & above

PRINCIPLES & PRACTICES OF AUDITING IN THE ADP SYSTEMS
ENVIRONMENT
4 - 22 Nov
2 - 20 Dec   1900 E. Street, N.W. $160   GS-9 & above

SEMINAR ON ADP IN PERSONNEL MANAGEMENT
9 - 11 Oct   1900 E. Street, N.W. $140   GS-12 - 15

APPLICATIONS OF OPERATIONS RESEARCH FOR EXECUTIVES
9, 16, 23, 30 Oct   1900 E. Street, N.W. $175   GS-14 & above

Civil Service Commission (continued)

TECHNIQUES AND METHODS OF OPERATIONS RESEARCH
10, 11, 17, 18 Oct   1900 E. Street, N.W. $150   GS-9 & above

SYSTEMS WORKSHOP FOR COMPUTER SPECIALISTS 1, BASIC
14 - 18 Oct   1900 E. Street, N.W. $150   GS-9 & above

EXECUTIVE WORKSHOP IN ADP PROGRAMMING
21 - 25 Oct   1900 E. Street, N.W. $150   GS-15 & above

EXECUTIVE SEMINAR IN MANAGEMENT REPORTING SYSTEMS
28 - 29 Oct   1900 E. Street, N.W. $ 90   GS-15 & above

ADVANCED SYSTEMS TECHNOLOGY FOR ADP SYSTEMS ANALYSTS
4 - 8 Nov   1900 E. Street, N.W. $160
    For digital computer systems analysts.

SEMINAR ON ADP IN FINANCIAL MANAGEMENT
6 - 8 Nov   1900 E. Street, N.W. $120   GS-12 - 15

EXECUTIVE SEMINAR IN STATISTICAL SCIENCE FOR MANAGEMENT
14 - 15 Nov   1900 E. Street, N.W. $ 75   GS-15 & above

EXECUTIVE WORKSHOP IN ADP SYSTEMS ANALYSIS
18 - 20 Nov   1900 E. Street, N.W. $135   GS-15 & above

SEMINAR IN ADP MANAGEMENT AND ADMINISTRATION
19 - 21 Nov   1900 E. Street, N.W. $135
    See course description for eligibility.

FIELD WORK PROGRAM IN ADP SYSTEMS ANALYSIS
27 Nov - 29 Jan 69   1900 E. Street, N.W. $125
    Consult course description for prerequisites.

   Financial Management and PPBS

FINANCIAL MANAGEMENT FOR OPERATING EXECUTIVES
23 - 26 Sept   1900 E. Street, N.W. $135   GS-14 & above

PPB SEMINAR (2 week residential)
9 - 20 Sept   University of Maryland
4 - 15 Nov   University of Maryland $300
    Consult Training Officer for eligibility requirements.

COST/BENEFIT WORKSHOP
9 - 13 Sept
21 - 25 Oct   1900 E. Street, N.W. $165   GS-11 & above

Civil Service Commission (continued)

PPB EXECUTIVE ORIENTATION
24 - 26 Sept   1900 E. Street, N. W. $ 75   GS-14 & above

PPB GENERAL ORIENTATION
1 - 2 Oct   1900 E. Street, N. W. $ 50   GS-13 & below

FINANCE IN AGENCY MANAGEMENT
7 - 11 Oct   1900 E. Street, N. W. $100   GS-9 - 12

MODELS IN MANAGEMENT DECISION-MAKING
14 - 18 Oct   1900 E. Street, N. W. $250   GS-14 or 15

MANAGERIAL ECONOMICS
28 Oct - 1 Nov   1900 E. Street, N. W. $165   GS-14 & above

FUNDAMENTALS OF FEDERAL AUDITING
28 Oct - 1 Nov   1900 E. Street, N. W. $unknown   GS-5 - 9

INTRODUCTION TO SCIENTIFIC COST ANALYSIS
18 - 22 Nov   1900 E. Street, N. W. $145
     Open to Federal staff analysts and managers who require a working
     knowledge of cost analysis.

QUARTERLY CONFERENCE FOR PPB SYSTEMS ANALYSTS
18 - 19 Nov   1900 E. Street, N. W. $160
     For working operating analysts.

     Personnel Management

IDEAS AND AUTHORS: SOCIAL SCIENCES
15 Oct, 12 Nov
10 Dec, 14 Jan 69   1900 E. Street, N. W. $ 95
     Course held on Tuesday evenings from 7 - 10 p. m.

U.S. Department of Agriculture Graduate School

     Special Programs

     All classes are held at the U.S. Department of Agriculture on Saturday
mornings at 8:00 a. m. to 12:00 noon except where indicated.

BASIC CONCEPTS OF DATA PROCESSING
28 Sept - 7 Dec $75   High School Graduate

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U.S. Department of Agriculture (continued)

ADVANCED CONCEPTS OF DATA PROCESSING
28 Sept - 7 Dec $ 75
    A basic concepts course or equivalent.

ADP SYSTEMS ANALYSIS AND DESIGN
28 Sept - 7 Dec $100

DEVELOPING ADP SPECIALISTS
28 Sept - 2 Nov $ 75   GS-12 & above

SOURCE DATA AUTOMATION
28 Sept - 2 Nov $ 75
    Prerequisites: Understanding of basic ADP systems and programming
    concepts.

INFORMATION STORAGE, RETRIEVAL & DISSEMINATION
28 Sept - 7 Dec $100
    Participants should have completed at least one year of ADP analysis
    experience.

ADP BUDGET AND FINANCE APPLICATIONS
28 Sept - 7 Dec $100
    Course is for those who have had training or experience in budget
    and finance operations.

TELEPROCESSING AND DATA COMMUNICATION SYSTEMS
28 Sept - 7 Dec $100
    Participants should have had at least one advanced data processing
    course or equivalent.

ADP DOCUMENTATION AND WRITING
28 Sept - 2 Nov $ 75
    For senior programmers and programmer supervisors.

ADP FOR EXECUTIVES
7 - 9 Oct $150   GS-13 & above
    Monday through Wednesday, 8:30 a.m. to 4:30 p.m.

HUMAN FACTORS IN DATA PROCESSING
28 Sept - 7 Dec $100
    Participants should have responsibility for subordinates.

STATISTICAL METHODS FOR FEDERAL EXECUTIVES
7 Oct - 1 Nov. $100   GS-13 & above
    Classes meet Mondays, Wednesdays, and Fridays 9:30 a.m. to
    11:30 a.m.

U.S. Department of Agriculture (continued)

STATISTICAL METHODS FOR RESEARCH WORKERS
28 Sept - 7 Dec $100
   Prerequisites: At least 9 semester hours of college mathematics
   and/or statistics.

COMPUTER SOLUTION OF STATISTICAL ANALYSIS PROBLEMS
28 Sept - 18 Jan 69 $120
   Prerequisites: One course in college algebra, one course in basic
   statistics, and some concept of the use of electronic computers.

INTRODUCTION TO OPERATIONS RESEARCH
28 Sept - 25 Jan 69 $120
   Prerequisite: Two years college mathematics and/or statistics.

ADP TRANSPORTATION APPLICATIONS
28 Sept - 7 Dec $120   Senior Analysts

ADP LIBRARY APPLICATIONS
28 Sept - 7 Dec $100   Librarians

FEDERAL CONTRACT NEGOTIATION INSTITUTE
23 - 27 Sept
18 - 22 Nov $130   GS-9 & above
   Classes meet Monday through Friday, 9:00 a.m. - 5:00 p.m.

SCIENCE INFORMATION AND COMMUNICATIONS
2 - 6 Dec $135   GS-13 & above

CIVIL SERVICE COMMISSION

TRAINING STATISTICS FY 67

Under the provisions of the Government Employees Training
Act of 1958 and specifically as assigned under Executive Order 11348,
the Civil Service Commission is charged with collecting and
reporting data on U. S. Government Agencies training activities.
Beginning with Fiscal Year 1967 the report was substantially
expanded and resulted in the study "Employee Training in the
Federal Service, FY 1967." The report focuses on "formal
classroom training of eight hours or more and in some categories
training of shorter duration." "Informal or on-the-job training,
although the most widely used and often the most effective training
method for improving job performance, is not included. . . because
of the difficulty in separating such training from the normal
supervisor-employee relationships." The following excerpts and
statistics were culled from this interesting work. Of the 1,008,780
participants from 56 Agencies, 80% received Agency training, 5%
received interagency training and 15% received non-government
training. Men constituted 79% of the participants and women 21%.
Technical or "how to" training, designed to improve employee skills
was received by 45% of the participants, supervisory or management
training by 18%, professional or scientific training by 11% and a
variety of training, the remaining 26%. Some 5,029 Agency personnel
were engaged full time in training activities; 1,730 Employee
Development Officers (Training Officers in the CIA usage), 2,005
Instructors and 1,294 clerical and support personnel. The annual
salaries of these full-time training personnel were over 45 million
dollars."

The study invited users to examine their own programs to
determine (inter alia):

How does the proportion of the Agency employees receiving
training compare with other Agencies; does the Agency make a
frequent review of its training activities, needs and results; do all
employees of the organization have an equal opportunity to partici-
pate in appropriate training programs (and) are some types of
training being overemphasized at the expense of others?

Of the 56 Departments and Agencies represented (NSA and CIA
were excluded), the Army lead the rest numerically with 204,599

and the Post Office led the civilian agencies with 75, 323.
Interestingly, NASA with a total of 32,629 had 24, 907 involved
in non-government training, second only to Navy with 27, 765.

Management training comprised 18% of those receiving
training; of this 77% was provided within the Agencies, 9% was
provided inter-Agency and 14% by non-government facilities. To
quote "the use of non-government resources was due in part to the
growing need for highly specialized training in supervisory and
management skills and to the continuing interest by Agencies in
the findings of management and organization research conducted
by Universities and Colleges. Again Agencies find it profitable
to expose their supervisors and managers to the personalities
and philosophies found in non-government facilities in order to
prevent inbreeding and staleness and to aid in maintaining a
Federal service that is dynamic and up to date." Of the non-govern-
ment training 17% was supervisory or management as opposed to
35% of inter-Agency training. The largest category of non-
government training, 32% was professional or scientific.

Women received 21% of all training but constituted 27% of the
working force. This was explained by the larger proportion of
women in the secretary, stenographer and typist category who are
hired already relatively well trained. They constituted 22% of those
who received Agency training, 24% of inter-government training
and only 16% of those in non-government courses. Most Agencies
reported an increase over past years in women participating in
training.

Twelve Agencies sponsored a total of 102 off-campus centers in
cooperation with 63 Universities and Colleges with approximately
18, 731 employees participating. The Navy was the leader here with
26 off-campus centers cooperating with 34 schools and 6, 000
students (almost 1/3 of the government total).

Long term non-government training is defined as training of
more than 120 days duration. Usually it consists of full time
academic study in residence at a College or University. In FY 1967
a total of 1, 042 employees from 26 Agencies participated in this
type of training, an increase of 30% over FY 1966. Some 4% were
trained overseas. The average training days was 198; the GS average
level was GS-12. Only 6% were women. Engineering provided
34% of the total with Physical Scientists having 24%; 14% was
supervisory or managerial. The Department of the Army with 234
led all the Agencies in this type of training. Some 2 million dollars
was spent. Of this 67% was for tuition, books, etc. and 33% was for
per diem and transportation.

It is also interesting to note that only nine Agencies spent
more for external training than CIA, 49 spent less, our nearest
competitor (at $742,000) was the Veterns Administration. Short
term non-government accounts for $27.7 million. A significant
amount of this is "after hours training at Colleges or Universities"
and tuition is 66% of the total. This contrasts with $2.75 million
for long term non-government training, of which 50% is for tuition.

The reporting Agencies were able to cite "numerous examples
of tangible dollar savings and productivity increases as well as the
less tangible but crucial gains in such factors as employee motivation
and morale."

The study commented that . . . "it was not feasible to collect
data on expenditures for Agency training in FY 1967 since there is
no uniform method of recording or reporting this cost data." It
should also be stressed that student numbers alone are not necessari-
ally meaningful since the actual man days involved could vary
significantly. CIA comparisons are even more complicated because
of the decentralized system of providing training. Known and
comparable items such as the size of the training establishment,
funds expended for external training, etc. clearly establish CIA as
a leader in training. This is as true of quality as of quantity. While
this can in part be related to the often unique skills in which the Agency
must provide training, it is at least equally related to the favorable
policy and attitudinal environment which training enjoys in this
Agency.

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