

DOCUMENT RESUME

ED 028 382

AC 004 216

By-Hitt, William D.; And Others

Final Report on an Analysis of the Education and Training Systems at Milan, Michigan and Terre Haute, Indiana to Federal Prison Industries Incorporated, U.S. Department of Justice.

Battelle Memorial Inst., Columbus, Ohio. Columbus Labs.

Pub Date Apr 68

Note-204p.

EDRS Price MF-\$1.00 HC-\$10.30

Descriptors-*Correctional Education, *Corrective Institutions, Courses, Employment Opportunities, Instructional Staff, Investigations, Job Placement, Physical Facilities, Prisoners, Program Administration, *Program Evaluation, Rewards, Staff Improvement, Vocational Counseling, *Vocational Education

Existing education and training (E&T) programs at the Terre Haute Penitentiary, Indiana, and the Milan Federal Correctional Institution, Michigan, were described and evaluated. Needs, objectives, inmate classification and placement, staff, and other aspects were covered. Reports, staff and inmate interviews, study of instructional materials, and observation of classes and facilities were used. Problems were vagueness and conflict in institutional objectives; absence of on the job training; lack of a planned E&T program, effective reward system, efficient E&T administrative system, planned staff development, or systematic program evaluation; not enough opportunities in vocational training; generally inadequate individual instruction and counseling; and deficiencies in E&T staffing at Terre Haute and in staff communication and space at Milan. Opportunities were seen in the possibility of relating work, training, and social adjustment, the presence of effective reinforcers (chiefly freedom and money), a controlled environment, dedicated staff, and support personnel. (Included are 48 tables and figures, and appendixes on job opportunities, textbooks, courses, schedules, staff members, equipment and materials, and dropout statistics.) (ly)

ED028382

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION
POSITION OR POLICY.

AC 004 216

ED028382

FINAL REPORT

on

AN ANALYSIS OF THE EDUCATION AND TRAINING SYSTEMS
AT MILAN, MICHIGAN AND TERRE HAUTE, INDIANA

to

FEDERAL PRISON INDUSTRIES, INCORPORATED
U.S. DEPARTMENT OF JUSTICE

April 15, 1968

by

William D. Hitt, Norman R. Agostino,
and Ronald J. Cress

BATTELLE MEMORIAL INSTITUTE
Columbus Laboratories
505 King Avenue
Columbus, Ohio 43201

AC 004 216

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	1
THE ANALYSIS: TERRE HAUTE	3
The Need	3
Objectives	3
Environment	4
Resources	6
Constraints	11
Management and Administration	17
Classification and Placement	20
Instructional Staff	24
The Education and Training Program	27
Methods of Evaluating E&T	44
Summary Evaluation of E&T System	46
THE ANALYSIS: MILAN	49
The Need	49
Objectives	49
Environment	50
Resources	52
Constraints	56
Management and Administration	59
Classification and Placement	62
Instructional Staff	64
The Education and Training Program	67

TABLE OF CONTENTS (Continued)

	<u>Page</u>
Methods of Evaluating E&T	82
Summary Evaluation of the E&T System	84
PROBLEMS	87
THE OPPORTUNITIES	96

APPENDIX A

EMPLOYMENT OPPORTUNITIES FOR OFFENDERS	A-1
--	-----

APPENDIX B

EXHIBITS	B-1
--------------------	-----

LIST OF TABLES

TABLE 1. ANNUAL OPERATING BUDGET FOR 1967-68	8
TABLE 2. PREDICTED PROFITS FOR PRISON INDUSTRIES FOR 1967-68	8
TABLE 3. EDUCATION AND TRAINING BUDGET FOR 1967-68	9
TABLE 4. DECISIONS MADE BY CLASSIFICATION BOARD	22
TABLE 5. COMPARISON OF EDUCATIONAL LEVELS	43
TABLE 6. SUMMARY EVALUATION OF THE TERRE HAUTE E&T SYSTEM	47
TABLE 7. ABBREVIATED STATEMENT OF OPERATIONS FOR PRISON INDUSTRIES (Fiscal 1966-67)	53
TABLE 8. BUDGET FOR EDUCATION AND TRAINING (Fiscal 1967-68)	54
TABLE 9. SAMPLE DISTRIBUTION OF TIME SENTENCED	57
TABLE 10. SAMPLE DISTRIBUTION OF ACTUAL TIME SERVED	57

TABLE OF CONTENTS (Continued)

	<u>Page</u>
TABLE 11. COMPARISON OF EDUCATIONAL LEVELS	81
TABLE 12. SUMMARY EVALUATION OF THE MILAN E&T SYSTEM	85

LIST OF FIGURES

FIGURE 1. STAFF ORGANIZATION FOR MANAGEMENT OF E&T PROGRAM	18
FIGURE 2. MAJOR STEPS IN THE CLASSIFICATION AND ASSIGNMENT SYSTEM	21
FIGURE 3. ORGANIZATION OF THE INSTRUCTIONAL SYSTEM	25
FIGURE 4. COMPONENTS OF THE EDUCATION AND TRAINING SYSTEM	28
FIGURE 5. COMPARISON OF LENGTH OF SENTENCE - TERRE HAUTE	36
FIGURE 6. COMPARISON ON AGE - TERRE HAUTE	37
FIGURE 7. COMPARISON ON EDUCATION - TERRE HAUTE	38
FIGURE 8. COMPARISON ON I.Q. SCORE - TERRE HAUTE	39
FIGURE 9. COMPARISON ON STANFORD ACHIEVEMENT TEST - TERRE HAUTE	40
FIGURE 10. COMPARISON ON OCCUPATION - TERRE HAUTE	41
FIGURE 11. STAFF ORGANIZATION FOR MANAGEMENT OF E&T PROGRAM	60
FIGURE 12. MAJOR STEPS IN THE CLASSIFICATION AND ASSIGNMENT SYSTEM	63
FIGURE 13. ORGANIZATION OF INSTRUCTIONAL STAFF	65
FIGURE 14. COMPONENTS OF THE EDUCATION AND TRAINING PROGRAM	68
FIGURE 15. COMPARISON ON LENGTH OF SENTENCE - MILAN	74
FIGURE 16. COMPARISON ON ACTUAL TIME SERVED - MILAN	75
FIGURE 17. COMPARISON ON AGE - MILAN	76
FIGURE 18. COMPARISON ON EDUCATION - MILAN	77
FIGURE 19. COMPARISON ON I.Q. SCORE - MILAN	78
FIGURE 20. COMPARISON ON STANFORD ACHIEVEMENT TEST - MILAN	79

INTRODUCTION

AN ANALYSIS OF THE EDUCATION AND TRAINING SYSTEMS
AT MILAN, MICHIGAN AND TERRE HAUTE, INDIANA

by

William D. Hitt, Norman R. Agostino
and Ronald J. Cress

INTRODUCTION

The purpose of the first phase of the study was to analyze the existing education and training systems at the Terre Haute Penitentiary and the Milan Federal Correctional Institution. This analysis included investigating, describing, and evaluating the systems.

To obtain the necessary information questions were formulated to cover each major aspect of the education and training system. Information to answer these questions was obtained from: (1) study of relevant reports and data provided by Terre Haute, Milan, and the Bureau of Prisons, (2) interviews with the staff and inmates at the institutions, (3) observation of classes and facilities, and (4) study of instructional materials. In addition, an interview was conducted with Mr. C. Huston Isaacs, Director of the Wabash Technical Institute, for the purpose of exploring the possibility of the Technical Institute providing some of the training for inmates at Terre Haute.

The education and training system was specified according to the following elements:

- Need - The problem that initiated consideration of E&T as a proposed solution.
- Objectives - The determination and specification of the terminal capability desired of trainees after having successfully completed a learning experience.
- Environment - The conditions under which learning is acquired.
- Resources - Present and potential means for support and operation of the E&T system.

- Constraints - Boundary conditions that affect the E&T system.
- Management & Administration - Refers to E&T planning, staff organization, communication, and record-keeping.
- Classification & Assignment - The system for classifying and assigning inmates throughout their stay in the institution.
- Instructional Staff - The people responsible for actually giving the instruction in all aspects of the E&T program.
- Education & Training Program - Includes curriculum, methods of instruction, materials and equipment, class scheduling, incentives for learning, and characteristics of participants.
- Evaluation - The assessment of accomplishment of E&T objectives and satisfaction of need.

The evaluation of the E&T system was based upon the following considerations:

- (1) Analysis of relevant data provided by the institutions and the Bureau of Prisons.
- (2) Present state of the art in educational technology.
- (3) Our knowledge of other effective E&T systems.
- (4) The logical consistency of the elements within the respective education and training systems.

We turn next to the results of the analysis. Answers to the formulated questions are presented below. These answers are a compilation of all of the information collected in the analysis that appeared to be both important and reliable.

THE ANALYSIS: TERRE HAUTE

THE ANALYSIS: TERRE HAUTE

1. The Need

What is the need that education and training are supposed to satisfy?

The overall mission of the Bureau of Prisons is correction of offender. Consistent with this mission, the need that education and training are supposed to satisfy is to equip the inmate to earn an honest living in the free community; to help him become a productive member of society.

The Terre Haute Penitentiary is considered to be life's decision point for many of the inmates. The majority of these men have a record of one or two offenses before coming to Terre Haute; yet few are considered to be hardened criminals. The Warden, in his introductory talk to new inmates, points out to them that they are "on a plateau" of life; they must now decide whether they want to continue to lead a life of crime or to try to make something out of themselves. Terre Haute is a major choice-point in life.

2. Objectives

(a) What are the objectives of the education and training system?

The general objectives of the E&T system are:

- To motivate the inmate to want to acquire job skills.
- To provide the inmate with skills needed to obtain and retain an honest job in the free community.
- To teach good work habits--such as assuming responsibility for taking care of tools, arriving at work on time, etc.
- To modify the inmate's attitude toward work, toward society, and toward himself.

(b) What is the minimum acceptable performance for demonstrating successful accomplishment of the objectives?

At present, the released offender is expected to perform at only the minimum proficiency level for a given job; at the entry level. It is assumed that a higher level of skill can be attained after he begins work.

(c) What observable acts are accepted as evidence that the learner has achieved the objectives?

Observable acts include the following:

- Performance on paper-and-pencil tests in the classroom (including tests constructed by the instructor as well as standardized achievements tests).
- Skill performance in the classroom.
- Job proficiency in Prison Maintenance and Prison Industries.
- Work habits in Prison Maintenance and Prison Industries.
- Successful performance in work-release program, including getting to the place of work, satisfying the job requirements of the employer, following the rules of the institution, and returning to the institution each night.

3. Environment

What are the environmental conditions under which learning takes place in the institution?

Some of the characteristics of the environment that probably have a significant influence on learning are described below.

- Inmate personality characteristics.

Probably the greatest motivation for most offenders is their desire for freedom; many inmates count the days remaining in sentences. Another important attribute that characterizes many inmates is the desire for immediate gratification; it

is a child-like trait that gives high priority to immediate satisfaction with little consideration given to long-term consequences of specific actions. Also, many of the inmates resent authority, which is manifested in such behaviors as testing the limits of institution regulations and intimidating E&T instructors.

- Inmate attitudes toward education and training.

Many inmates indicate that their stay in prison is "dead time"; as the saying goes: "You do the crime, and you do the time". Another deterrent to E&T is that some of the old-timers in the institution "play down" E&T to the new inmates; E&T is "sissy". Also, some inmates state that they are afraid to enter a vocational training program if the date of completion extends beyond their earliest possible date of release--because they fear that the Parole Board may not release them. All of these attitudes have a significant influence on the effectiveness of the E&T program.

- Conflicts between E&T and job requirements.

There are serious conflicts between E&T and job requirements in the institution. Prison Industries and Prison Maintenance* obviously must receive high priority for the effective operation of the institution. A machine in the textile mill, for example, requires an experienced operator for the entire day; if the operator leaves during the day to attend class and he has no replacement, the machine stops. Similarly, the men must be fed, clothes must be laundered, and the facilities must be maintained. These are the essentials--and they generally have precedence over education and training.

Significant here is the fact that the Industries' operation is set up on a piece rate--and the men do not want to be docked by attending classes. Furthermore, some men feel that they will lose out on good time if they leave their jobs to go to school.

* The term "Prison Maintenance" is used here to refer to all of those jobs involved in the operation and maintenance of the institution.

With respect to Prison Maintenance, some of the supervisors resent their dual role as supervisor and trainer; they sometimes ask Mr. Stiff: "Do you want maintenance or do you want training?" These are serious problems.

- Staff attitudes.

Staff attitudes toward education and training are both positive and negative. Some staff members appear to give E&T their full support, and others obstruct it. One difficulty here is seen in the question raised by a number of staff members: "What is our mission in the institution?" Is the primary objective punishment? ... or custody? ... or correction? The answer apparently is rather vague to the staff. Consequently, the role of E&T in the total operation is not clear. On the positive side of the picture, the staff members appear to be very receptive to change. They seem to feel that a study of the E&T system is long overdue--and most of them probably will welcome constructive recommendations for improvement.

- Influence of the Warden.

The Warden's influence is felt throughout the institution; he has tremendous power and authority. As one staff member succinctly stated: "The Warden determines what kind of ball game we play". The significant point here is that the institution's education and training program is emphasized to the extent that the Warden wants it to be emphasized--no more and no less.

4. Resources

(a) What funds are available for supporting and operating the E&T program?

To place the E&T budget in perspective, we may look first at:

- (1) the operating budget for the institution and (2) the profits

generated from Prison Industries. The educational program is financed by the operating budget, whereas the vocational training program is financed by Prison Industries. The financial aspects of normal prison operations and those of Prison Industries are treated separately at the Bureau of Prisons as well as at the institution.

The total operating budget for the institution is presented in Table 1. As can be seen, the largest portion of this budget covers staff salaries. Item #2 - Care of inmates - covers education, recreation, and welfare (excluding salaries). The total budget does not include expenses for construction or extraordinary repair bills.

Predicted profits for Prison Industries for fiscal 1967-68 are presented in Table 2. Inmate salaries for this same time period are estimated to be \$224,000. Prison Industries also will contribute approximately \$23,000 to the Institution's meritorious payroll and \$58,000 to vocational training during this fiscal year.

The budget for education and training is shown in Table 3. The grand total is \$138,727. Included in this figure, however, is \$16,600 for recreation, which leaves \$122,100 for education and training. This adjusted total includes library expenses, but does not cover any of the expenses associated with on-the-job training in the shops.

(b) What personnel are available for conducting the E&T program?

Available instructional personnel include:

- Academic Education: regular instructional staff; part-time instructors from Indiana State University and high schools in Terre Haute; inmates.
- Vocational Training: regular instructional staff.
- On-the-job-training in Prison Industries: supervisors in Prison Industries; inmates.
- On-the-job-training in Prison Maintenance: supervisors in Prison Maintenance; inmates.
- Social Education: regular instructional staff.

TABLE 1. ANNUAL OPERATING BUDGET FOR 1967-68

Item	Amount
(1) Staff	\$2,173,000
(2) Care of inmates	370,000
(3) Maintenance & Operation	306,000
(4) Equipment	127,000
Total	\$2,966,000

TABLE 2. PREDICTED PROFITS FOR PRISON INDUSTRIES FOR 1967-68

Industry	Annual Profit
Woolen Mill	\$244,000
Furniture	77,000
Canvas Specialty	91,000
Total	\$412,000

TABLE 3. EDUCATION AND TRAINING BUDGET FOR 1967-68

Item	Education	Vocational	
Salaries (full time)	\$55,519 00	\$26,481.00	
Salaries (part time)	5,435.00	5,583.00	
Operating Expense	14,159.00	6,360.00	
Equipment	3,033.00	3,240.00	
College Tuition	2,000.00	.00	
	<u>80,146.00</u>	<u>41,664.00</u>	
Sub-total	80,146.00	41,664.00	
Position Vacancy	none	(two) 16,917.00	Base Salary
	<u>80,146.00</u>	<u>58,581.00</u>	
Sub-total	80,146.00	58,581.00	
GRAND TOTAL		\$138,727.00	

(c) What facilities are available for carrying out the E&T program?

The primary facilities for E&T are:

- (1) Academic education: 16 classrooms
- (2) Vocational training: The same 16 classroom as shown in (1) with an additional 4 classrooms at the farm camp.
- (3) Social education: The same 16 classrooms as shown in (1)
- (4) OJT in Prison Industries: no special facilities.
- (5) OJT in Prison Maintenance: Ten different areas used for training.
- (6) Library: 13,000 volumes; 60 fiction and 40% nonfiction; designed for general reading.

(d) What additional training opportunities are available to inmates?

One additional opportunity for training may be found in the newly formed Wabash Valley Technical Institute. The Institute was created by action of the Indiana General Assembly in 1963 to assume a specific role in vocational and technical education in Indiana. It is located adjacent to the Penitentiary and is scheduled to commence classes in 1968. Initial classes that are planned include Automotive Mechanics, Basic Electricity, Blueprint Reading, Dictation and Transcription, Digital Computer Fundamentals, Principles of Accounting, and others. The Director of the Institute, Mr. C. Huston Isaacs, has indicated a strong willingness to cooperate with the Penitentiary in developing a "study-release" program for inmates.

(e) What incentives are available for motivating an inmate to participate in the E&T program?

The primary potential incentives seem to be these:

- A man may be paroled after serving only 1/3 of his sentence. It is suggested that participation in E&T will influence the Parole Board's decision about an individual case.

- Meritorious good time may be awarded an inmate for participating in the E&T program. (At Terre Haute, however, meritorious good time is not awarded for participating in E&T per se; it is supposed to be used to reward the inmate's "overall adjustment".

There appears to be a great deal of uncertainty among inmates and staff concerning the policies and decision rules on the allocation of these incentives.

5. Constraints

(a) How much time is available for inmates to participate in E&T?

- (1) Conceivably, an inmate could participate in the E&T program for the duration of his sentence. The distribution for length of sentence for inmates admitted (and retained) during the period from July 1, 1966 through June 30, 1967.

<u>Sentence</u>	<u>Number of Inmates</u>	<u>Percentage</u>
Under 2 years	77	13
2-5.9 years	379	62
6-10 years	105	17
Over 10 years	48	8
	<u>609</u>	<u>100%</u>

While it appears that the time available usually exceeds two years, it is important to recognize that a majority of inmates actually serve only a fraction of their sentence before being granted parole.

- (2) On a daily basis, men work in Prison Maintenance an average of 6 hours per day and in Prison Industries almost 8 hours per day. Evenings and weekends are free time.

(b) What constraints are imposed upon the use of meritorious pay and good time for rewarding performance in E&T?

Some of the relevant considerations included in Manual Bulletin No. 252 (Revised) are:

Section 4126: "The corporation (Federal Prison Industries) ... is authorized to employ the fund (Prison Industries Fund) ... in paying, under rules and regulations promulgated by the Attorney General, compensation of inmates employed in any industry, or performing outstanding services in institutional operations."

Section 4162: Industrial Good Time.

(1) "A prisoner may, in the discretion of the Attorney General, be allowed a deduction from his sentence of not to exceed three days for each month of actual employment in an industry or camp for the first year or any part thereof, and not to exceed five days for each month of any succeeding year or part thereof.

- In the discretion of the Attorney General such allowance may also be made to a prisoner performing duties of outstanding importance in connection with institutional operations.

- Such allowance shall be in addition to commutation of time for good conduct, and under the same terms and conditions and without regard to length of sentence."

(2) "Additional factors (to be considered in selection of cases for meritorious good time) which will be considered are demonstrated efforts in self improvement and contributions to the moral and welfare of the institution community. These may consist of the following:

- Better than average accomplishment in academic and vocational training.

- Active participation in constructive activities such as inmate councils and committees, avocational programs, forums, blood donor programs, etc."

(3) "An inmate engaged in a full-time educational or vocational training program cannot be considered or engaged in institution operations or eligible for all the allowance (of meritorious good time); except that an inmate engaged in a full-time vocational program may be considered eligible if in conjunction with his training he is providing a significant service to the institution."

(c) What types of jobs in the free community are usually closed to offenders?

(1) Community Attitudes

General attitudes in the community towards offenders are especially relevant to availability of employment. To what extent does the "ex-convict stigma" hamper employability?

A study by Walter A. Lunden in 1962-63 to determine the views and policies of companies with respect to employment of released prisoners noted that 18 percent of the 95 business firms surveyed in 16 Midwestern cities had employment policies against offenders.* A survey by the Minnesota Division of Adult Corrections in 1966 gives indication of somewhat less resistance of employers towards hiring offenders.** Among 983 Minnesota firms, it was found that only 10 percent had some degree of formal written restrictions against hiring offenders. Fifty-eight percent of firms indicated no restrictions in hiring offenders in some or all positions in their firms. The results of a Battelle survey showed that some of the firms surveyed require a routine police check on individuals employed in specific occupations. However, evidence of a conviction does not, in and of itself, bar an individual from being employed

* Walter A. Lunden, "Jobs for Ex-Cons", Iowa State University of Science and Technology, Ames, Iowa, 1965.

** Minnesota Department of Corrections, "Offenders Employment Resource Survey", January, 1966.

or retained. Employers also consider the frequency and severity of the offence. Applicants who had committed sexual or assaultive offenses, or who had narcotics convictions are least likely to be considered for employment. Also, falsification of the application for employment usually results in rejection of the individual.

Parole officers engaged in seeking employment for offenders in the Terre Haute and Milan release areas stated that there has been diminishing resistance to offenders by employers in recent years, attributable in a large part to tightening of labor supply and the need for workers in many areas. However, difficulties in finding jobs for parolees still exist because of their lack of education and skills. The qualifications of offenders relative to positions available is a factor as it would be for any unemployed person.

Attitudes by some unions towards providing assistance to offenders is another deterrent to successful placement. Experience with industrial unions in large metropolitan areas has been somewhat more successful than that with craft unions. A concentrated effort by parole and employment placement officers to solicit union officials' cooperation in accepting an offender in apprenticeship program has had a limited degree of success.

(2) Bonding and Licensing

Bonding is a requisite in many clerical, sales, and commercial occupations. In some instances, however, employers who are reluctant to hire offenders use bonding as a scapegoat. Often qualified offenders are denied suitable employment because of blanket restrictions by bonding companies and by licensing laws. To overcome the bonding barrier, the Labor Department in 1965 initiated an experimental program to provide assistance to those

individuals whose prospective job requires bonding, but who are unable to obtain it through regular channels because of their records. To qualify for bonding, the job should offer reasonably full-time work, adequate wages and working conditions. Self-employed persons or persons working on a personal contract are not eligible.

Currently there are area bonding sponsors in Employment Security offices for the following areas within the commitment region: Metropolitan Detroit in Michigan; statewide in Illinois through the Chicago office; Lake County in Indiana through the Chicago office; Kansas City and St. Louis in Missouri; Akron, Cincinnati, Cleveland, Columbus, Dayton, Toledo, and Youngstown in Ohio.

Although they have had limited experience with utilizing the bonding service, parole officers indicated the existence of such a program in their area has helped to break down employers' "rationalization for rejection".

Discrimination against offenders is also found in regulatory and licensing laws relative to entry into employment activities related thereto. A survey in 1952 by the Council of State Governments indicated that there were more than 1200 occupational license laws in the states*. Occupations included range from the professions of medicine and law to such activities as those of guide-dog trainers and horse shoers. Many of the statutes require applicants to be of good moral character. Laws and regulations requiring evidence of moral character vary widely. The most common wording merely calls for evidence of good character, the interpretation of which lies with the licensing authorities. Occasionally, requirements like finger-printing, letters of personal recommendation, or demonstrated lack of a criminal record are specified.

* Occupational Licensing Legislation in the States, The Council of State Governments, June, 1952.

Applicants for occupational licenses may have to meet one or all of four different qualifications:

- Personal requirements of good moral character, minimum age and a minimum period of residence in the State (or receive training in the state).
- Formal educational requirements.
- Specified periods of service as apprentices or journeymen before full licenses are issued.
- Pass an examination.

These requirements vary widely among the states. Also, there does not appear to be a concensus about the training or skills required to practice a specific occupation. For example, to be licensed as a barber in Michigan, one must be 18 years of age, have an 8th-grade education and have had a 2-year apprenticeship in a barber school; in Indiana, the minimums are 17 years, 8th grade and 1-year registered apprenticeship; Illinois specifies 19-1/2 years, 10th grade, and 2-1/4 years registered apprenticeship.

In addition to licenses to practice a trade or profession, there are also many statutes requiring licensing of businesses of various types such as restaurants and taxicab companies. These licenses are issued to owners or prospective owners of businesses who meet requirements of personal fitness and good moral character without having to meet educational or experience qualifications or to pass occupational examinations.

While designed for the protection of the public, the number of practitioners is often unnecessarily limited by the licensing process. Each year many bills concerning the licensing of additional businesses and occupations such as Sanitariums, Television Installers and Repairmen, and Medical Technicians are introduced into state legislatures without due consideration of the dichotomy between consumer protection and the full utilization of available manpower.

(3) Public Employment

Successful placement of offenders with governmental agencies has been negligible and in most instances limited to short-term unskilled jobs. However, restrictive policies regarding the hiring of former offenders by local, state, and federal governments have been eased somewhat in the last year. In 1966, the U.S. Civil Service Commission revised the Federal employment policy so that employing agencies could accept applications from persons with records of criminal conviction and employ those considered "good risks". The standards are apparently based on individual evaluation of the applicant. The type of offense for which convicted and its relation to the type sought is a major consideration.

Nevertheless, leadership on the part of governmental agencies in employment of those with a criminal record has been notably lacking, and in fact, private employers when pressed to help rehabilitate an offender by giving him a chance often use government policy in justifying their refusal.

6. Management and Administration

(a) What is the overall staff organization for the management and administration of the E&T program?

The overall staff organization for the Terre Haute Penitentiary is shown in Figure 1. As can be seen, the organization of the various facets of the E&T program is diffuse. Academic Education, Vocational Training (Supportive), and Social Education are under the responsibility of Mr. List; Prison Industries is under the responsibility of Mr. Curley; Mr. Stiff has responsibility for the Work Release Program. Within this organizational framework, any on-the-job training that takes place in Prison Industries or Prison Maintenance falls under the responsibility of the men in charge of these functions.

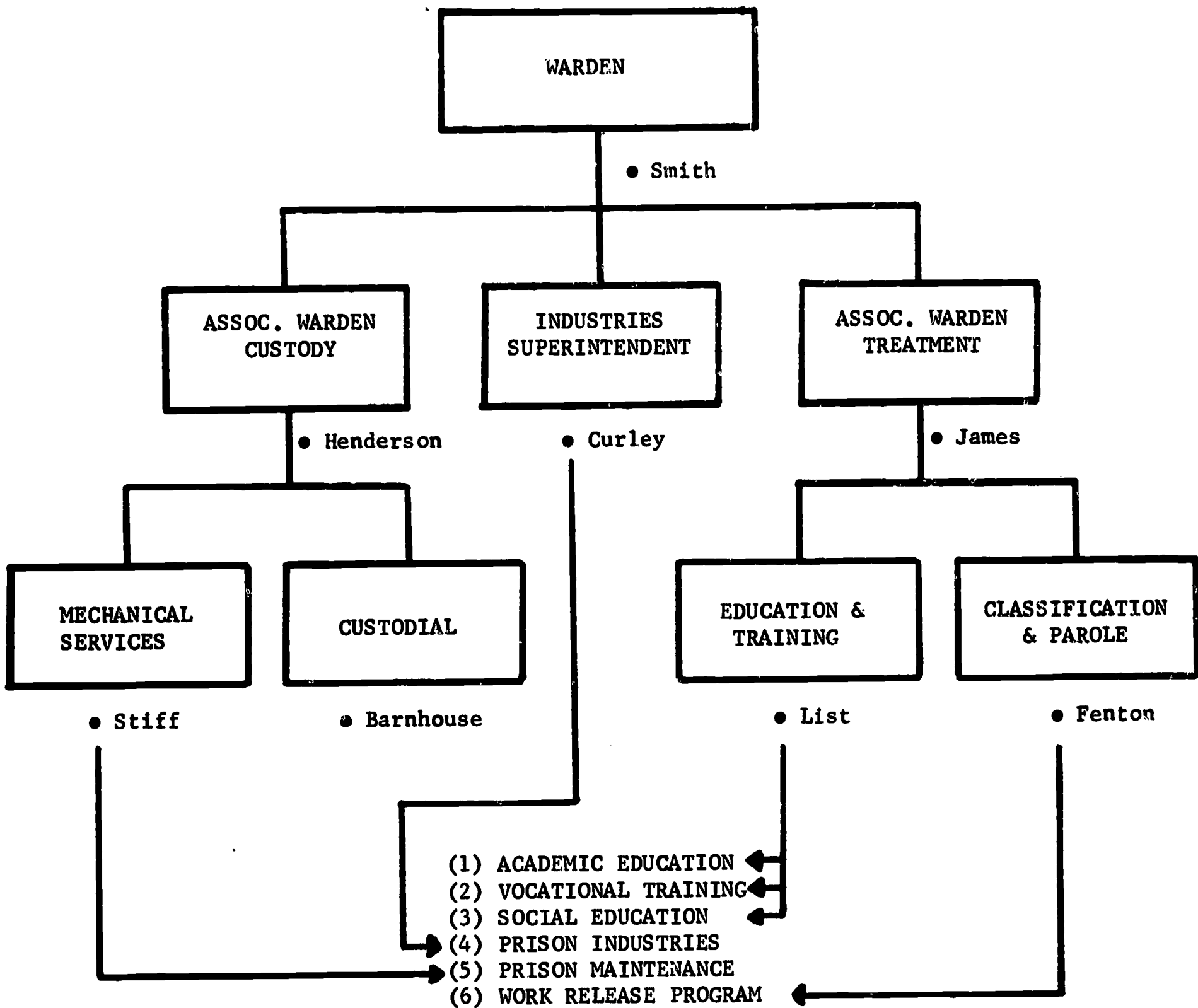


FIGURE 1. STAFF ORGANIZATION FOR MANAGEMENT OF E&T PROGRAM

(b) What is the nature of the planning function in the E&T system?

The planning function in the E&T system is conspicuously absent. The institution has very little in the way of a plan - either long-range or short-range. It appears that the present E&T system is the result of an evolutionary process: it has just developed over time with little direction being given to the developmental process. Staff members strongly agree that there is a need for a systematic plan to guide the E&T program. There appears to be some uncertainty, however, concerning who should be responsible for developing and implementing such a plan.

(c) What is the nature of the information-flow in the E&T system?

Inmates receive a fairly comprehensive briefing on the E&T program when they first enter the institution and during subsequent meetings with their case workers. The Terrescope, the institution newsletter prepared by inmates, contains items dealing with the E&T program.

The communication among staff members involved in the E&T program leaves much to be desired. Intra-Departmental communication is fair, but inter-Departmental communication is poor. For example, there appears to be very little communication between the staff members in the Education and Training Department and the staff members responsible for OJT in the Mechanical Services Department.

Another form of communication is that from the inmate to the staff. Here it is interesting to note that several of the inmates indicated that staff members are not very receptive to inmates' suggestions concerning the E&T program.

(d) What is the record-keeping procedure for the E&T program?

The primary record maintained on inmates in the E&T program is Educational Form No. 17. This form contains scores on standardized tests (intelligence, aptitude, and achievement) and all grades achieved in the education and training program.

One of the major weaknesses in the record-keeping procedure is that inmates post the scores and grades in the records. There appears to be a widespread feeling among the inmates and the staff that test scores and course grades can be "bought". A course grade might be worth one pack of cigarettes, whereas an IQ might go for two packs.

Another major weakness in the record-keeping system is that the data are not organized for quick retrieval. A considerable amount of effort is required to collect and organize data for even very simple statistical analyses.

Overall budget data for the E&T program are maintained (as was shown in Table 3), but detailed budget data for various programs are not readily available. In its present form, the record-keeping system is unsatisfactory for systematic analysis of cost/effectiveness data on education and training.

7. Classification and Placement

(a) What is the overall inmate classification procedure?

The major steps in the inmate classification procedure are listed in Figure 2. In the first step, the inmate is tested, given a physical examination, observed and counseled, and attends orientation lectures. He may be given temporary work during this period, which last 4-6 weeks. He is then classified, which takes into consideration: type of custody, living quarters, work assignment, treatment program, and possibility of transfer to another institution (see Table 4). He is next assigned in accordance with the decision made in the classification phase. Reclassification and reassignment may occur several times during an inmate's stay in the institution. (This may be based either upon the needs of the institution or the desires of the inmate.) Next, the man may be given an assignment toward release;

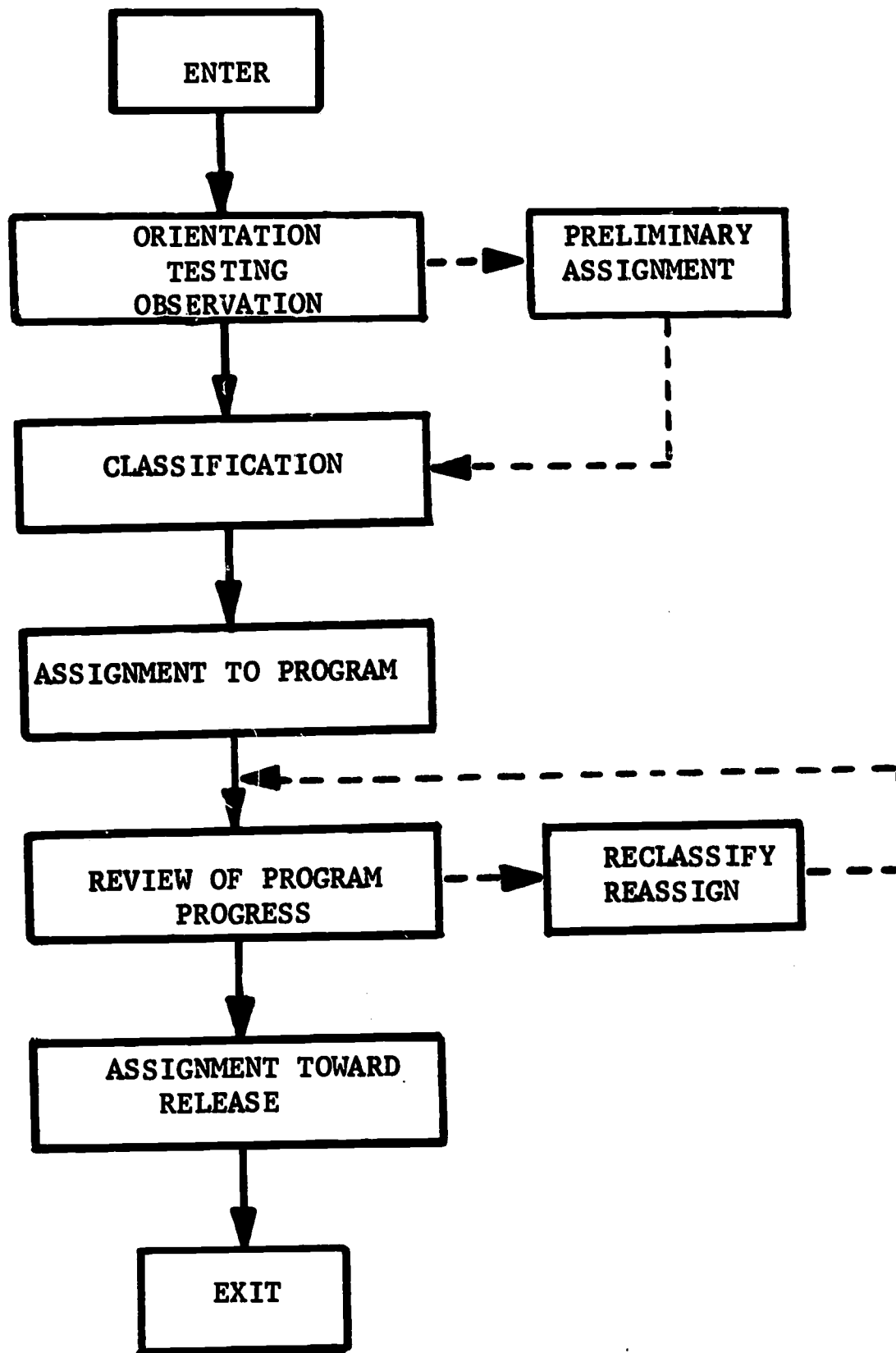


FIGURE 2. MAJOR STEPS IN THE CLASSIFICATION AND ASSIGNMENT SYSTEM

TABLE 4. DECISIONS MADE BY CLASSIFICATION BOARD

1. CUSTODY
 - (a) Close
 - (b) Medium
 - (c) Minimum
2. LIVING QUARTERS
 - (a) Dormitory
 - (b) Cell
3. WORK ASSIGNMENT
 - (a) Industries
 - (b) Maintenance
 - (c) Farm
4. TREATMENT PROGRAM
 - (a) Vocational
 - (b) Academic
 - (c) Social Education
 - (d) Alcoholics Anonymous
 - (e) Narcotics Program
5. TRANSFER
 - To a more suitable institution?

this may be minimal custody on the prison farm or the work release program. Then, finally, the inmate leaves the institution, which may be under any of these conditions; (1) dismissed by court, (2) parole, (3) conditional release, or maximum release.

(b) What methods are used to assess the capabilities of the inmates entering the E&T program?

The primary assessment of inmate capabilities takes place at the time of admissions. This activity includes: review of work history of the inmate, interview, case study, a 4-6 week observation period, and psychological tests. The tests, administered by the Education and Training Division, include: the Stanford Achievement Test, the General Aptitude Test Battery, standardized diagnostic tests in math and English, and the Revised Beta for assessing general intelligence.

Probably the greatest weakness in the testing program is the lack of staff personnel for administering and scoring the tests. This job, by and large, is delegated to the inmates. Consequently, many people--staff and inmates alike--question the authenticity of the test scores.

(c) What is the rationale and procedure for assigning an inmate to a given course of instruction?

The inmate generally has considerable latitude in his choice of a course of instruction. The case worker reviews the inmate's capabilities and presents alternative programs that would be reasonable for him. Sometimes, however, an inmate may have to wait a period of several weeks or months for a given course of instruction to open if it already has its quota of trainees.

Some important criteria considered in assigning an inmate to a program are the type of custody required by the inmate, the needs of the institution, and the needs of the individual.

The decisions are generally made in this sequence, but exceptions can be made in individual cases on the basis of the type of treatment believed to be best for a given inmate.

The individual case worker is very influential in determining the assignment for a given inmate. As might be expected, there are significant individual differences among case workers; one may give top priority to the needs of the inmate, whereas another may give greater weight to the needs of the institution. The classification procedure is set up in such a manner, however, to permit the Classification Committee to override the recommendation made by the case worker.

A given inmate may participate in a variety of rather divergent education or training programs during the time he is serving his sentence. This permissive situation has the advantage of allowing the inmate a voice in the decisions that influence him, but it has the disadvantage of not producing much depth in any particular area.

- (d) To what extent are present and predicted job opportunities in the free community introduced into the classification and assignment function?

Very little consideration is given to present and predicted job opportunities for offenders in the free community. This is a major deficiency throughout the entire education and training system.

8. Instructional Staff

- (a) What is the overall organization of the instructional staff?

The staff organization in the Education and Training Division is presented in Figure 3. It should be noted that this Division operates independently of Prison Industries and Prison Maintenance.

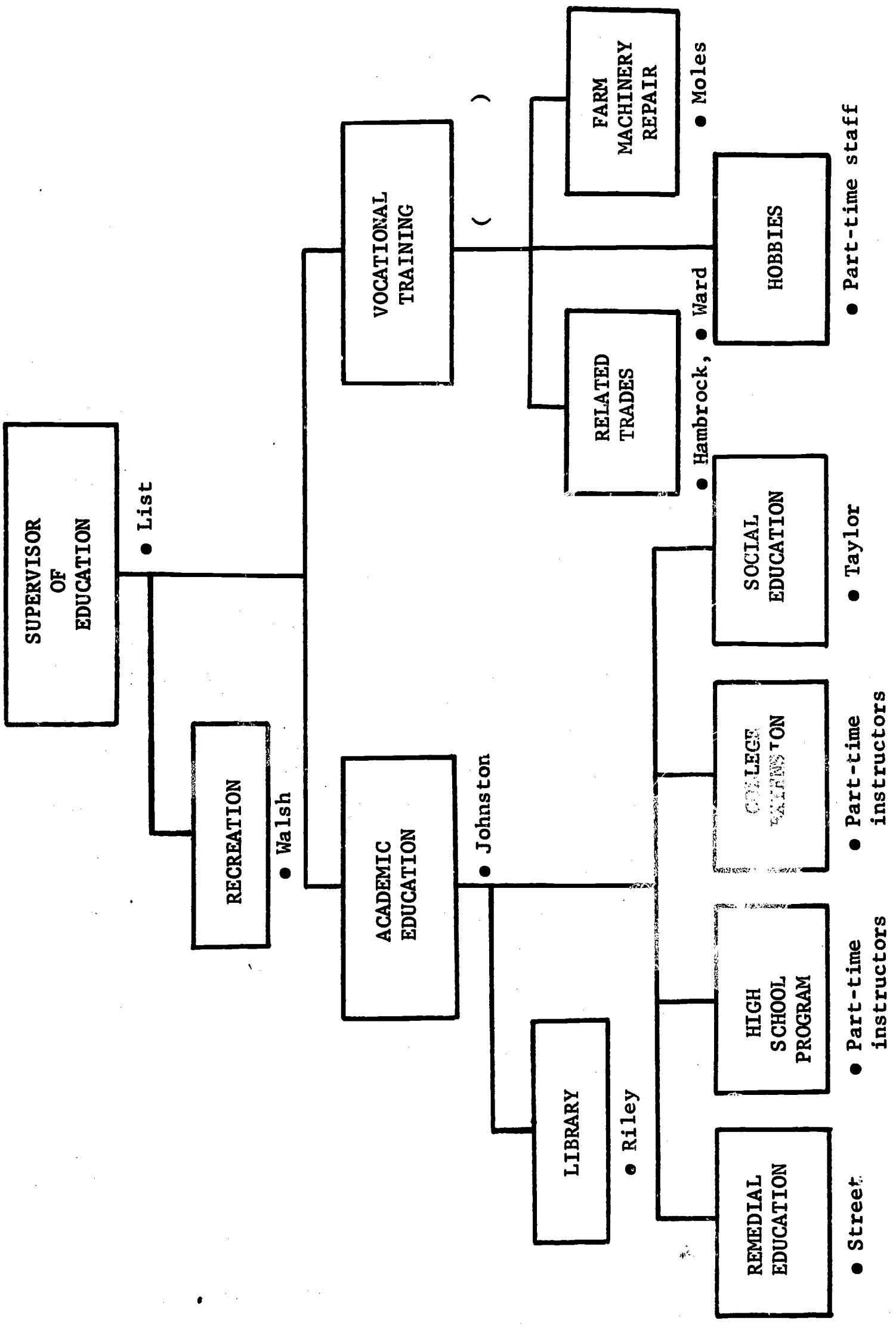


FIGURE 3. ORGANIZATION OF THE INSTRUCTIONAL STAFF

(b) What are the job responsibilities of the instructional staff?

The weekly schedule for full-time instructional staff is shown in Exhibit 1*. A detailed analysis of the duties and responsibilities of four full-time staff members is presented in Exhibit 2. It should be noted that these four staff members together are able to spend only 37 man-hours per week in the classroom, which is approximately 25% of a 40-hour work week.

(c) What are the qualifications of the instructional staff?

The overall qualifications of the instructional staff may be summarized as follows:

- The full-time instructional staff members vary in ability and interest from very good to very poor.
- Supervisors in Prison Maintenance have limited qualifications for providing systematic on-the-job training.
- In general, the part-time instructors from Terre Haute appear to be very competent.
- Inmate instructors typically are unable to assume full responsibility for organizing and conducting a course of instruction.
- There is an obvious lack of specialized instructional personnel in the area of social education.

(d) What methods are used for quality control of staff performance?

The standard Civil Service evaluation procedure is used for quality control of staff performance. Supervisors complete rating forms on each staff member on an annual basis and conduct a discussion-type evaluation on a semi-annual basis. Consideration is given to these factors: (1) Quality of work, (2) Quantity of work, (3) Supervisory skills, (4) Technical ability, and (5) Expression and communication.

Notably lacking from the quality-control procedure is any systematic observation and evaluation of the instructor's classroom (or shop) performance. This deficiency is especially critical with regard to inmate instructors, who receive little, if any,

* All Exhibits are included in Appendix B.

feedback on their performance. Moreover, shop supervisors are merely "checked on" to see if they give the scheduled weekly lecture; again, no systematic evaluation is provided. An evaluation form was designed for the purpose of evaluating the shop instructor's performance, but apparently the form is not used in any systematic manner.

(e) What is the nature of the program for staff training and development?

There is no systematic program for staff training and development. When funds permit, however, staff members are able to participate in such programs as the following:

- Correctional Conference at Southern Illinois
- Correctional Workshop at Eastern Michigan
- Indiana State University for refresher courses in the summer.
- Extension Service at Indiana State University that provides instructor training for shop supervisors.

The staff members apparently do have sufficient funds for purchasing books in their fields of specialization. They have commented favorably on this policy.

9. The Education and Training Program

(a) What is the overall organization of the education and training program?

The components of the E&T program are shown in Figure 4. Academic education, vocational training, and social education provide the foundation for acquiring job skills and useful employment. Prison Industries and Prison Maintenance are intended to provide employment for inmates as well as on-the-job training. The Work Release program is designed to help the inmate make the transition from prison to successful employment in the free community.

**TRANSITION
TRAINING**

**ON-THE-JOB
TRAINING**

FOUNDATIONS

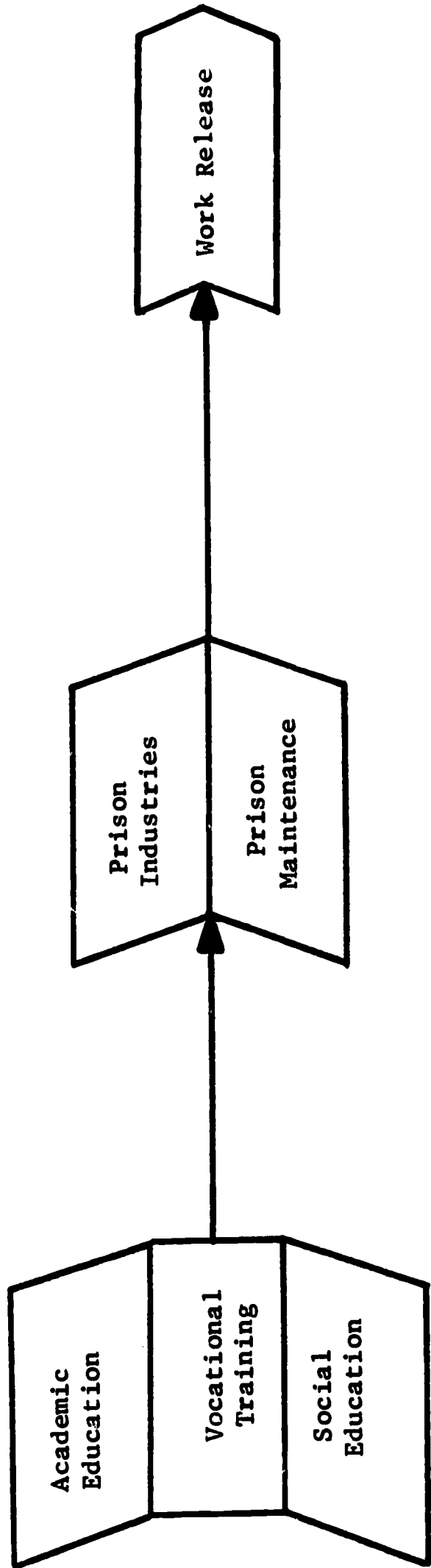


FIGURE 4. COMPONENTS OF THE EDUCATION AND TRAINING PROGRAM

The general objectives of these various facets of the E&T program are:

- (1) Academic Education - To provide the high school certificate or to upgrade the inmate's general academic ability as much as possible within the time constraints of the situation.
- (2) Vocational Training (supportive) - To provide the knowledge needed for performing vocational skills.
- (3) Social Education - To change basic attitudes and to provide understanding of human relations, mental health, money management, marriage and family relations, and community responsibility.
- (4) Prison Industries has three objectives:
 - To make a profit,
 - To provide employment for inmates, and
 - To provide meaningful training for inmates.
- (5) Prison Maintenance has three objectives:
 - To operate and maintain the institution,
 - To provide employment for inmates, and
 - To provide meaningful training for inmates.
- (5) Work Release Program - is designed to help inmates make the transition from prison to their home community. Moreover, it is viewed as a means for evaluating the effectiveness of the other aspects of the E&T program. The program allows the inmate to go into the community without escort; he works in the community during the day and returns to the institution at night.

(b) What is included in each major aspect of the E&T program?

(1) Academic Education

- Remedial math and remedial reading and grammar for grades 1-8 (see Exhibit 3)
- A full high school curriculum (see Exhibit 4)
- Selected college courses at the freshman level.

(2) Vocational Training (supportive)

- Blueprint Reading
- Basic Electricity
- Related Shop Mathematics
- Measuring Devices
- Basic Metals
- Basic Drafting

(See Exhibit 5)

(3) Social Education

- One course in Mental Health taught in Fall semester
- One course in Money Management to be taught in Spring semester.

(4) Prison Maintenance

Provides limited OJT in these areas:

- Auto Shop
- Electric Shop
- Farm Machinery Repair*
- Machine Shop
- Paint Shop
- Sheet Metal Shop
- Steamfitters
- Welding Shop
- Woodworking Shop

(The operations that are supposed to be covered in these OJT Shop Classes are listed in Exhibit 6.)

(5) Prison Industries:

Although the OJT associated with Prison Industries is completely unstructured and void of any systematic approach, inmates acquire limited skills by beginning at the bottom and working their way up the ladder. Prison Industries is involved in the production of blankets, towels, duffle bags, and plastic furniture. In the textile mill, experience is provided in these areas:

*Farm Machinery Repair is directly under the supervision of the E&T Supervisor, but in actual operation is similar to the on-the-job training shop class.

- Dyeing
- Blending
- Carding
- Spinning
- Weaving
- Finishing

(6) Work Release Program:

The Work Release Program is designed primarily for "adaptation" and "adjustment" rather than for training in the usual sense of the word. Typically, a man is hired for a job for which he is qualified; hence, it is assumed that no skill training is required. Sometimes an employer will provide a minimal amount of on-the-job training to make the man more effective in his work.

(c) What methods of instruction are used in the E&T program?

The methods of instruction used in the various parts of the program are listed below:

- Audio-visual aids
- Buddy system (a senior inmate helps a new inmate learn a particular skill)
- Demonstration
- Discussion
- Lecture
- Programmed Instruction

(d) What materials and equipment are used in the E&T program?

(1) Academic Education - Remedial Math and Grammar:

- Conventional textbooks (see Exhibit 7)
- Commercially produced programmed materials
- Refresher math textbooks
- Readers Digest Skill Builder for teaching reading

(2) Academic Education - High School Program:

- Regular textbooks used by Indiana State Department of Education

(3) Vocational Training - (supportive):

- Regular textbooks used by Indiana State Department of Education
- Additional supplementary texts (see Exhibit 8)
- Appropriate materials for drafting, blueprint reading, etc.)

(4) OJT Shop Training:

- The tools and farm equipment used in Farm Machinery Repair appears to be up-to-date
- Instructors in some of the other courses state that their materials and equipment are outdated. (The inmates with apparent knowledge in particular trades support this claim.) The instructors also state that it is very difficult to obtain up-to-date instructional materials and equipment.

(5) OJT in Prison Industries:

- No materials and equipment are available for training.
- Supervisory personnel at Prison Industries expressed a need for simulation-type equipment for use in training. It was indicated, for example, that it would be very desirable to train a loom operator without tying up the equipment in the mill.
- Some of the inmates interviewed complained that there were no textbooks available to help them learn about their jobs.

(e) What is the system for class scheduling?

The majority of the educational courses are given during the evening; this includes the high school program, the college program, and some of the vocational training. Many of the remedial courses and vocational training courses, however, are given during the day. The educational program was set up for the evenings so that operations in Prison Industries and Prison Maintenance would not be disrupted.

A common complaint among education and training personnel is that E&T gets very little "prime time" in the institution. A number of the inmates also indicated that E&T always "takes a backseat" to Prison Industries and Prison Maintenance when it comes to scheduling the inmate's daily activities.

(f) What are the incentives for learning?

Some of the incentives that motivate inmates to participate in the E&T program are:

(1) Desire for early parole

Many of the inmates want to have a record of good adjustment in order to get paroled as soon as possible; they want to impress the Parole Board. They believe that one way to do this is to demonstrate a desire for self-improvement through participation in the E&T program.

(2) Desire for employment in the free community

A number of the inmates appear to realize the importance of attaining job skills if they are to stay out of prison. These people appear to be serious in their desire to acquire basic job skills and to improve their academic performance.

(3) Award of certificate of accomplishment

Terre Haute awards a high school certificate and a vocational training certificate for successful completion of required courses. Moreover, graduation exercises are held in the institution, with friends and relatives of the graduates being invited to the ceremony. These awards serve to motivate some of the inmates.

(4) To obtain a job in the institution

Some of the inmates indicate that they enrolled in an education or training program in order to acquire a particular job in the institution. One man, for example, stated that he learned to type so that he could get a clerical job in Prison Industries, which offered "pretty good pay".

(5) Desire to keep busy

Some of the inmates indicated that they were participating in the E&T program simply to keep busy. They work during the day and go to school at night in order to "pull their time" better.

(g) How many men are enrolled in each course of instruction?

(1) Number of men enrolled in OJT shop training*:

<u>Area</u>	<u>Number</u>
(A) Auto Mechanics	10
(B) Electric Shop	19
(C) Farm Machinery Repair	16
(D) Machine Shop	4
(E) Paint Shop	4
(F) Plumbing Shop	12
(G) Sheet Metal Shop	4
(H) Steamfitters	3
(I) Welding Shop	6
(J) Woodworking Shop	7
Total	<u>85**</u>

(2) Number of men enrolled in academic program:

<u>Program</u>	<u>Number</u>
(A) Literacy School	7
(B) Junior and Senior High	220
(C) College Resident Program	30
Total	<u>257</u>

(3) Number of men enrolled in social education: 23

* These figures were obtained during October, 1967, at which time the inmate population was approximately 1200.

** This includes men taking VT courses in the Supportive Education Program.

(h) What are the characteristics of the men enrolled in the E&T System?

The purpose of this phase of the analysis was to determine if the inmates enrolled in the educational program differed on certain dimensions from the general prison population. Data were collected on all prison admissions between July 1, 1966, and June 30, 1967.

Of the total 609 admissions during the period, 124 enrolled in the educational program (62 in the elementary and junior high program and 62 in the high school program). Therefore, the 124 participants are not compared to nonparticipants, but to the total inmate population including participants and non-participants.

The comparison between E&T participants and the general inmate population is made on these factors:

Figure 5. Comparison on Length of Sentence

Figure 6. Comparison on Age

Figure 7. Comparison on Education

Figure 8. Comparison on IQ

Figure 9. Comparison on Stanford Achievement Test

Figure 10. Comparison on Occupation

When the results of the comparison between participants and the general inmate population is analyzed, it is important to be mindful of the fact that only 20.36% of the general inmate population participates in the educational program. Significant deviations from the mean participation rate are more important than the absolute percentages.

When the comparison was made on the length of sentence received, it was discovered that almost none (2.59%) of the inmates with less than 2 year sentences participate. The largest participation is by inmates with 11-15.9 year sentences (53.57%). The trend shows the participation percentage ($\frac{\text{number participating}}{\text{ttl. number of inmates}}$) to be directly related to the length of sentence received.

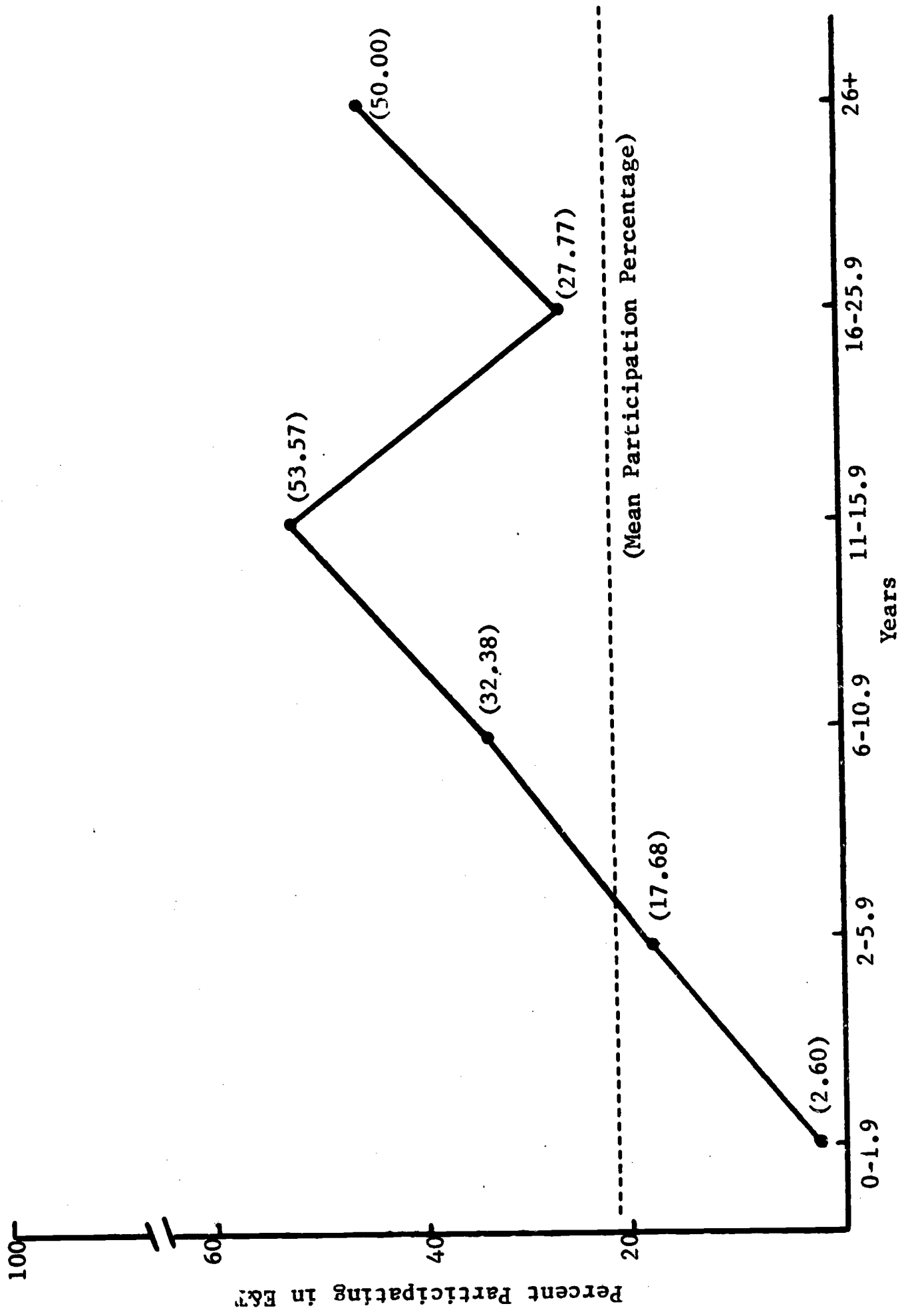


FIGURE 5. COMPARISON ON LENGTH OF SENTENCE - TERRE HAUTE

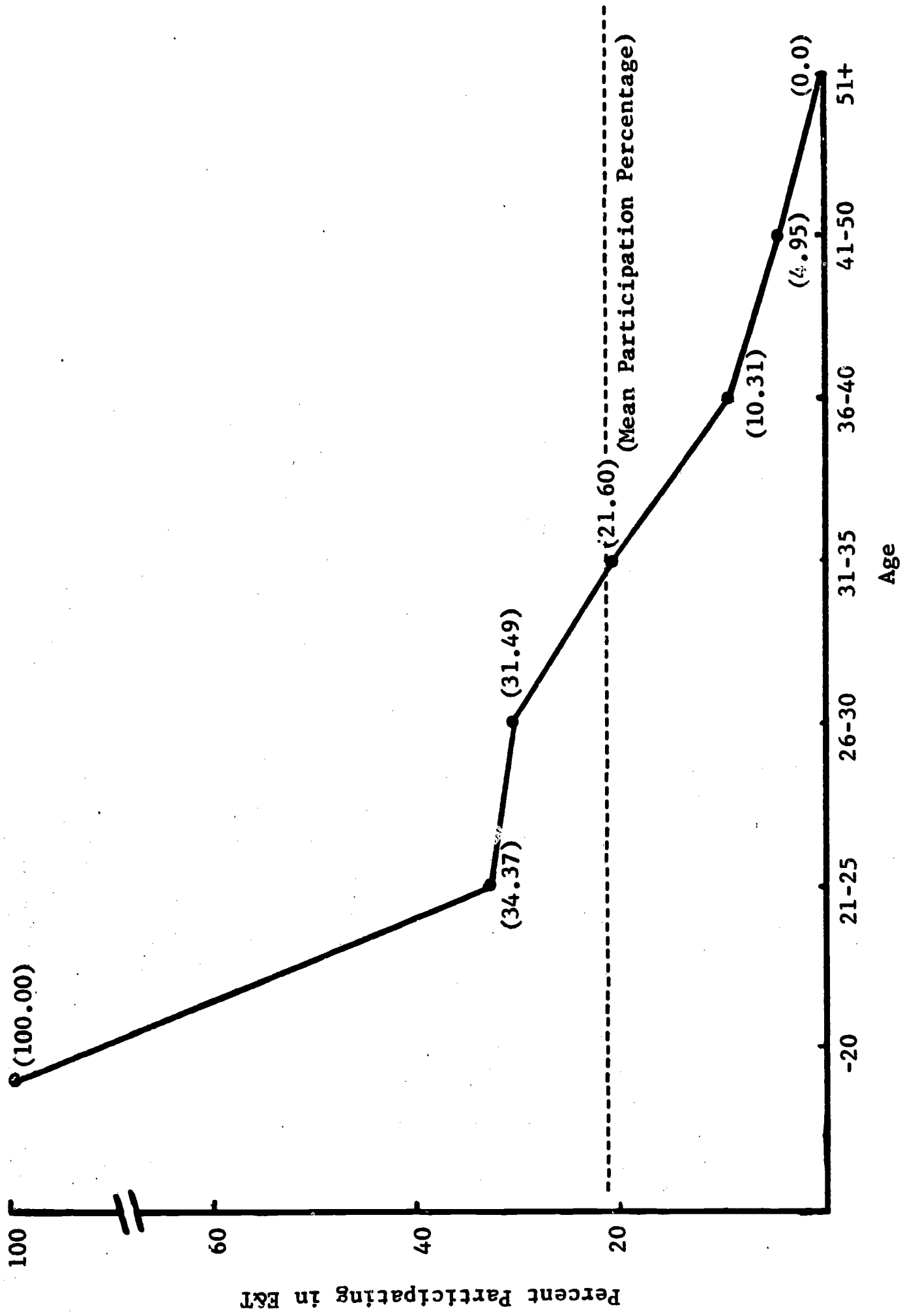


FIGURE 6. COMPARISON ON AGE - TERRE HAUTE

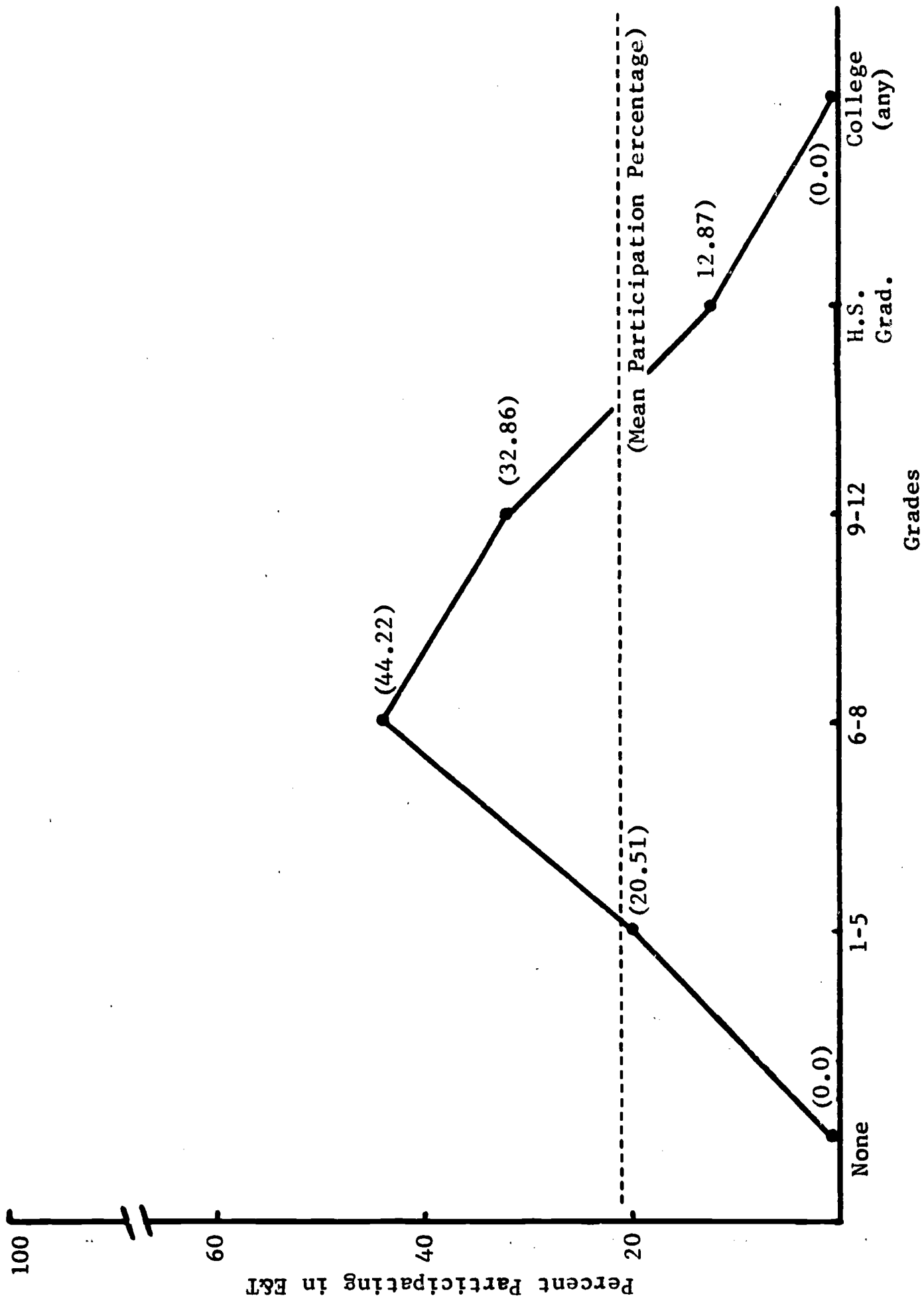


FIGURE 7. COMPARISON ON EDUCATION - TERRE HAUTE

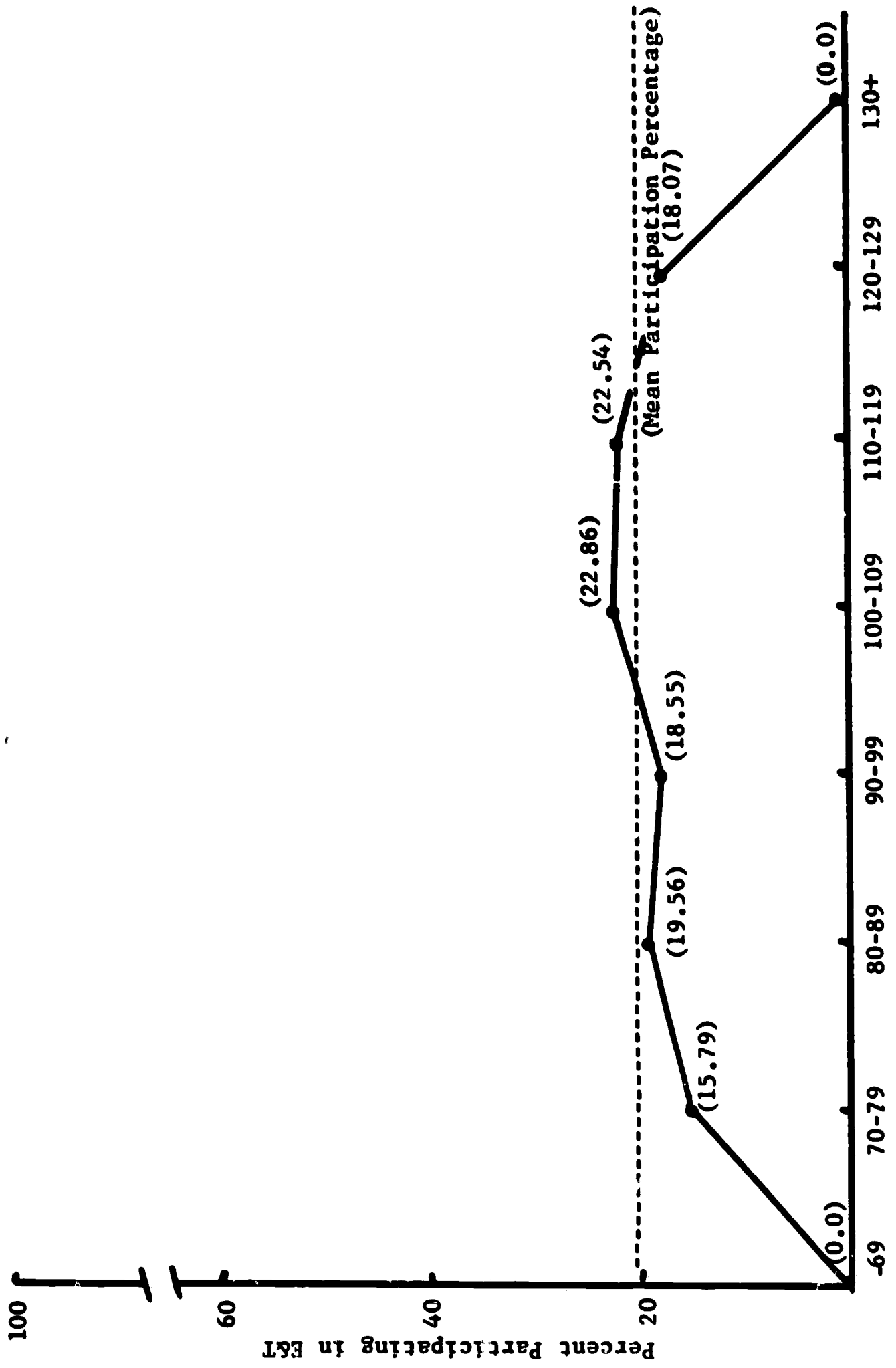


FIGURE 8. COMPARISON ON I.Q. SCORE - TERRE HAUTE

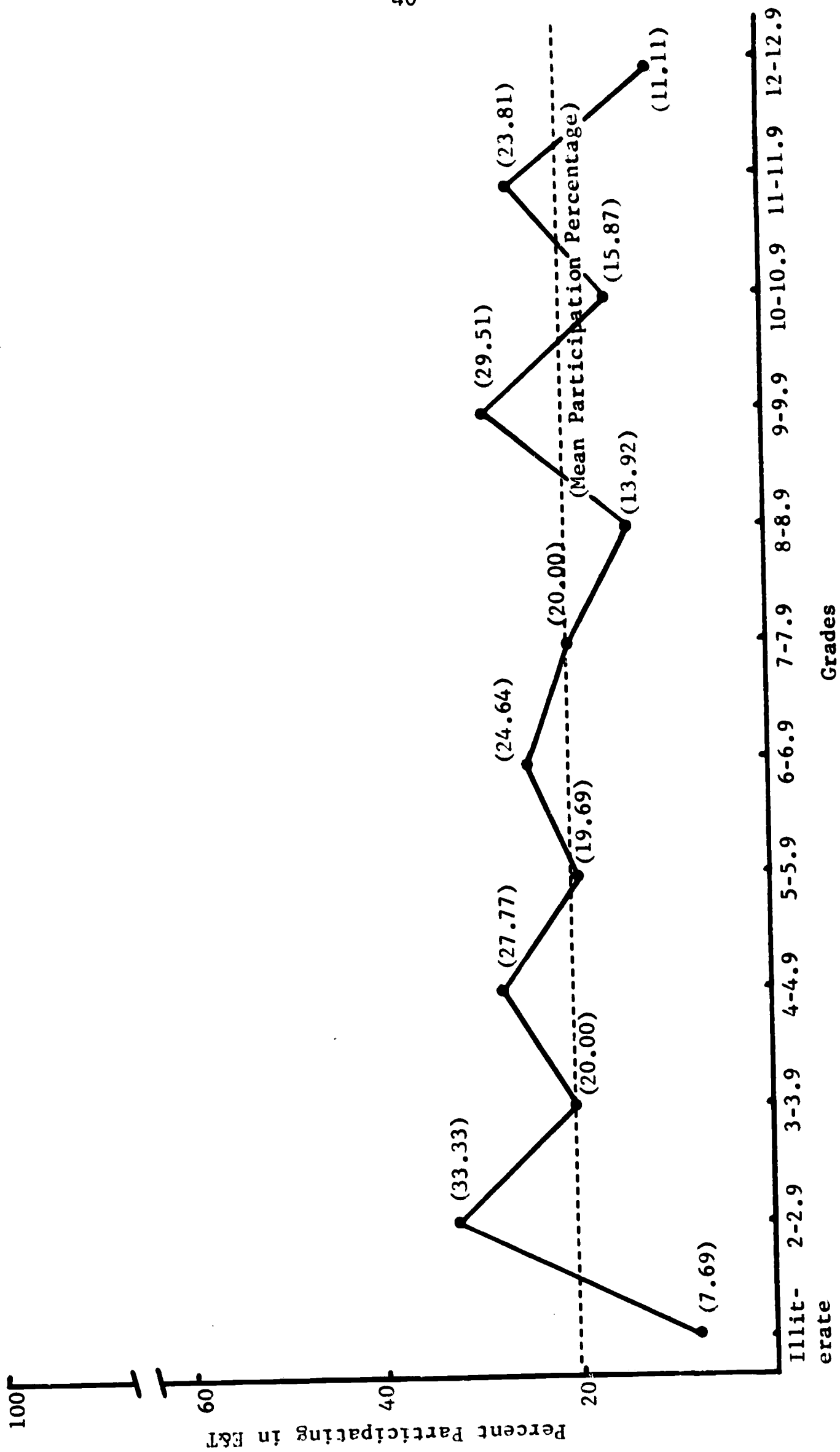


FIGURE 9. COMPARISON ON STANFORD ACHIEVEMENT TEST - TERRE HAUTE

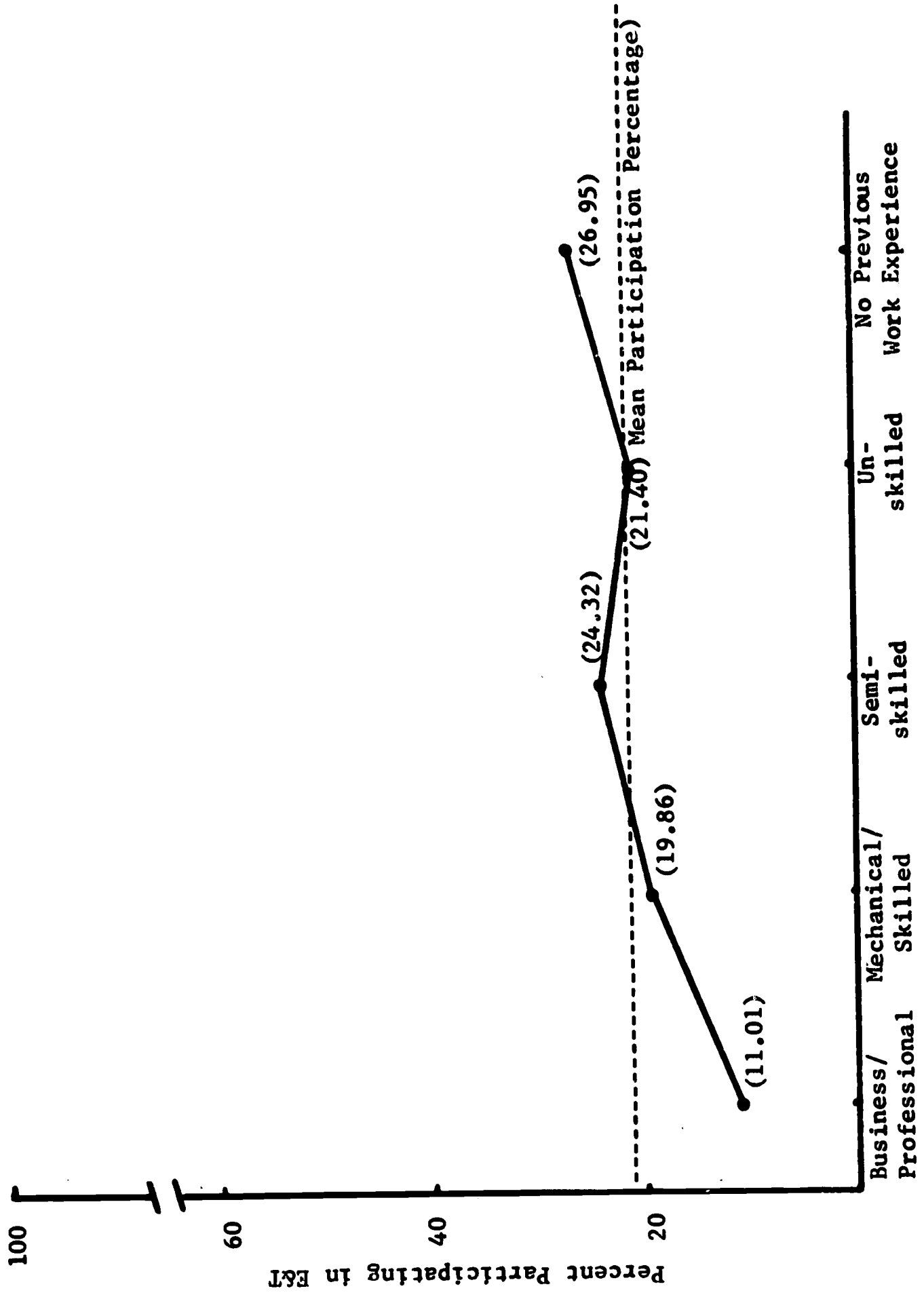


FIGURE 10. COMPARISON ON OCCUPATION - TERRE HAUTE

When participants were compared with the total inmate population on age, it was discovered that the participation percentage was inversely related to age. All of those under 20 years old participate, and one third (34.37%) of those in the 21-25 year old group participate. The percentage decreases with each age group to a low of 4.95% for the 51+ year olds.

Although the comparison of participants and the total inmate population on education failed to reveal a linear trend, a definite pattern did emerge. The data formed an inverted U-shaped curve, with maximum participation in the groups of inmates with 6-8 (44.22%) and 9-12 (32.86%) years education. There was no participation by inmates with no formal education nor by those with any college training. Of all inmates with a high school diploma, only on-half the average rate participated (12.87%).

The comparison on IQ scores demonstrated that while there were no participants in either the -69 or the $130+$ groups, participation in all other groups ranged from 15.79% for the $70-79$ group to 22.86% for the $100-109$ group, with no significant deviations from the 20.36% mean. In general, though, the participation percentage for those with above average IQ scores is higher than for those with below average IQ scores (21.61% vs. 17.24%).

The data contrasting participants and the total inmate population on SAT^{*} scores shows no discernible trend or pattern. As on the IQ comparison, the two extreme groups -1.9 and $12.9+$ have poor participation percentages--7.69% and 11.11%, respectively. Other deviations from the mean participation percentage of 20.36 include highs in the $2-2.9$ (33.33%) and $9.9.9$ (29.51%) groups and lows in the $8-8.9$ (13.92%) and $10-10.9$ (15.87) SAT score groups.

Occupational comparison of participants and the total population shows a rough trend of an inverse relationship between participation percentage and occupational level.

* Stanford Achievement Test

Although it is apparent that significant differences between participants and the total inmate population are limited, several limited conclusions are allowable. In general, participants have sentences in excess of six years, are 30 years or younger, do not have a high school diploma, have IQ scores in the 80-119 range, have semi-skilled, unskilled, or not previous work experience, and except in specific subgroups do not differ with nonparticipants on SAT scores. For a perspective on the overall levels of education of the free community, the total correctional population, and the Terre Haute population, see Table 5.

It is important to bear in mind the descriptive nature of the comparisons of participants and the total inmate population in the educational program. It is dangerous to infer causal relations between any dimension and participation or to overlook the interdependency of the dimensions. It is entirely possible that participation is a function of some variable or variables not explored here.

TABLE 5. COMPARISON OF EDUCATIONAL LEVELS

Level of Education	General* Population	Total Correctional* Population	Terre Haute
College (any)	17.8%	5.3%	5.42%
High School	48.2%	40.0%	50.91%
Elementary	34.0%	54.7%	43.67%

*Persons aged 25-64.

NOTE: Information used in Table 5 was drawn from (1) The Task Force Report on Corrections, p. 2, and (2) information provided by the Terre Haute staff.

10. Methods of Evaluating E&T

(a) What methods are used to measure the accomplishment of E&T objectives?

Methods used for measuring the accomplishment of E&T objectives include the following:

- (1) Academic Education - paper-and-pencil tests, Stanford Achievement Test
- (2) Vocational Training (Supportive) - paper-and-pencil tests, performance tests
- (3) Social Education - no tests are administered; course grade is based upon class attendance
- (4) OJT in Prison Maintenance - progress reports on inmates are completed by instructors on a monthly basis. A fairly comprehensive evaluation is made by the instructor at the end of the training period. (This covers the operation listed in Exhibit 6.)

(b) What methods are used to assess the degree to which E&T satisfies the need for which it is designed?

As stated in the first part of this analysis, the need to be satisfied by education and training is to equip the inmate to earn an honest living in the free community; to help him become a productive member of society. Unfortunately, the institution has absolutely no idea how well this need is being satisfied. There is no method of follow-up to ascertain what happens to the men after they leave the institution. Consequently, within the present organization of the E&T system, there is no method for evaluating the ultimate effectiveness of the E&T program.

Any available follow-up data are obtained in an incidental manner. Some offenders, of course, return to one of the Federal institutions. These are the recidivists, the "failures". Then, on the positive side, some men, after returning to the free community, will write a letter of gratitude to tell a staff member that the training he was given in the institution helped him obtain a very good job. These might be considered the "successes". Unfortunately, this is practically the extent of any follow-up data on the effectiveness of the E&T program.

(c) What data are available for measuring the cost-effectiveness of the E&T program?

One very crude measure of effectiveness of the E&T program is the number of men participating in a meaningful education and training program compared to the total inmate population. Using this measure, the effectiveness index for the academic program is calculated to be:

$$\text{E.I.} = \frac{257}{1200} = .21$$

The effectiveness index for vocational training is:

$$\text{E.I.} = \frac{85}{1200} = .07^*$$

This obviously is only a very rough approximation of E&T effectiveness; it is only an "indicator". Nevertheless, it does provide some idea of the percentage of inmates being reached by the E&T program.

A second measure of effectiveness is the ratio of number of men completing a course of instruction/number of men beginning a course of instruction. In the vocational training program for the 1966-67 fiscal year, for example, there were 47 completions out of a total of 89 participants. This gives an effectiveness index of 53%. (See Exhibit 9). The reasons for the dropouts are given in Exhibit 10.

* This figure is actually inflated, inasmuch as a considerable amount of the vocational training would not be considered meaningful.

To assess the efficiency of the E&T program, rough measures of cost-effectiveness could be obtained by calculating the amount of expenditure per inmate participating in the E&T program. These figures are not readily available, however. One reason for this is that the actual financial support for E&T is derived from more than one budget. The Education and Training Division, for example, has a budget (ref. Table 3), but the funds for covering the time of the shop instructors spent in OJT is derived from their own operating budgets. Even with these difficulties, it would seem that a little searching and thinking might produce some meaningful figures for assessing the cost/effectiveness of the education and training program.

11. Summary Evaluation of the E&T System

A summary evaluation of the E&T system is presented in Table 6 on the following pages. The Table includes all of the major items discussed in the analysis. Each item is evaluated on a five-interval scale: Very Poor - Poor - Fair - Good - Excellent. The rating was completed by the Project Director (William Hitt) on the basis of the total body of information collected during the course of the study. It should be noted that this summary rating tends to over-simplify a very complex situation - but should provide a useful overview of the problems and opportunities found in the present education and training system.

TABLE 6. SUMMARY EVALUATION OF THE TERRE HAUTE E&T SYSTEM

ITEM	Very Poor	Poor	Fair	Good	Excellent
1. NEED					
Clearly stated need for E&T					X
2. OBJECTIVES					
(a) Clearly specified E&T objectives			X		
(b) Objectives specified in measurable terms		X			
3. ENVIRONMENT					
(a) Staff attitudes toward E&T			X		
(b) Inmate attitudes toward E&T			X		
(c) Relation between E&T and job demands in the institution	X				
4. RESOURCES					
(a) Availability of funds		X			
(b) Availability of personnel		X*		X**	
(c) Availability of facilities			X		
(d) Additional E&T opportunities for inmates		X			
(e) Availability of incentives			X		
5. CONSTRAINTS					
(a) Available time for participating in E&T		X			
(b) Potential use of meritorious pay and good time				X	
(c) Availability of jobs in free community			X		

* Full-time personnel

** Part-time personnel

TABLE 6. (Continued)

ITEM	Very Poor	Poor	Fair	Good	Excellent
6. MANAGEMENT AND ADMINISTRATION					
(a) Effectiveness of overall staff organization for E&T	x				
(b) Systematic planning for E&T	x				
(c) Communication about E&T			x		
(d) Record-keeping procedures		x			
7. CLASSIFICATION AND PLACEMENT					
(a) Reasonableness of classification and placement				x	
(b) Appropriateness of assessment methods				x	
(c) Use of relevant manpower data	x				
8. INSTRUCTIONAL STAFF					
(a) Reasonableness of job responsibilities		x			
(b) Competency of staff			x		
(c) Methods of quality control			x		
(d) Staff training and development		x			
9. EDUCATION AND TRAINING PROGRAM					
(a) Logic of program organization				x	
(b) Academic Education				x	
(c) Vocational Training (supportive)			x		
(d) Social Education	x				
(e) OJT - Prison Maintenance		x			
(f) OJT - Prison Industries	x				
(g) Work Release Program				x	
(h) System for Class Scheduling		x			
(i) Incentives for Learning			x		
10. METHODS FOR EVALUATING E&T					
(a) Appropriateness of student evaluation			x		
(b) Availability of follow-up information	x				
(c) Availability of cost-effectiveness data		x			

THE ANALYSIS: MILAN

THE ANALYSIS: MILAN**1. The Need**

The primary function of the Federal Correctional Institution at Milan is the correction, care, and custody of the young adult offender. This institutional function is directed toward returning the offender to the free community as a contributing member of society.

The role of education and training in the overall institution function is to provide the academic, vocational, and social programs necessary to ensure the offender's capability to function as a contributing member of society.

2. Objectives**(a) What are the objectives of the E&T program?**

The stated objectives of the education and training program are:

- To help the inmate perceive himself as a contributing member of society.
- To strengthen the man's positive feelings about himself.
- To develop success experiences in the learning environment.
- To provide an atmosphere for acquiring vocational skills.

These objectives are not specified in terms of observable behaviors; therefore, determining when they have been achieved is extremely difficult. Furthermore, it is obvious that other "implicit" objectives do exist for the E&T program. Most of the statements presented in sections (b) and (c), below, apply to these unstated objectives.

(b) What is the minimum acceptable performance for demonstrating successful accomplishment of E&T objectives?

The minimum acceptable performance with regard to vocational training is entry-level job skill. The goal is to give the man enough technical skill to obtain a job at the entry level; it is assumed that he can attain a higher degree of skill after he begins

work. With respect to social adjustment, ability to adequately cope with everyday problems constitutes minimum acceptable performance.

(c) What observable acts are accepted as evidence that the learner has achieved the objectives?

Observable acts that provide evidence of the inmate having achieved the objectives of the education and training program include the following:

- Performance on written tests in the classroom (including both instructor-made tests and standardized achievement tests).
- Demonstration of skill on performance tests in the vocational training shop.
- Demonstration of job skill in carrying out work assignments both in the V.T. shop and on work release.
- Demonstration of social adjustment by caring for personal needs and quarters, by displaying good work and study habits, and by absence of conflicts with staff and other inmates.

3. Environment

What are the environmental conditions under which learning takes place in the institution?

Some of the environmental factors that have a significant influence on the education and training program are described below:

- Change in mission

Currently, Milan is in a transition from an adult F.C.I. to a youth and young offenders institution.* This changeover in mission has created somewhat of a state of flux in the institution. New staff members, new courses of instruction, new facilities, and a different

* As a result of this transition, the mean age of inmates has dropped from 30.5 to 21.5.

population of trainees are now in the education and training system. Consequently, the E&T program is just in the process of being developed; it has not yet "arrived".

- Conflict between E&T and job requirements

Utilizing current scheduling procedures results in major conflicts between E&T and the day-to-day institutional requirements. For example, Prison Industries and E&T objectives clash when men periodically interrupt their jobs during the day to participate in the educational program. The resulting inefficiency also harms E&T inasmuch as certain E&T programs depend on Prison Industries profit. Prison Maintenance and E&T objectives clash when men on a work detail interrupt their assignments to attend class. While the men benefit by E&T the institution is failing to achieve one of its objectives-- care of inmates.

- Staff attitudes

A third significant environmental factor is the attitude of the staff toward education and training. It is apparent that the Warden, the Associate Warden, and other key staff members give the education and training program their full support. This support has a considerable influence on the effectiveness of the entire program.

- Inmate attitudes

In general, the attitude of the inmates is fairly favorable toward E&T. This is especially true with regard to vocational training. A reasonably large percent of the inmates in V.T. report they are attempting to acquire a job skill for use upon release.

4. Resources

(a) What funds are available for operating the E&T program?

Funds for operating the E&T program are derived from normal prison operating expenses and from profits generated by Prison Industries. The normal operating budget supports the education program, and profits from Prison Industries support vocational training. Any unusual construction or remodeling expenses are supported by the Bureau of Prisons.

The institution's annual operating budget for fiscal 1967-68 was \$1,692,500. An abbreviated statement of operation for Prison Industries and the budget for education and training for this same time period are presented in Table 7 and Table 8, respectively.

(b) What personnel are available for conducting the E&T program?

The institution has an unusually good supply of part-time personnel to call upon in carrying out its education and training program. Milan F.C.I. makes considerable use of part-time personnel from nearby education institutions, including Eastern Michigan University, the University of Michigan, the Washtenaw Community College, and the public school system in Milan. These personnel include college and university professors, high school teachers, graduate students, and undergraduate college students preparing for careers in education.

The situation with regard to full-time instructional personnel, however, is rather dim. The Milan F.C.I. salary schedule allows beginning teachers only \$5565 for 12 months, whereas the Detroit public school system pays \$6600 and above for 9 months. This disparity in beginning salaries obviously creates a major recruiting problem. Thus, while the availability of a part-time instructional staff members is very good, the availability of well-qualified full-time staff members is far from satisfactory.

TABLE 7. ABBREVIATED STATEMENT OF OPERATIONS FOR
PRISON INDUSTRIES

(Fiscal 1966-67)

Item	Amount
Total Net Sales	\$2,100,655
Net Cost to Manufacture	1,343,073 (Inmate salaries = \$44,564)
Net Profit	764,638*
Distribution of Earnings:	
. Vocational Expense	66,114
. Meritorious Compensation	14,125
Balance of Earnings	684,173

* The figures in this table do not balance because of the omission of items of no interest to this study.

TABLE 8. BUDGET FOR EDUCATION AND TRAINING
(Fiscal 1967-68)

Item	Amount
Education Salaries	\$ 69,100
Education Supplies	5,500
Part-time Fees	10,000
Eastern Michigan University	10,000
University of Michigan	5,000
Maintenance & Operations	<u>5,000</u>
Subtotal	\$104,600 (provided by general budget)
V.T. Salaries	67,700
V.T. Operating Expenses	20,000
V.T. Maintenance & Operations	<u>61,200*</u>
Subtotal	\$148,900 (provided by Prison Industries)
Grand Total	\$253,500

*To purchase equipment and materials for new V.T. buildings.

(c) What facilities are available for carrying out the E&T program?

The facilities at Milan are crowded. The institution is designed to care for 550 inmates; during November there were 603.

The facilities for general education are extremely crowded. There are only five general-purpose classrooms and a small library to accommodate the entire academic program. The budget for a new \$300,000 general education building was just approved in November. Completion of this structure should solve most of the problems associated with crowded conditions in the general education program.

Existing facilities for vocational training are much more favorable than those for general education. The institution has just constructed a new V.T. building, which has space for five or six different individual shop areas. Materials and excellent equipment are now being added. The facility should be fully operational within the next several months.

Limited facilities for individual study and tutoring are available. Ninety-two inmates live in a Student Honor Center that has individual cells. Most of the inmates, however, live in large dormitory-type rooms with absolutely no privacy.

(d) What additional education and training opportunities are available to inmates?

An additional educational opportunity for inmates is centered in the study-release program. This program is designed for minimum-custody inmates who desire to attend nearby colleges to take courses for college credit. During the Fall quarter, 8 inmates were taking courses at Eastern Michigan University and Washtenaw Community College. Eastern Michigan offers academic and business courses, and Washtenaw offers academic, business, and vocational courses.

(e) What incentives are available for motivating an inmate to participate in the E&T program?

Some of the major incentives that motivate inmates to participate in the education and training program are:

- A strong indication that participation in E&T will influence the Parole Board's decision about an individual case.
- Meritorious pay that is used in selected cases to reward performance in E&T along with other forms of behavioral adjustment.
- Private living quarters in the Student Honor Center are used to reward good overall adjustment along with participation in the E&T program.
- Participation in the V.T. program which some inmates view as a reasonably easy and interesting way to serve a portion of their sentence. This may be especially true in the auto mechanics program where there is considerable inmate interest as indicated by the long waiting list.

5. Constraints

(a) How much time is available for inmates to participate in E&T?

The average length of sentence for inmates at Milan is 16-18 months. Some men, of course, are incarcerated for five years or more, while others are in the institution for as little as six months. Conceivably, an inmate could spend the duration of his sentence in the education and training program. Realistically, however, two factors influence the real time available. Most inmates will actually serve only a fraction of their sentence before being granted parole. Other inmates are sentenced under the Youth Correction Act (5010B), which has an indeterminate sentence.

The following sample distributions illustrate the divergence between time sentenced and time actually served.

TABLE 9. SAMPLE DISTRIBUTION OF TIME SENTENCED

Time Sentenced	Number of Inmates	Percentage
Under 1 year	1	1
1 - 2.9 yrs.	31	28
3 - 4.9 yrs.	16	15
5 - 6.9 yrs.	56	51
Over 7 years	$\frac{5}{109^*}$	$\frac{5}{100}$

TABLE 10. SAMPLE DISTRIBUTION OF ACTUAL TIME SERVED

Actual Time Served	Number of Inmates	Percentage
Under 1 year	25	23
1 - 1.9 yrs.	67	61.5
2 - 2.9 yrs.	11	10
Over 3 years.	$\frac{6}{109^*}$	$\frac{5.5}{100}$

* This represents a 20% random sample of the total inmate population

On a daily basis, men assigned to Prison Maintenance or Prison Industries are required to be on their jobs for 7-8 hours per day, five days per week. Some of these men are given permission to leave their jobs for 1-2 hours each day to participate in the daytime educational program. Men involved in the vocational training program are assigned to the V.T. shops for 1/2 of each day and to class for 1/2 of each day, five days per week. The evening high school program is open weeknights to all men who qualify.

- (b) What constraints are imposed upon the use of meritorious pay and good time for rewarding performance in E&T?

Traditionally, meritorious pay has been used in selected instances to reward an inmate's overall adjustment; performance in the E&T program was one factor taken into consideration in this evaluation but not the only factor. Recently, however, funds have been made available for the sole purpose of rewarding performance in E&T. Good time is not authorized for men committed under the Youth Act; however, meritorious pay is available.

For a statement of official constraints on the use of meritorious pay and good time see the Terre Haute analysis, pages 12-13.

- (c) What types of jobs in the free community are usually closed to offenders?

A fairly good sample of the job opportunities available to offenders released from Milan F.C.I.--at least in the Detroit area--is illustrated in the Work Release Program. Approximately 40 men were on Work Release during November--and more could have been placed in jobs had the men been available. The employers apparently have a favorable attitude toward hiring inmates; some employers state that the inmates are more dependable than the typical man hired "off the street". Therefore, it would seem

that there is considerable opportunity for offenders from this geographical area to obtain useful employment in semi-skilled and unskilled jobs.

For a discussion of the jobs probably closed to the offender see page 19 of the Terre Haute analysis.

6. Management and Administration

(a) What is the overall staff organization for the management and administration of the E&T program?

The overall staff organization for the management and administration of the Milan F.C.I. is presented in Figure 11. As can be seen in the organizational chart, the responsibility for the various facets of the E&T program is diffuse. The Supervisor of Education is responsible for General Education, Vocational Training, and Social Education. Any on-the-job training taking place in Prison Industries is under the supervision of the Superintendent of Industries, and OJT in Prison Maintenance is under the supervision of the Chief of Mechanical Services and the Food Service Administrator. The Chief of Classification and Parole is responsible for the Work Release program.

(b) What is the nature of the planning function in the E&T system?

The planning function in the E&T system is rather limited. During recent months, primary emphasis has been placed on developing new courses of instruction to "get things rolling", rather than systematically planning an overall E&T program. To a great extent, the E&T program is designed to meet the needs of the inmates. In a number of instances, however, courses have been added because either: (1) a staff member or consultant thought it was a good idea or (2) a number of inmates requested that the course be taught.

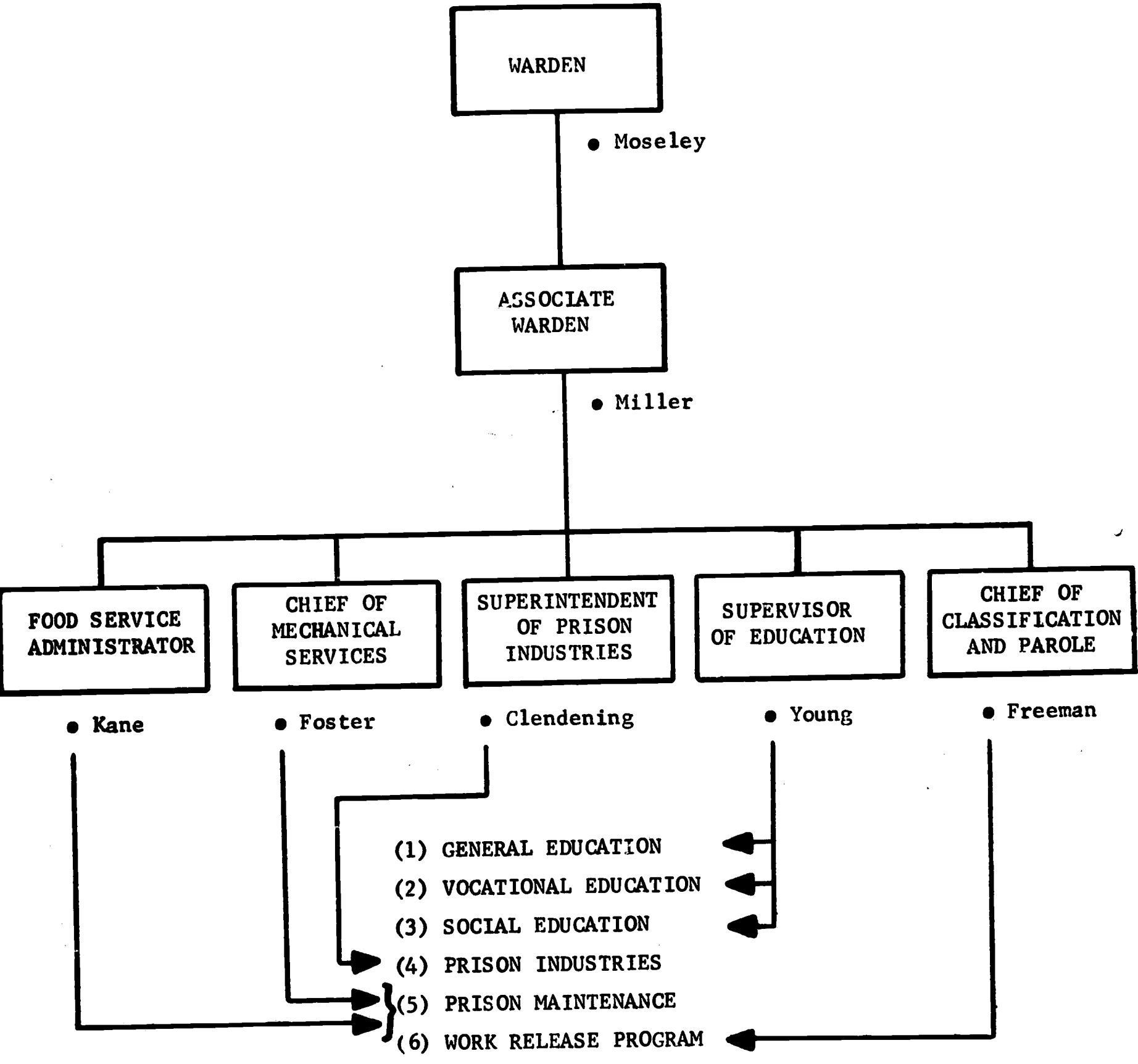


FIGURE 11. STAFF ORGANIZATION FOR MANAGEMENT OF E&T PROGRAM

(c) What is the nature of the information-flow in the E&T system?

Inmates receive a briefing on the E&T program from their case workers and education advisors when they first enter the institution. After the inmate is classified and assigned, however, he seems to have much less contact with his case worker as well as with other staff members. As a result, his overall understanding of the overall E&T program is sharply curtailed.

New developments in the E&T program are sometimes communicated through the grapevine. As might be expected, the inmates often hear conflicting information via this informal channel. A case in point is the recent introduction of new vocational training courses. Inmates state that on one day they hear a given course will begin in a couple of weeks, but the following day they hear that it may be several months before the course will commence.

Several staff members indicated that communication about E&T could be improved across Departments. This inter-departmental communication obviously is important, inasmuch as there must be close coordination among all aspects of the E&T program--including general education, vocational training, on-the-job training, and Work Release.

(d) What is the record-keeping procedure for the E&T program?

The record-keeping procedure for the E&T program is simple and straightforward. Individual records are maintained for each participant in the E&T program. These records include all scores on standardized tests (intelligence, aptitude, and achievement) and performance evaluations or grades for each E&T course taken. These records are available to case workers and other staff members upon request.

7. Classification and Placement

(a) What is the overall inmate classification and placement procedure?

The inmate classification and placement procedure at Milan is centered around a team classification system. According to a policy statement issued by the Warden*: "The purpose of the Team Classification system is to more effectively bring all available forces to bear upon, and to more efficiently coordinate all efforts toward, the accomplishment of the primary mission of the institution ... In essence the classification 'Team' replaces the traditional three committees: classification, sub, and disciplinary. As the term would imply, it is a team of staff members selected, located, organized, and functioning in such a manner as to provide maximum guidance of the offender toward the accomplishment of established goals. Further, it will serve as an information center for all personnel involved in the performance of their duties as regards the inmate ... Each Basic Team consists of a Case Worker, a Senior Officer Specialist, and an Education-Vocational counselor."

The major steps in the classification and assignment system are shown in Figure 12. Admission and orientation lasts only 3 days. The inmate is then assigned to a Team Unit and given a temporary job assignment. After 21 days, the case-work analysis is completed and the inmate is assigned to a specific program. After another 60 days, there is an automatic review of the inmate's progress, at which time a decision is made by the Team to either modify the program or continue the program as is.

(b) What methods are used to assess the capabilities of inmates entering the E&T program?

The initial evaluation and diagnosis of the inmate is made during his first three weeks in the institution. During this period of time, a number of different methods are used for the purpose of obtaining comprehensive information about the inmate. Methods include: interview, observation, review of past education and work records, and testing. Tests include the Stanford Achievement Test, the General Aptitude Test Battery, and the Revised Beta.

* MM 70001.2, "Team Classification -Milan", January 9, 1967.

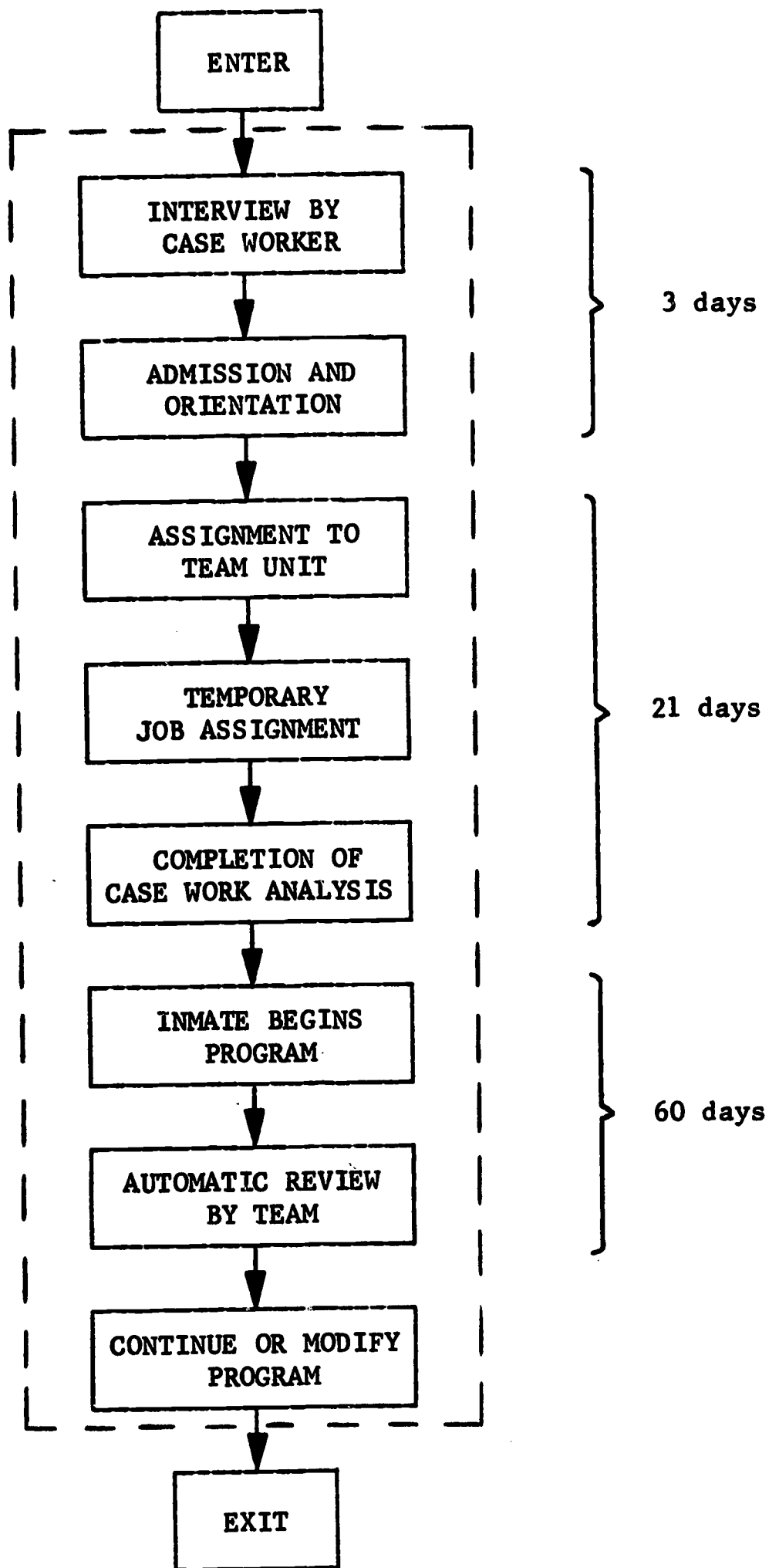


FIGURE 12. MAJOR STEPS IN THE CLASSIFICATION AND ASSIGNMENT SYSTEM

- (c) What is the rationale and procedure for assigning an inmate to a given course of instruction?

The inmate is assigned to a given program by the Unit Team. This program covers both the work assignment and the E&T assignment. These assignments are based upon several considerations: class openings, desires of the inmate, the Team's recognition of the individual's needs, and needs of the institution. Participation in the evening program is voluntary, whereas participation in the day program is compulsory.

- (d) To what extent are present and predicted job opportunities for offenders in the free community introduced into the classification and assignment function?

It was indicated that Department of Labor statistics were used to guide the selection of skill areas for vocational training. This information, however, apparently is not used to any great extent in the classification and assignment function.

8. Instructional Staff

- (a) What is the job responsibilities of the instructional staff?

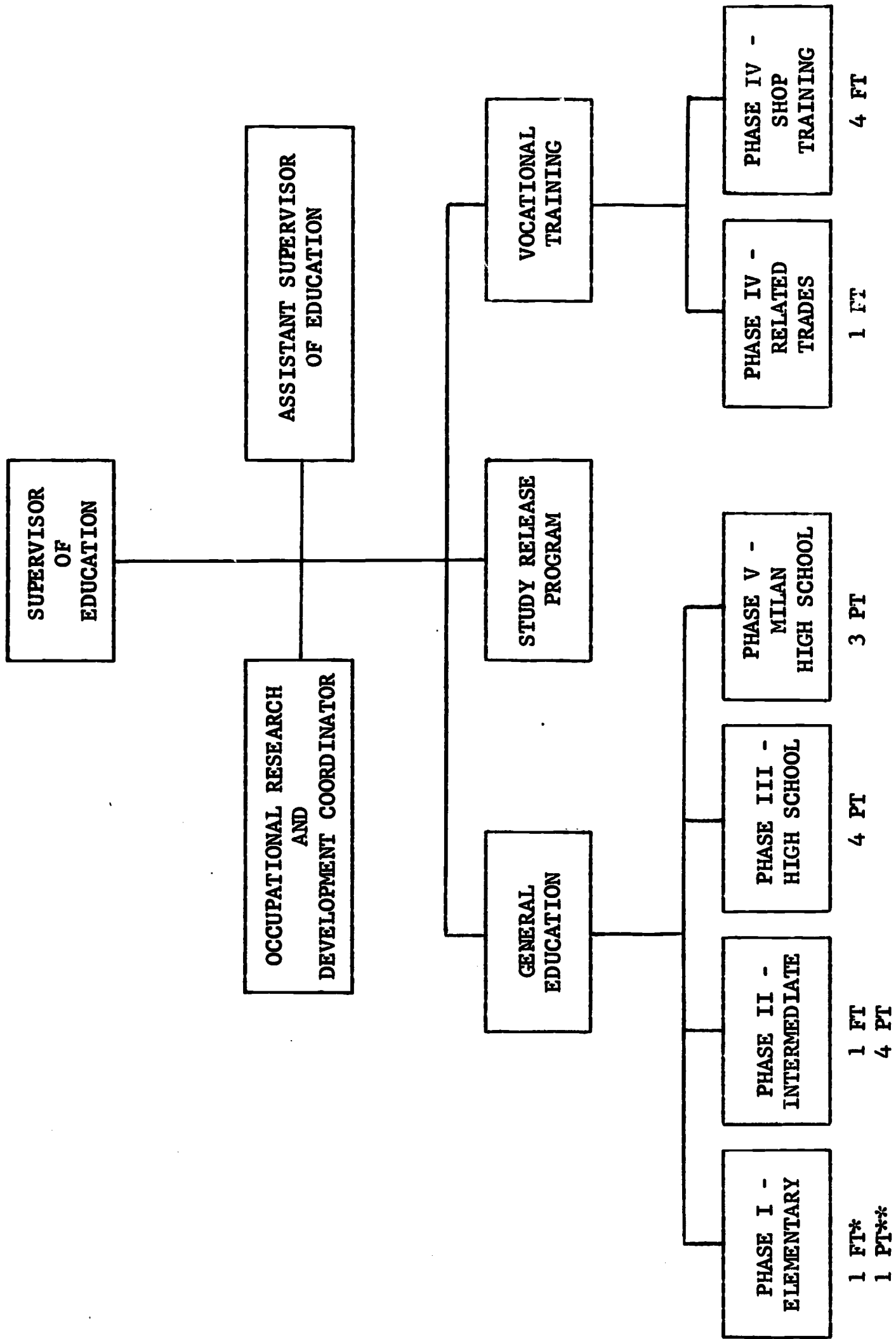
The overall staff organization for the Education and Training Division is shown in Figure 13. General Education is taught by both full-time and part-time staff; Vocational Training is carried out by full-time staff only; and the Study Release Program involves staff at nearby colleges, with the Supervisor of Education providing the coordination.

- (b) What are the job responsibilities of the instructional staff?

The job responsibilities of the instructional staff are presented in Exhibit 11.

- (c) What are the qualifications of the instructional staff?

A summary description of staff qualifications is given in Exhibit 12. Included here are: current position, experience, and education.



* Full-time.
 ** Part-time.

FIGURE 13. ORGANIZATION OF INSTRUCTIONAL STAFF

A subjective assessment of the staff was compiled through interviews with them, observation of their performance in the classroom, and interviews with inmates participating in the E&T program. This assessment pointed up the wide variation in the ability of the instructional staff--from outstanding to very poor. It is apparent that some of the instructors are doing exceptional work, others are unqualified for their positions, and still another group delivers substandard performance in spite of their apparent qualifications. This latter group appears to be "doing time" along with the inmates.

The most important characteristics that seem to distinguish the effective instructor from the ineffective is enthusiasm for the course content and the ability to get student involvement. The effective instructor is able to motivate the students to participate actively while the ineffective instructor merely has a group of bodies sitting in his class.

(d) What methods are used for quality control of staff performance?

One major method used for quality control of staff performance is the standard Civil Service evaluation procedure. A written evaluation is completed on each full-time staff member by his supervisor on a periodic basis. Consideration is given to these five factors: (1) quality of work, (2) quantity of work, (3) supervisory skills, (4) technical ability, and (5) expression and communication. This evaluation is reviewed with the staff member and then recorded in the employee's personnel folder.

There is considerable opportunity to observe teacher performance in the general education program. All of the classrooms are centered around the Education Supervisor's office and are surrounded by large windows. Shop training takes place in a different building, however, so it is necessary to visit this locale for the purpose of observing teacher performance.

(e) What is the nature of the program for staff development and training?

There is no systematic plan for staff development and training. When funds permit, however, staff members are encouraged to participate in conferences and professional workshops that are relevant to their work. For example, the workshop on the application of PPB* to corrections has been found to be relevant to E&T management.

9. The Education and Training Program

(a) What is the overall organization of the education and training program?

The components of the E&T program are shown in Figure 14. Because social education is considered to be an integral part of each of these components, it is not shown as a separate area of instruction.

The general objectives of the different parts of the E&T program are:

(1) General Education - to develop success experiences in the learning environment and to strengthen the man's positive feelings about himself. The General Education program is divided into these phases:

- Phase I : SAT level from 0 to 6.0
- Phase II : SAT level from 6.0 to 9.0
- Phase III: Area A - SAT level from 9.0 and above
Area B - Low SAT but high potential
- Phase V : Milan Night High School program
- Study Release: Inmates are permitted to leave the institution to attend classes at Eastern Michigan University and Washtenaw Community College.

(2) Vocational Training - to provide entry-level skills in the areas of auto mechanics, masonry, machine shop, and small engine repair. Vocational Training (Phase IV) is divided into two parts:

* Planning, Programming, and Budgeting

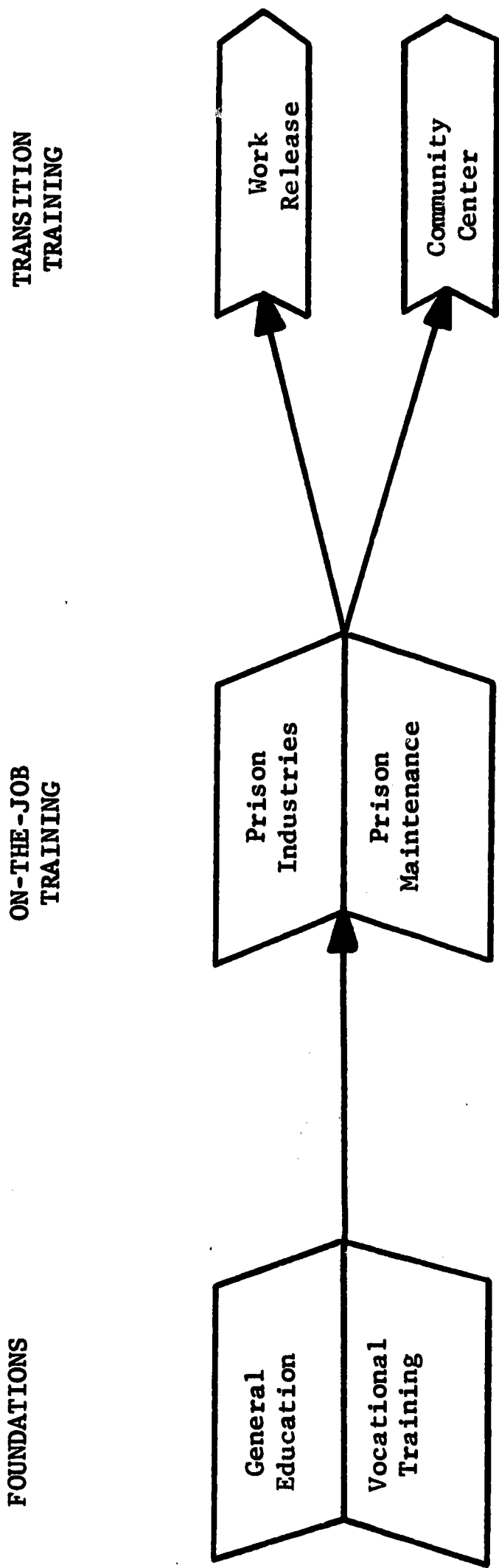


FIGURE 14. COMPONENTS OF THE EDUCATION AND TRAINING PROGRAM

- Related Trades - programmed instruction in specific areas supportive of skill training.
- Shop Training - skill training.

(3) Prison Industries:

- To provide employment for inmates,
- To provide useful training for inmates, and
- To make a profit.

(4) Prison Maintenance:

- To operate and maintain the institution,
- To provide employment for inmates, and
- To provide useful training for inmates.

(5) Work Release - is designed to help the inmates make the transition from prison to their home communities. The inmate works in the community where the institution is located but returns to the institution at night.

(6) Community Center - sometimes called the "half-way house", it also is designed to help inmates make the transition from prison into the free community. In this case, the Community Center is located near the inmate's place of release. The inmate works in the community and may visit family and relatives during the day, and then returns to the Center in the evening.

(b) What is included in each major aspect of the E&T program?

(1) Academic Education includes:

Phase I : Grammar, Reading, Math, Social Studies, Science.

Phase II : Same courses as Phase I, but Literature replaces Grammar and Reading.

Phase III: Area A - Basic Psychology, Creative Writing, Modern Literature, Speech and Dramatic Art, and Pre-college Orientation.

Area B - Modern math.

Phase V: (Milan High School Program):

English Grammar, American Literature, English Literature, General Math, Algebra, American Government, U.S. History, Economics.

(2) Vocational Training (Phase IV) includes:

- **Related Trades** - Dupont programmed instruction in areas related to Mechanics, Masonry, Machine Shop, and Small Engine Repair.
- **Shop Training** - Skill training in Auto Mechanics, Masonry, Machine Shop, and Small Engine Repair.

(3) Prison Industries:

Provides limited on-the-job training in the metals industry. This involves the assembly-line production of beds, wall lockers, and stationery drawers for desks. Experiences is provided in these areas:

- **Welding**
- **Painting**
- **Press operator**
- **Shipping and packing**
- **Machine shop**
- **Clerical.**

(4) Prison Maintenance:

Provides limited on-the-job training in these areas:

- **Food service**
- **Electrical maintenance**
- **Plumbing**
- **Masonry**
- **Carpentry**
- **Sheetmetal**
- **Welding**
- **Drafting**

- Auto mechanics
- Landscaping
- Boiler fireman
- Painting
- General construction
- Clerical
- Laundry
- Janitorial
- Library
- Orderlies in hospital.

(5) Work Release Program:

Is designed for adaptation and adjustment to the free community--rather than for skill training per se. Any training received in the classical sense of the term is incidental to the overall mission.

(6) Community Center:

(Essentially the same as Work Release)

(c) What methods of instruction are used in the E&T program?

Methods of instruction used in the education and training program include the following:

- Lecture
- Discussion
- Demonstration and practice in shop training
- Projects in shop training
- Programmed instruction
- Films and visual aids
- Buddy system (in OJT and shop training)

All of these methods appear to play a meaningful part in the overall E&T program. There is no argument concerning one method versus another, but the job is to select those particular methods that appear to be most appropriate for a given instructional requirement.

(d) What materials and equipment are used in the E&T program?

Textbooks and programmed materials used in the general education program are listed in Exhibit 13. Equipment, textbooks, and programmed materials used in vocational training are listed in Exhibit 14.

(e) What is the system for class scheduling?

The class schedule for the General Education program is presented in Exhibit 15. It can be seen that the majority of the courses are given during the daytime hours, with the Milan High School program and a few selected courses being offered during the evening. All of the shop courses are taught during the normal daytime hours.

A major scheduling problem is created for the staff as a result of the continuous turnover of students. An inmate may enter the E&T system at any time, and he may leave the system at any time.

It is important to point out that a number of the inmates participating in Phase I and Phase II programs complained about being allowed to attend class for only one hour per day. They stated that they needed considerably more time than this to achieve any significant improvement in their academic ability.

(f) How many men are enrolled in each course of instruction?

The number of men enrolled in each course of instruction (as of November 15, 1967) is as follows:

(1) General Education

Phase I	-	56
Phase II	-	84
Phase III(A)	-	127
Phase III(B)	-	26
Phase V	-	86
Study Release	-	8

387

(2) Vocational Training

Auto Mechanics	-	13
Masonry	-	12
Small Engine	-	6
Machine Shop	-	2
		<u>33</u>

Total enrollment (non-duplicated) is 311.

(g) What are the characteristics of the men enrolled in the E&T program?

The purpose of this phase of the analysis was to determine if inmates enrolled in the educational program differed on certain characteristics from inmates not enrolled in the educational program. A 20% random sample, drawn from the total prison population, was divided into participants and nonparticipants. The sample representing the E&T participants contained 47 inmates and the sample representing those not participating in E&T contained 62 inmates.*

The comparison between E&T participants and nonparticipants is made on these factors:

- Figure 15. Comparison on Length of Sentence
- Figure 16. Comparison on Actual Time Served
- Figure 17. Comparison on Age
- Figure 18. Comparison on Education
- Figure 19. Comparison on IQ
- Figure 20. Comparison on Stanford Achievement Test

In interpreting these data it should be remembered that inmates scoring low on the intelligence and/or the SAT tests are required to participate in E&T. This situation undoubtedly introduces some distortion in the data and, in general, skews the graphs to the right.

It also is important to remain mindful of the descriptive nature of this study. It is dangerous to attempt to draw causal relations from these data, and it may be shortsighted to fail to realize that other variables probably exercise more control over participating in E&T behavior than do the six analyzed.

* The actual population of Milan at this time numbered 603. A 20% sample size would be 121. Our deviation from this amount is due to the fact that complete information was not available on 12 subjects and they were dropped from their respective samples.

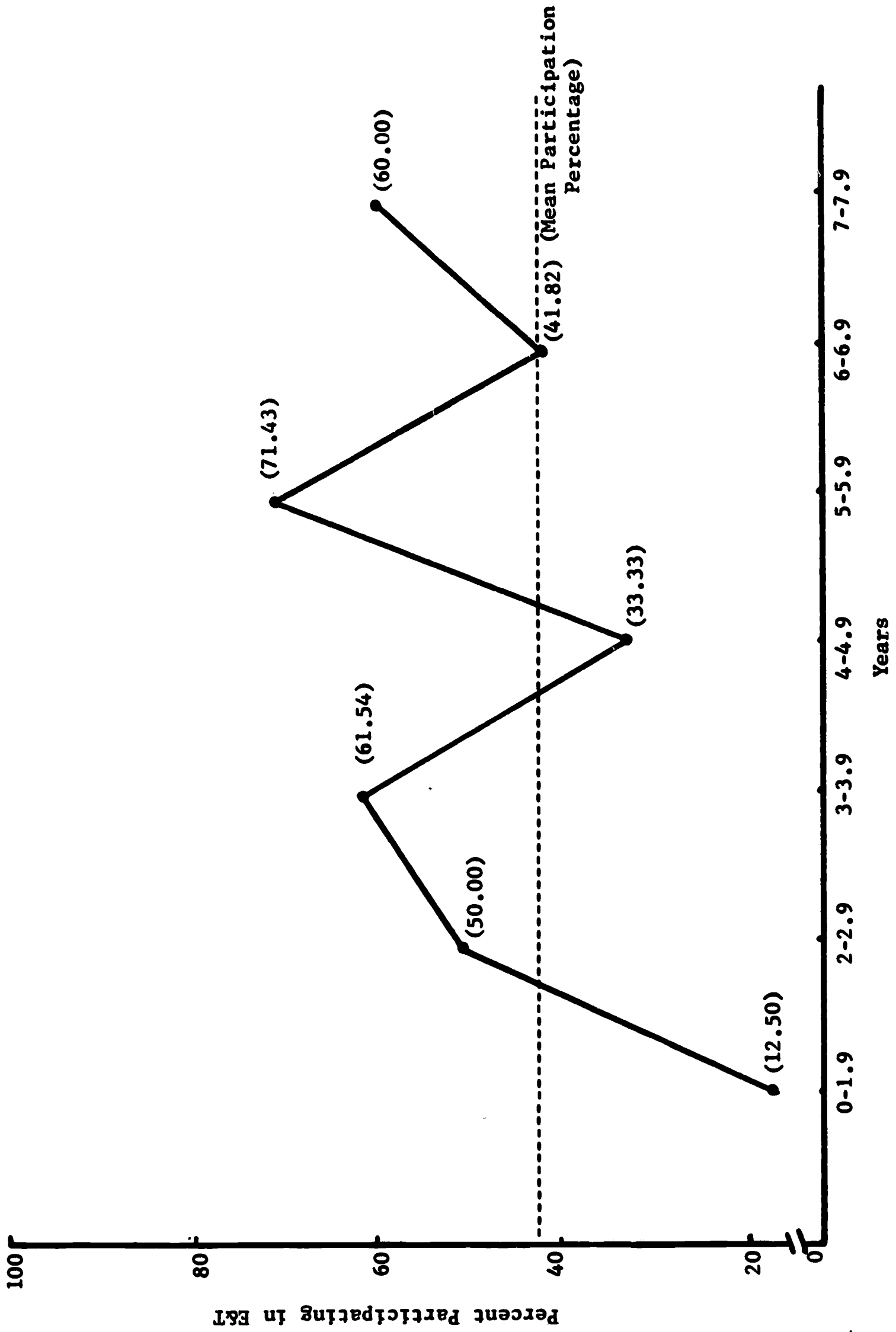


FIGURE 15. COMPARISON ON LENGTH OF SENTENCE - MILAN

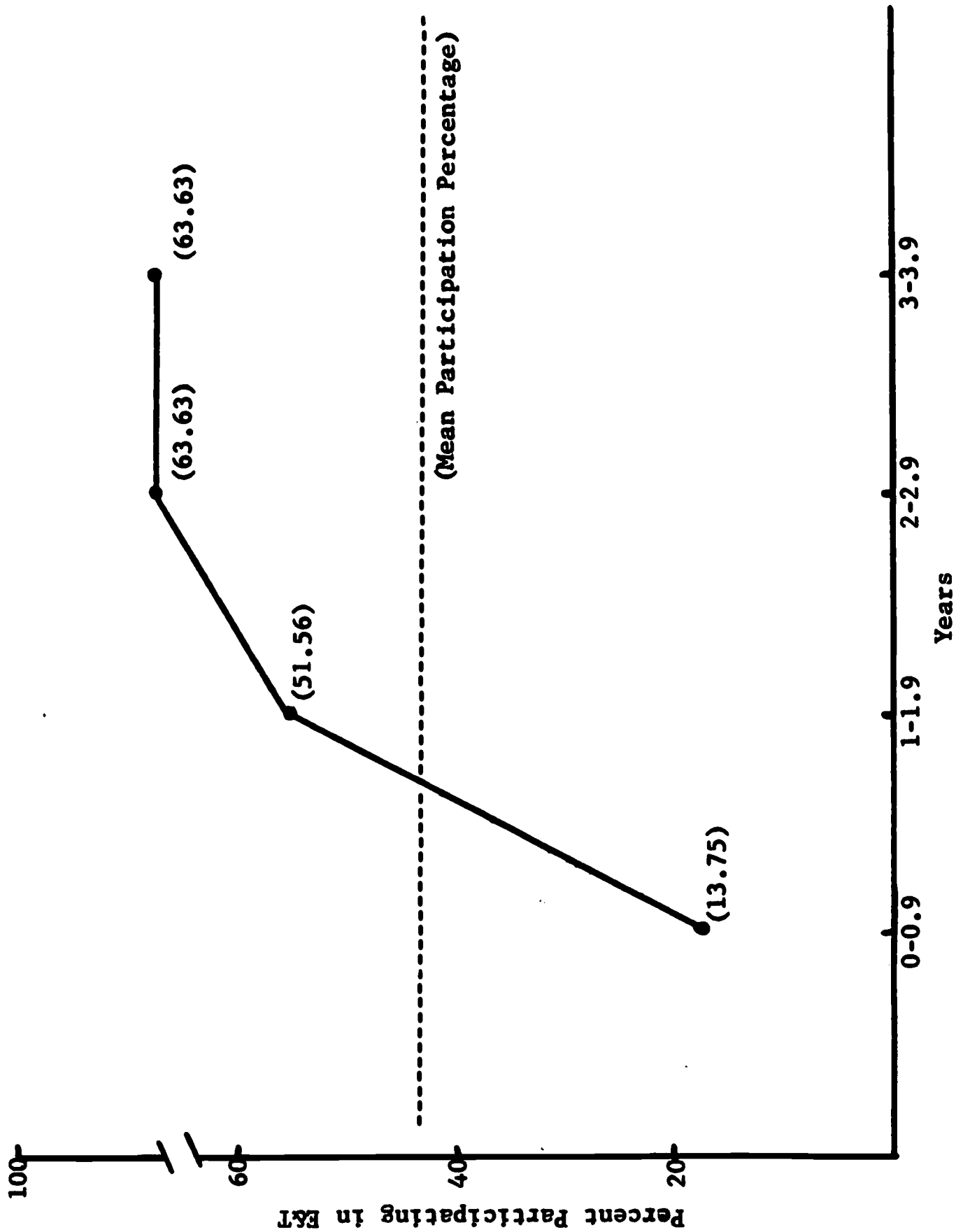


FIGURE 16. COMPARISON ON ACTUAL TIME SERVED - MILAN

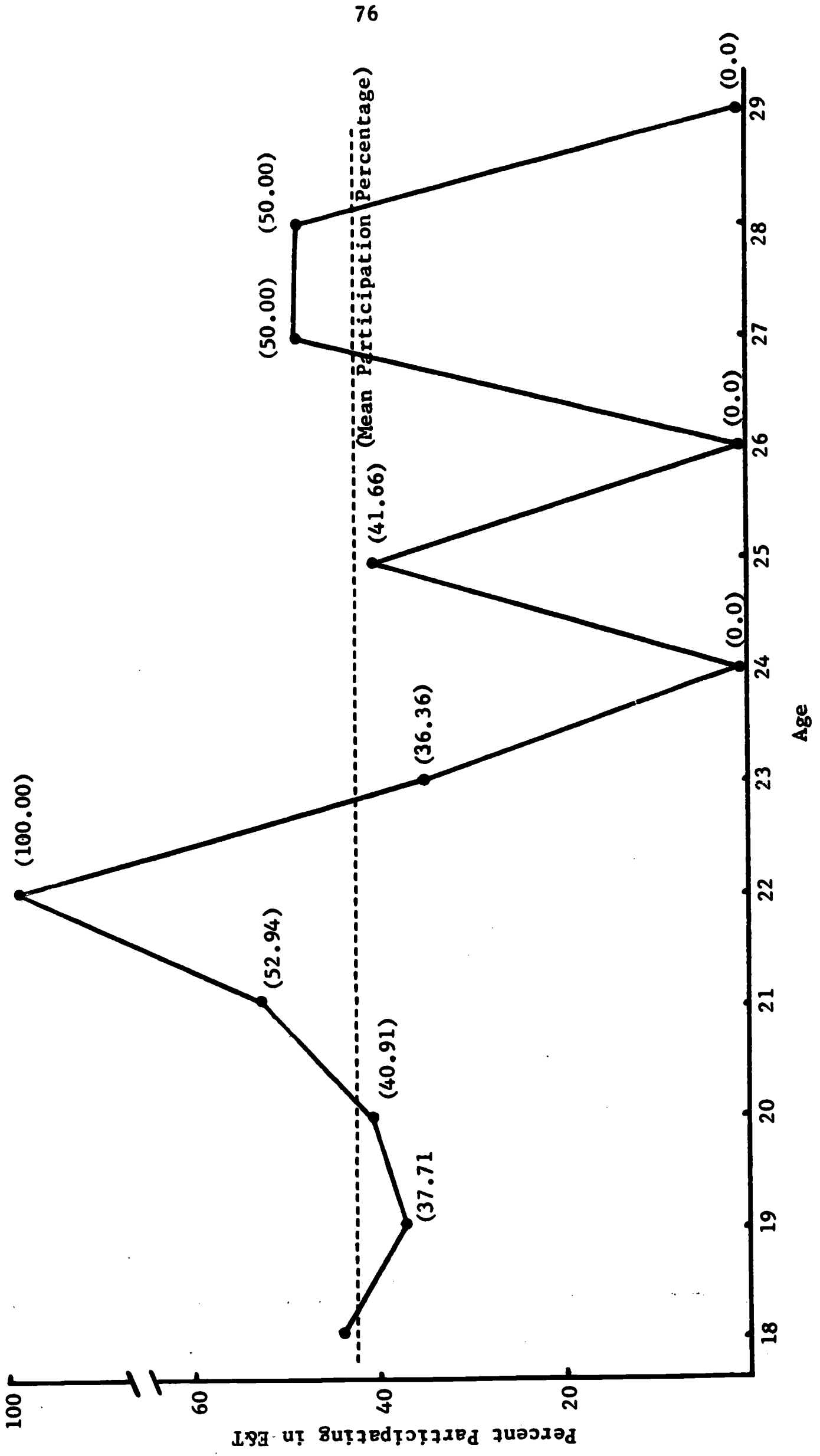


FIGURE 17. COMPARISON ON AGE - MILAN

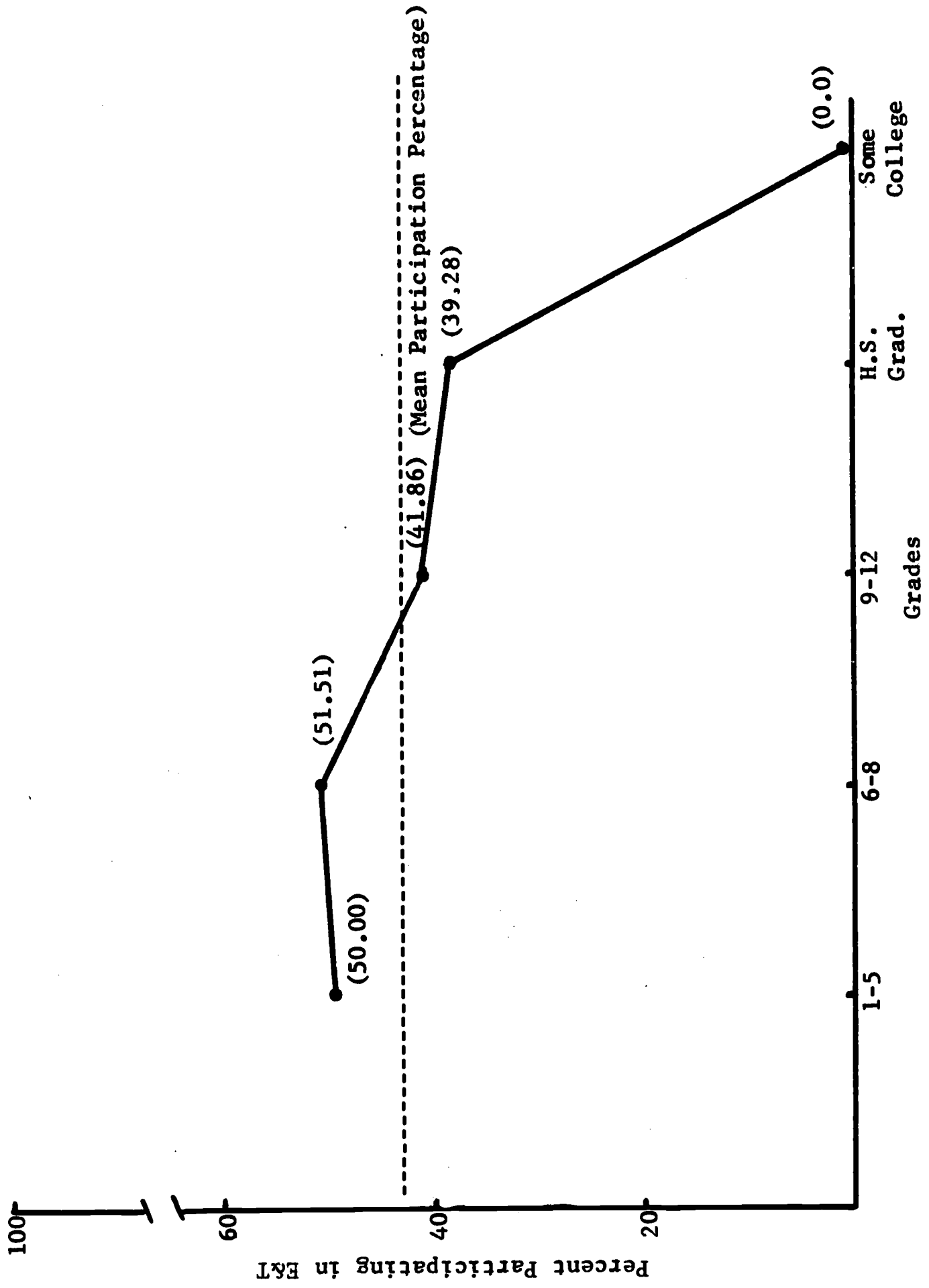


FIGURE 18. COMPARISON ON EDUCATION - MILAN

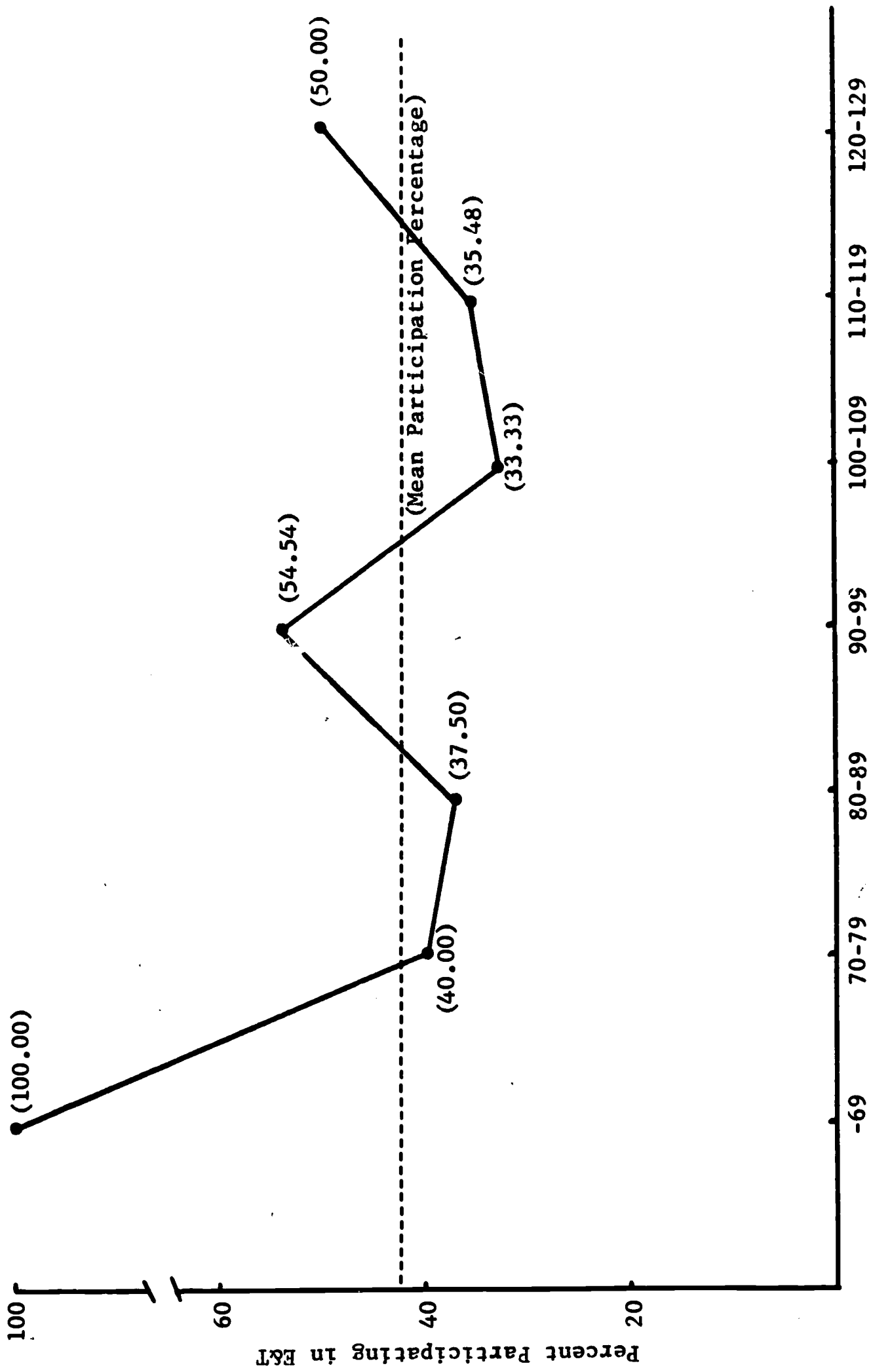


FIGURE 19. COMPARISON ON I.Q. SCORE - MILAN

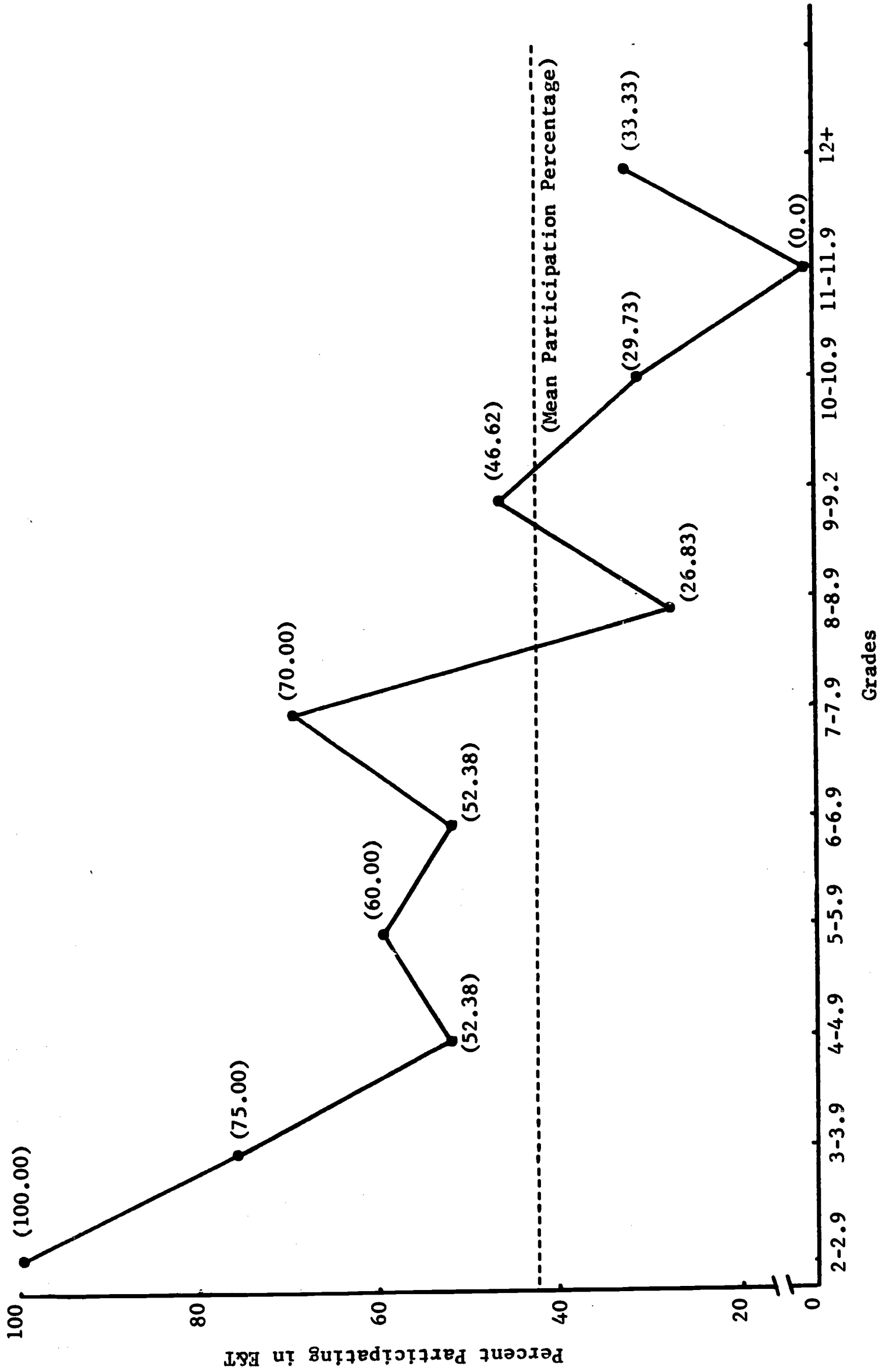


FIGURE 20. COMPARISON ON STANFORD ACHIEVEMENT TEST - MILAN

As seen in Figures 15 and 16, there were some significant within-group differences on the noted characteristics. Of those inmates receiving short sentences (less than two years), very few (12.50%) participated in the educational program. However, over half (56.41%) of the inmates sentenced from 2 to 5.9 years participated in the program. When participants and nonparticipants were compared on "actual time served", a similar trend emerged. A few (13.75%) serving less than one year participated in the program, with about half (51.28%) serving from 1 to 2.9 years participating; the greatest participation percentage was among inmates actually serving three or more years.*

The comparison on age failed to reveal any discernible trends or patterns. The participation percentage varied erratically and substantially. By combining several age groups together, however, we did find that over half (58.28%) of those 20 years old and younger participate in E&T and that this percentage drops only slightly (51.89%) in the 20 to 23 year old group.

To obtain a perspective on the general educational level of Milan's inmates as compared to the free community and the nationwide correctional population, see Table 11.

When participants and nonparticipants were compared on past education, it was discovered that about half (51.42%) of those with eight years or less of education enrolled in the program, but only 39.19% of the post-grade school inmates are involved in E&T, with the majority of these in junior high and none of the inmates with some college participating.**

IQ comparisons between the participants and nonparticipants indicate that about half (52.08%) of those with average and lower IQ scores are enrolled in the program. Of those inmates with above average IQ scores, one third (36.06%) are enrolled in the program.

* Recent research by Daniel Glaser cited in The Effectiveness of Prison and the Parole System indicates inmates actually serving three or more years and participating in the educational program have a significantly (P less than .05) lower failure rate (subsequent return to prison) than their nonparticipating counterparts.

** Ibid. Glaser also indicates that inmates who participate in the educational program and complete 9th grade or higher prior to release have a significantly higher (P less than .05) failure rate than their nonparticipating counterparts.

TABLE 11. COMPARISON OF EDUCATIONAL LEVELS

Level of Education	General* Population	Total Correctional* Population	Milan
College (any)	17.8%	5.3%	2.7%
High School	48.2%	40.0%	65.2%
Elementary	34.0%	54.7%	32.1%

* Persons aged 25-64.

NOTE: Information used in Table 11 was drawn from (1) The Task Force Report on Corrections, p. 2, and (2) information provided by the Milan staff.

However, the 100% participation by the 69 and lower IQ scorers results in the above breakdown. None of the other IQ subgroups deviate significantly from the 43.1% participation percentage mean.

While the comparison of participants and nonparticipants on the SAT test is difficult because subgroup sample sizes are small and, therefore, not reliable, a definite trend is apparent. Of those who score from 0-4.9 about one third (61.29%) participate in the educational program; of those scoring from 5-7.9, one fifth (60.78%) participate; but participation is severely reduced (32.35%) in the group scoring over 8.0 and on the SAT.

We can conclude that, in general, participants in the educational program have sentences over two years, actually serve more than one year, are at the grade school to junior high education level, have IQ scores below 99 and have SAT scores of less than 7.9, and that participants and nonparticipants, do not seem to differ on age.

10. Methods of Evaluating E&T

(a) What methods are used to measure the accomplishment of E&T objectives?

Methods used for measuring the accomplishment of E&T objectives include:

- (1) General Education - written tests prepared by instructors; SAT; CAT; Dupont tests for related trades; monthly evaluation reports.
- (2) Vocational Training - performance tests; monthly evaluation reports.
- (3) OJT in Prison Industries - monthly evaluation scale completed by supervisors.
- (4) OJT in Prison Maintenance - monthly evaluation scale completed by supervisors.

- (b) What methods are used to assess the degree to which E&T satisfies the need for which it is designed?

The need to be satisfied by education and training is to help the inmate become a productive member of society. It is unanimously agreed among everyone concerned that the institution has no idea how well this need is being satisfied. There is no method of follow-up to ascertain what happens to the offenders after they leave the institution. Consequently, there is no existing method for evaluating the ultimate effectiveness of the E&T program.

- (c) What data are available for measuring the cost-effectiveness of the E&T program?

One rough approximation of the effectiveness of the E&T program is the number of men participating in a meaningful education or training program compared to the total inmate population. Using this measure, the effectiveness index for the overall E&T program is calculated to be:

$$E.I._{E\&T} = \frac{311}{603} = .52$$

The effectiveness index for vocational training is:

$$E.I._{VT} = \frac{33}{603} = .05$$

These figures represent only a very rough estimate of E&T effectiveness. Nevertheless, they do provide some idea of the percentage of inmates being reached by the E&T program.

A second measure of effectiveness might be a success ratio: the number of men completing a course of instruction/the number of men completing a course of instruction.

To assess the efficiency of the E&T program, rough measures of cost-effectiveness could be obtained by calculating the amount of expenditure per inmate per course participating in the E&T program. These figures are not readily available, however. One reason for

this is that the actual financial support for E&T is derived from more than one budget. The Education and Training Division, for example, has a budget (ref. Table 8), but the funds for covering the time of the shop instructors spent in OJT is derived from their own operating budgets. Even with these difficulties, it would seem that a little searching and thinking might produce some meaningful figures for assessing the cost/effectiveness of the education and training program.

11. Summary Evaluation of the E&T System

A summary evaluation of Milan's E&T system is presented in Table 12 on the following pages. The table includes all of the major items discussed in the analysis. Each item is evaluated on a five-interval scale: Very Poor - Poor - Fair - Good - Excellent. The rating was completed by the Project Director (William Hitt) on the basis of the total body of information collected during the course of the study.

TABLE 12. SUMMARY EVALUATION OF THE MILAN E&T SYSTEM

ITEM	Very Poor	Poor	Fair	Good	Excellent
1. NEED					
Clearly stated need for E&T					x
2. OBJECTIVES					
(a) Clearly specified E&T objectives		x			
(B) Objectives specified in measurable terms	x				
3. ENVIRONMENT					
(a) Staff attitudes toward E&T				x	
(b) Inmate attitudes toward E&T			x (1)	x (2)	
(c) Relation between E&T and job demands	x				
4. RESOURCES					
(a) Availability of funds			x		
(b) Availability of personnel		x (3)		x (4)	
(c) Availability of facilities		x (5)		x (6)	
(d) Additional E&T opportunities for inmates			x		
(e) Availability of incentives			x		
5. CONSTRAINTS					
(a) Available time for participating in E&T			x		
(b) Potential use of meritorious pay and good time			x		
(c) Availability of jobs in free community				x	
6. MANAGEMENT AND ADMINISTRATION					
(a) Effectiveness of staff organization for E&T		x			
(b) Systematic planning for E&T		x			
(c) Communication about E&T		x			
(d) Record-keeping procedures			x		

(See code on following page)

TABLE 12. (Continued)

ITEM	Very Poor	Poor	Fair	Good	Excellent
7. CLASSIFICATION AND PLACEMENT					
(a) Reasonableness of classification and placement			x		
(b) Appropriateness of assessment methods			x		
(c) Use of relevant manpower data		x			
8. INSTRUCTIONAL STAFF					
(a) Reasonableness of job responsibilities				x	
(b) Competency of staff			x		
(c) Methods of quality control				x	
(d) Staff training and development		x			
9. EDUCATION AND TRAINING PROGRAM					
(a) Logic of overall program organization		x			
(b) Academic Education			x		
(c) Vocational Training			x*		
(d) Social Education		x			
(e) OJT - Prison Maintenance	x				
(f) OJT - Prison Industries	x				
(g) Work Release Program				x	
(h) System for Class Scheduling			x		
(i) Incentives for Learning			x		
10. METHODS FOR EVALUATING E&T					
(a) Appropriateness of student evaluation			x		
(b) Availability of follow-up information	x				
(c) Availability of cost-effectiveness data		x			

- (1) Attitude toward General Education
- (2) Attitude toward Vocational Training
- (3) Full-time staff
- (4) Part-time staff
- (5) General Education
- (6) Vocational Training

* Tentative evaluation because of recency of the program.

PROBLEMS

PROBLEMS

The problems discussed below are found, to some degree, at both Terre Haute and Milan. Our purpose is not to focus attention on every problem, but rather to identify those problems that, to us, especially interfere with the effectiveness of the E&T program.

A. Vagueness and Conflict in Institutional Objectives

One of the most serious problems affecting the education and training system is vagueness of institutional objectives. What is the major purpose of a correctional institution? Is it punishment of the offender? Is it custody? Is it maintenance and operation of the institution? Is it to make a profit from Prison Industries? Or is it correction of the offender? The philosophy of corrections has changed significantly over the past several decades, and, further, there seems to be a considerable lag between the time at which a new philosophy is introduced and the time at which the philosophy is actually implemented. Because of the vagueness of institutional objectives, it is difficult to formulate a clear picture of the role of education and training in the correctional system.

A second and related problem is the severe conflict between institutional subsystems. The dominant motive of Prison Industries is to generate profits; the primary purpose of Prison Maintenance is to operate and maintain the institution; and the objective of the education and training system is to help prepare the inmate for success in the free community. The objectives of these various subsystems frequently come into conflict. If a man leaves his job assignment during the day to attend class, a manpower shortage is created. If a man leaves his Prison Industries assignment to take a full-time V.T. assignment, another manpower problem is created. If a man is able to leave his non-paying job in Prison Maintenance to obtain a paying job in Prison Industries, then Maintenance is left short. If an inmate chooses to earn money in an Industries job that provides no useful skill, then his long-term personal development may be seriously impaired. Yet the correctional system--especially the

vocational training program--depends on profits from Prison Industries, and without Prison Maintenance the institution cannot reasonably care for its inmates.

These are serious problems. It is apparent that there is a great need for a definitive statement of institutional objectives along with a statement of priorities.

B. Lack of a Planned Education and Training Program

A plan is generally addressed to two major questions: (1) Where do we want to go? and (2) How do we get there? A systematic plan for education and training would involve a clear statement of objectives, an organized program to accomplish these objectives, and a detailed budget required for carrying out the program. Such a plan should specify what is to be done, how it is to be done, when it is to be done, and who has the responsibility for seeing that it gets done. No such plan exists at either Terre Haute or Milan. In both cases, a great deal of the education and training program has just evolved, coming into existence without purpose or plan.

The overall E&T program has a number of important components: Academic Education, Study Release, Vocational Training, OJT in Prison Industries, OJT in Prison Maintenance, Social Education, and Work Release. These different elements fall in different departments and, in general, are uncoordinated. Academic education is not closely tied to vocational training; job requirements in Prison Maintenance and Prison Industries have little relation to V.T.; V.T. has little relation to Work Release; and, in general, Social Education is diffuse and unspecified. There is an obvious lack of job market information in a form to appropriately guide the curriculum planning in the area of vocational training.

There is an obvious need for: (1) a clear statement of objectives for the entire E&T program, (2) a clear statement of objectives for each aspect of the E&T program, and (3) a clear statement of the relation between and among the various aspects of the E&T program.

C. Insufficient Opportunities in Vocational Training

The V.T. programs at both Terre Haute and Milan have restrictions on the number of men that can be accommodated. During the time at which this analysis was carried out, Milan had approximately 600 inmates and Terre Haute has 1200. The majority of these men--approximately 75%--are unskilled. The Vocational training courses, however, are designed to accommodate only a small percentage of these men. Consequently, the needs of the majority of the inmates with respect to vocational training cannot be met.

D. Absence of On-the-Job Training

One of stated objectives of both Prison Industries and Prison Maintenance is to provide meaningful training for inmates. It is apparent, however, that there is little semblance of on-the-job training in either Prison Industries or Prison Maintenance. A man learns primarily "by doing" or by receiving assistance from a buddy; but there obviously is no systematic method used to provide skill training.

These are some of the contributing factors: (1) supervisors do not view training as a significant part of the jobs; (2) supervisors are not trained to be instructors; (3) the needs of the moment invariably have priority over training; and (4) there is a higher turnover rate of inmate personnel in a given skill area.

It would seem that both Prison Industries and Prison Maintenance offer considerable potential for providing meaningful on-the-job training. Unfortunately, this potential is not being realized.

E. Lack of an Effective Reward System

One inmate operates a loom in the textile mill and earns \$50 and three days of "good time" each month; another provides maintenance service for the mill and earns nothing. One man works as a clerk in the

Education and Training Division and earns meritorious pay; another serves as an instructor or tutor and earns nothing. The inmate and the staff alike feel that there are many inequities in the institutional reward system for inmates. When "good time" and money are viewed as such precious rewards even the slightest of inequities is viewed as unfair. There is an obvious need for a more equitable reward system. This problem is especially relevant to education and training because of the importance of motivating inmates to participate in the E&T program.

The majority of inmates at Terre Haute and Milan are school dropouts (approximately 95%). Some finished only the second or third grade; some made it to the tenth or eleventh grade; but most of them dropped out of school between the seventh and ninth grades. These men were considered to be failures in the public school system--both by others and by themselves. Therefore, it is not reasonable to assume that these men will now be motivated for academic achievement or even respond favorably when the idea of "school" is reintroduced to them.

Another difficulty results from the inmate's inability to see a relation between his work assignment and his particular course of instruction. For example, if a man is working a spray-painter in the factory during the day and then learning grammar and arithmetic at night, he probably sees no relation between the two activities. As a consequence, both the job performance and the class performance suffer from the lack of apparent mutual support.

A fourth problem is seen in the inmates' defeatist attitude toward possible employment in the free community. Many of the men were unable to obtain desirable employment "on the street" --often because of lack of education and training--and they frequently gave this as the reason why they turned to crime. Now the situation is even worse: they have a record.

These are important problems. They point up the crucial need for an effective reward system to motivate inmates to participate in education and training.

F. Inadequate Individualized Instruction

There is great variety among the inmates at Milan and Terre Haute. Some are serving sentences of 18-24 months, while others are serving sentences of 10-15 years.* Some have a high school diploma but no skill, others have a skill but no diploma, and many have neither diploma nor skill. Some are illiterate, and others are avid readers. The IQ's range from "mentally retarded" to "near-genius".

As a result of these wide individual differences, there are many different individual needs with regard to education and training. One man needs some employable skill; another needs three or four credits in order to obtain a high school diploma; another needs to learn good work habits; while still another needs to learn the basic social skills needed for everyday living. The education and training program is not designed to meet these individual needs. For example:

- The courses of instruction are not designed to accommodate the individual differences among the inmates enrolled in the courses.
- The system does not allow an inmate to complete a course of instruction at his own pace.
- The system provides little opportunity for individual tutoring.
- The high school program is not designed to meet the needs of the inmate who needs only a few particular credits for a high school diploma.

Correction of these deficiencies could lead to a much-improved E&T system.

G. Inadequate Inmate Counseling

A number of inmates interviewed in this study complained that they had insufficient opportunity to communicate with their case workers to discuss their work assignments and/or their E&T program. One reason

* Also, many of the inmates at Milan are serving indeterminate sentences.

for this problem is that the case worker usually is working at the institution during the same hours the inmate is working at his job assignment; consequently, the inmate may have little opportunity to see his case worker unless there is some reason for a "call-out". A second reason for the problem is the fairly high turnover of case workers, which is brought about by resignations, transfers to other institutions, or transfers from one unit to another in the same institution. As a result, there is a lack of continuity in the relation between the inmate and the case worker.

H. Lack of an Efficient Administrative System for E&T

A well-managed education and training program is dependent upon an efficient administrative system. Tests must be scored, grades must be recorded, evaluations must be made, classes must be scheduled, assignments must be changed, cost data must be recorded and analyzed, purchases must be approved, and many other administrative tasks must be carried out. These functions must be carried out in an efficient manner.

At the present time, the administrative system for E&T is inadequate. At Terre Haute, for example, inmates are performing sensitive tasks, such as administering tests and recording test scores, and senior staff members in the Education Department are performing many routine administrative tasks that a junior clerk could handle. As a second example, it was found at Milan that the Superintendent of Industries is responsible for the Vocational Training budget and must approve all purchases in this area, which leads to considerable inefficiency. It also was found at Milan that there is frequently a delay of several weeks--or even several months--in receiving books, material, and equipment after they are ordered. Such delays can seriously disrupt an E&T program. Further, there are serious scheduling problems at both institutions; e.g., E&T gets relatively little "prime time" during the normal work day, and the many "call-outs" interfere with the work of Prison Industries and Prison Maintenance.

A well-designed administrative system could result in a considerable improvement in the overall operation and management of the E&T program.

I. Lack of a Planned Program for Staff Development

The instructional staff members have a wide variety of backgrounds. Some have been trained in the field of education; others have been trained in a particular vocational area; while still others have been transferred from some other department in the institution into the Education Department. All of these people have particular needs with regard to their professional development. There is no planned program designed to meet these needs.

The many new developments in education require a well-informed staff for their effective implementation. Included here, for example, are such topics as contingency management, methods for formulating instructional objectives, programmed instruction, and the application of the PPB System* to education. All of these rather recent developments should be applicable to the institution's E&T program; therefore, it is essential that the instructional staff be skilled in their application.

J. Lack of Systematic Program Evaluation

One of the major objectives of a correctional institution obviously is to equip the inmate to earn an honest living in the free community - to help him become a productive member of society. Unfortunately, neither Milan nor Terre Haute has any idea how well this objective is being accomplished. There is no external evaluation to ascertain what happens to the offenders after they leave the institution. Consequently, within the existing organization of the E&T system, there is no method for evaluating the ultimate effectiveness of the E&T program.

There also is a lack of internal evaluation of program effectiveness. For example, instructional courses are sometimes taught without providing any grades or systematic evaluation of student performance. Further, cost-benefit data on various aspects of the E&T program are unavailable.

* Planning, Programming, and Budgeting

Effective curriculum review and revision require good evaluation methods. This includes overall program evaluation as well as the evaluation of specific innovations. It also includes both internal evaluation as well as long-term external evaluation. Without such evaluation methods, the E&T program will simply evolve in a capricious manner.

In addition to the common problems discussed above, there were some problems specific to one particular institution. This does not infer that these difficulties are not common, but rather they were not pinpointed at both institutions.

The following two problems (K and L) were found at Terre Haute:

K. Inadequate Staff for Carrying Out an Effective Education and Training Program

As mentioned before, a meaningful vocational training program should be the most important part of the total E&T program. With the exception of the Farm Machinery Repair course, there is only a meager effort devoted to vocational training. In general, qualified personnel for teaching such courses are not available in the institution. There are several shop supervisors who probably would be effective V.T. instructors --if this were their primary job and they had sufficient time to devote to it.

There also is a need for specialized personnel in the area of social education. This is an important part of the E&T program. Personnel teaching such courses should be expert in such subjects as: mental health, attitude formation and change, social behavior, and abnormal psychology.

L. Inadequate Budget for Supporting an Effective Education and Training Program

It is apparent that there is a great need for an effective vocational training system. It also is apparent that more of the inmates should be involved in the E&T program if the institution is to achieve any

degree of success in the accomplishment of the objectives. Moreover, most staff members would agree that an efficient administrative system is needed.

All of these proposed developments will require money. If these improvements are to be made in the E&T system, then it is essential that the required budget be appropriated. This is not to say, however, that all improvements in the E&T system will require additional funds. It is apparent that some improvement could be made in the system even within the budget that is presently appropriated.

The following two problems (M and N) were found at Milan:

M. Inadequate Staff Communication

The breadth of the Milan E&T program requires effective intra- and inter-departmental communication. Intra-departmental communication appears to be fairly good, but inter-departmental communication is poor in many respects. The specific plans of one department may be unknown to an allied department. Inter-departmental transfer of inmates often occur with no forewarning to the departments concerned. Several of the staff members interviewed in this study expressed the need for better communication among the departments.

N. Inadequate Space

There is inadequate space for carrying out an effective E&T program at the present time. Probably the greatest need is in the area of General Education--but this need should be satisfied with construction of the new General Education building. There is a need for small rooms in which a tutor could work with a student on an individual basis. Also, as mentioned previously in the report, there is a great need for individual study areas for the inmates participating in the E&T program.

THE OPPORTUNITIES

THE OPPORTUNITIES

This discussion of problems associated with the education and training systems has centered around only the weaknesses of the systems. The systems also have a number of strengths, which, if properly mobilized, could lead to the development of significantly improved education and training programs.

Some of the elements that represent significant opportunities for improving the education and training programs are described below.

A. Opportunity for Relating Work, Training, and Social Adjustment

If the inmate is to be a productive member of society when he returns to the free community, it is essential that he be trained in a marketable skill and have the desire and ability to adjust to the working environment. The correctional institution provides an excellent opportunity to work with the whole man: (1) to provide training in a marketable area, (2) to provide meaningful employment in which he can use his training as well as learn good work habits, and (3) to shape attitudes and behavior in order to improve the inmate's social adjustment.

B. Availability of Effective Reinforcers

In order to promote both participation and achievement in the education and training program, the system must be able to manipulate the reinforcers controlling inmate behavior. In the majority of cases, freedom is the strongest reinforcer, with money running a close second. The correctional institution is able to systematically administer various forms of these two reinforcers: parole, good time, Industry pay, and meritorious pay. Effectively administered, these reinforcers represent very powerful tools that can be utilized to the advantage of the E&T program.

C. A Controlled Environment

It is obvious that the institutions' education and training system is operating within a controlled environment. The value of these conditions for education and training is that they permit the development of an effective E&T program in an analytical manner. Variables can be manipulated in a systematic manner, and the concomitant effects can be ascertained. The correctional institution offers a unique opportunity for developing a practical education and training program in a scientific manner.

D. Dedicated Staff

It is apparent that a large number of personnel working in the correctional field are truly dedicated to their work. This is manifested in a number of ways--from working long hours to doing their best on each task to be completed. Assignment of these personnel to key positions in the education and training system could help strengthen the E&T program.

E. Available Support Personnel

Both Milan and Terre Haute are already making use of a number of support personnel in its education and training program. Instructional staff are recruited from the local school systems and nearby colleges and universities; at Terre Haute inmates serve as instructors and clerks in the E&T system. It would seem that there is an opportunity to make even greater use of these support personnel. For example, it may be difficult to find a full-time staff member who is a specialist in social education --but this need may be met by employing two or three specialists from nearby universities on a part-time basis. Moreover, it seems fairly well agreed that inmate instructors should not be given full responsibility for developing and conducting courses of instruction; these same men,

however, may be excellent teaching assistants or tutors working under the supervision of the regular staff.

* * * *

These are potential opportunities that should be studied and evaluated. Their effective use could make the difference between having a fair education and training program and having an excellent program.

APPENDIX A

EMPLOYMENT OPPORTUNITIES FOR OFFENDERS

by

**Ralph Craig, Joseph Duncan, Harold Maggied,
and Helen Samuels**

APPENDIX A

EMPLOYMENT OPPORTUNITIES FOR OFFENDERS

by

Ralph Craig, Joseph Duncan, Harold Maggied,
and Helen Samuels

INTRODUCTION

The purpose of this section of the report is to provide information on the occupational opportunities for offenders in the 1970's. This information is important to the development of an E&T program for two major reasons: (1) it provides information on the basic level of education necessary to obtain these jobs, and (2) it provides information on the skills needed to perform these jobs. Thus, a training program can be developed which will produce skills relevant to those occupations in which jobs will be available.

The approach used in this analysis was first to analyze the expected employment opportunities for the 1970's in the United States, with special emphasis on the Midwest states of Illinois, Indiana, Michigan, Missouri, Ohio, and West Virginia...hereafter referred to as the study area. In this way, occupations with growing employment needs in the commitment regions for the offenders were identified. The education and training needs of these occupations were then analyzed to determine the qualifications required for obtaining these jobs. Next, the level of education and training of offenders was compared with these requirements. Finally, based on this information, we developed a list containing occupations that will be in demand in the 1970's and for which offenders could become qualified through an E&T program.

EMPLOYMENT GROWTH IN THE 1970's

The general outlook for development of the U.S. economy in the 1970's is optimistic. Specifically, the estimates of economic activity in 1975 developed in Battelle's Socio-Economic Research Section indicate an overall growth of 4.1 percent per year from the level achieved in 1967.

Additionally, Battelle's economists foresee that the structure of the national economy of the 1970's will represent basically different characteristics from those that have previously been experienced. It will be characterized as a "human-resources economy", with emphasis on employment in service, semiprofessional and professional occupations, and with a high level of consumer expenditures being devoted to nonproduct activities (services such as medical care and education).

These projections were developed by analysis of the individual sectors of the national economy in terms of the relative share of total national output historically contributed by each sector with specific analysis of the influence of rising household income*, new technology and emerging social concerns on the cross-sectional composition of economy. National employment levels were determined on the basis of estimates of productivity and an analysis of final demand and intermediate demands which are anticipated.** (Consumer expenditures were analyzed to determine the aggregate demands to be placed upon individual industry sectors. Thus, industries with potential employment growth were identified on the basis of aggregate demand and projected productivity.)

In Tabel A-1, the past distribution of employment is compared with estimates of future employment distribution for the U.S. on an industry-by-industry basis. Overall employment is expected to increase 31 percent between 1960 and 1975. Agriculture (meaning farming or the production phase of agriculture), forestry, and fisheries will continue their historic decline, experiencing a reduction of 37 percent in total employment between 1960 and 1975. Also, mining will decline from 654,000 persons in 1960 to 270,000 in 1975, largely as a result of continued mechanization and a shift to resources produced outside of national boundaries.

* The estimate was developed by analysis of spending by 252 socio-economic groups and a projection of 1975 input-output relationships.

**Battelle's Socio-Economic Research Section estimates that gross national product in 1975 will be 950 billion dollars (in 1960 dollars). This represents a growth of 4.4 percent per annum from the BNP level achieved in 1960.

TABLE A-1. DISTRIBUTION OF EMPLOYMENT BY INDUSTRY, UNITED STATES, 1950, 1960, AND 1975

Industry	Number Employed (thousands)		Percentage Distribution		Compound Annual Growth Rate, Percent	
	1950a	1975b	1950	1960	1950-1960	1960-1975
Agriculture, Forestry and Fisheries	7,034	2,730	12.5	6.7	-4.7	-3.1
Business and Repair Services	1,308	2,720	2.3	2.5	2.1	3.6
Construction	3,458	4,790	6.1	5.9	1.0	1.5
Entertainment and Recreation	493	640	0.9	0.8	0.2	1.6
Finance, Insurance and Real Estate	1,920	4,640	3.4	4.2	3.4	3.7
Manufacturing	14,685	19,500	26.0	27.1	1.8	0.7
Mining	931	270	1.6	1.0	-3.5	-5.7
Personal Services	3,465	5,550	6.1	6.0	1.1	2.5
Professional and Related Services	4,827	17,600	8.6	11.7	4.6	5.8
Public Administration	2,514	5,260	4.5	5.0	2.5	3.4
Retail Trade	8,542	13,300	15.1	14.8	1.2	2.2
Transportation, Communications, and Utilities	4,450	4,980	7.9	6.9	--	0.7
Wholesale Trade	1,965	2,940	3.5	3.4	1.2	1.9
Industry Not Reported	843	--	1.5	4.0	--	--
Total Employed	56,435	84,920	100.0	100.0	1.4	1.8

^a1960 Census of Population, Vol. 1, Characteristics of the Population, Part 1, U.S. Summary, Table 92.

^bBattelle estimates, Socio-Economic Research Section.

Of particular significance to the Midwest, as well as the U.S., is the relatively slow growth in total manufacturing employment. From 1960 to 1975, it is expected that manufacturing employment will decline from 27.1 percent of total employment to 23 percent. This represents a reversal of a long-term trend. In 1900, approximately 15 percent of total employment was found in manufacturing. This increased to nearly 24 percent in 1930, 23.2 percent in 1940, and 26.0 percent in 1950. The projected reduction is based on expected changes in consumer expenditures (with an increasing portion of consumer spending going into service or nonproduct related categories) and the higher productivity expected in manufacturing establishments.

The industries that are expected to have the highest growth rates are the service industries. Employment in professional and related services is expected to increase from 11.7 percent in 1960 to 20.7 percent in 1975. Employment in finance, insurance, and real estate is expected to increase from 4.2 to 5.5 percent in the same period. Public administration is expected to increase its share of total employment from 5.0 to 6.2 percent. Other service industries, such as business and repair services and personal service, are also expected to have employment growth. This reduction in the relative importance of manufacturing employment, combined with the increase in the importance of service industries, represents a fundamental transition in the structure of the U.S. economy. The emergence of the service industries as a dominant source of employment, combined with a shift from blue-collar to white-collar occupations, indicates the development of a new era, the Human Resources Era in the U.S. economy, in which employment will be characterized by reliance upon human aptitudes for adaptability, control, and creativity, rather than upon the simple manipulative skills which characterized the employment primarily associated with agriculture and manufacturing based economies.

OCCUPATIONAL OPPORTUNITIES FOR OFFENDERS

Fourteen occupations have been identified as good employment possibilities for offenders. These occupations were selected on the basis of: the national employment market, the employment pattern of the study area, and characteristics of the offenders. The procedure used was to develop a list of occupations that employed a large percentage of the population and then to eliminate those occupations that were not suited to the study area or to the offenders.

The first list of occupations was obtained from the 1960 census, which contained a detailed list of occupations of employed persons by sex. From this list, occupations that employed a large number of males were selected. This list was further reduced by eliminating occupations that have very high educational requirements, such as doctors and college professors. This left a list of 55 occupations.

The list of occupations was shortened by considering characteristics of the offenders and specific factors in the study area. The educational attainment of offenders in the Terre Haute and Milan institutions in 1966 was 9.5 years and 10.8 years of school, respectively. In addition, those inmates with previous work experience were predominately in low-skilled occupations that are characterized by low wages and high rates of unemployment. Thus, if the occupations selected were limited to those which matched the limited qualifications of offenders, almost every job would be eliminated. An analysis of the characteristics of offenders, however, showed that seventy-two percent of the offenders at Terre Haute and fifty percent at Milan had scores of 100 or better on the Revised Beta I.Q. test. This is evidence that most offenders are capable of achieving the minimum entrance requirements through E&T.

In selecting the final list of occupations, manufacturing was emphasized because it is stronger in the study area than in the U.S. as a whole. In addition, an attempt was made to select occupations that would not become obsolete as a result of automation. A lower number of occupations from the service industries was selected (even though employment in service

industries will grow rapidly) because many service jobs are low-paying, low-status occupations, and because of the special security requirements for some categories (e.g., policemen and guards).

Based upon an analysis of offender characteristics, industries, and occupations in the study area, we have identified the following 14 occupational classifications as significant for consideration in the development of educational and training programs for the institutions at Terre Haute and Milan:

1. Assemblers
2. Carpenters, Electricians, and Plumbers
3. Checkers, Examiners, and Inspectors
4. Filers, Grinders, and Polishers
5. Insurance Agents, Brokers, and Underwriters
6. Machinists
7. Mechanics and Repairmen
8. Salesmen and Sales Clerks
9. Service Workers
10. Technicians, Electronic
11. Technicians, Engineering and Physical Sciences
12. Technicians, Medical and Dental
13. Toolmakers and Diemakers
14. Truck and Tractor Drivers

Table A-2 provides a summary of statistical material for each of these categories, including projected growth rates. These occupational classifications are discussed below. These occupations are presented in alphabetical order to emphasize that no priority is implied. The selection of occupations for E&T programs should be based upon additional consideration such as industry cooperation, availability of appropriate instructional equipment and personnel, and the type of training which is underway in other institutions.

Occupations	Study Area Total		Percent of		Percent of		Annual Growth Rate	
	1950	1960	U.S.	1960	1950	1960	U.S.	1950-60
Assemblers	185,318	249,732	49.0	40.7	1.26	1.55	5.0	3.0
Checkers, Examiners, and Inspectors	115,194	172,907	34.7	36.0	.78	1.07	3.8	4.1
Construction Industry								
Carpenters	204,127	181,396			1.38	1.13	1.1	1.2
Electricians	87,730	89,322	22.2	22.2	.59	.55	.8	.2
Plumbers	68,779	75,687	28.2	26.5	.47	.47	.9	1.0
Filers, Grinders, and Polishers	77,405	70,801	52.4	47.7	.52	.44	.0	.9
Insurance Agents, Brokers, and Underwriters	67,853	87,428	24.9	24.0	.46	.54	3.0	2.6
Machinists	161,908	141,302	31.5	28.3	.36	.88	.3	1.4
Mechanics and Repairmen	472,459	565,422	27.3	25.4	3.20	3.51	2.5	1.8
Salesmen and Sales Clerks	860,152	943,419	26.0	25.2	5.83	5.85	1.2	.9
Service Workers	1,097,273	1,330,048	25.5	24.4	7.44	8.25	2.4	1.9
Cooks	105,814	136,287	24.2	24.3	.72	.85	2.6	2.6
Attendants - hospital	52,366	100,650	25.5	25.7	.35	.62	6.7	6.8
Janitors and Sextons	144,824	165,628	31.7	27.9	.98	1.03	2.6	1.4
Protective Service Workers	146,592	165,438	25.5	24.0	.99	1.03	1.8	1.2
Waiters	177,080	211,919	26.5	25.7	1.20	1.31	2.1	1.8
Others	470,597	553,126						
Technicians, Electronic	2,511	12,048	21.4	13.2	.02	.07	22.8	17.0
Technicians, Engineering and Physical Sciences	24,658	45,698	27.1	25.0	.17	.28	7.3	6.4
Technicians, Medical and Dental	17,350	30,419	22.6	22.0	.12	.19	6.1	5.8
Toolmakers and Diemakers	77,989	89,257	51.1	49.0	.53	.55	1.8	1.4
Truck and Tractor Drivers	364,960	398,015	27.5	25.6	2.47	2.47	1.6	.9
Total Employment (in thousands)	14,753	16,117	26.0	24.9	100.00	100.00	1.3	.9

TABLE A-2. SUMMARY TABLE OF EMPLOYMENT BY OCCUPATION

Assemblers

Assembly operations are concentrated in durable-goods manufacturing, which employed nearly 91.0 percent of all assemblers working in the U.S. in 1960. Other industries that employed a large share of assemblers in 1960 include fabricated metals, electrical machinery, and non-electrical machinery. During the past decade, a large number of technological advances have reduced the routine and repetitive assembly operations. For example, the development of heavy fabrication machines and metals with improved ductility has permitted fabrication of more complex shapes. The use of numerical control in the next 15 years is expected to permit design of complex parts which will replace components which must be assembled today. Further, the use of molded plastics and component packages built around micro-electronics will further reduce assembly operations.

Nevertheless, a large number of manufacturing operations will continue to provide employment for assemblers. Specifically, the number of assemblers employed in fabricated metals, electronic machinery, and non-electrical machinery is expected to remain near the levels of 1960. The major reduction in the number of assemblers will be identified with the motor-vehicles industry, in which the number of assembly jobs is expected to decline. This reduction of assembly operations is based on the assumption that the major production improvements in automotive manufacturing will occur in the increased use of component parts that can be readily integrated into the final production unit.

Carpenters, Electricians, and Plumbers

These three occupations have been grouped together, since they represent occupations significantly concentrated in the construction industry. In 1960, over 78.0 percent of all carpenters were in construction, as were 38.0 percent of all electricians and nearly 63.0 percent of all plumbers.

During the post-war period, the construction industry has not been outstanding in terms of the introduction of technological changes in the construction process. Factors affecting the slow evolution of the

construction industry include the limited amount of innovation which occurs at the design stage, the restrictions imposed by building codes, and the reluctance of both builders and consumers to modify patterns which have proven successful in the past. It is anticipated that many of these factors will continue to be significant during the next decade and a half. Other forces, however, will be at work to change the employment structure of the construction industry.

The motor-vehicles industry also employs large numbers of electricians and plumbers. No significant technological changes are foreseen in the role of these employees in this industry; therefore, their share of total employment in motor vehicles is expected to remain at approximately the same levels which they obtained in 1960. Therefore, as a result of employment growth in a motor-vehicles industry, the number of electricians employed by this industry is expected to increase.

Checkers, Examiners, and Inspectors

The lack of growth in the employment totals for checkers, examiners, and inspectors projected for the 1970's masks the changes that are expected to occur in this important function. Nearly all manufacturing industries will experience continued pressures to improve quality control. As a result, the number of inspections that will be employed in the individual production process is likely to increase. The lack of growth of total employment for checkers is a reflection of the fact that an increasing proportion of inspection will be accomplished mechanically and electronically, using such methods as ultrasonic testing, electronic testing, and other significant developments in this area.

Filers, Grinders, and Polishers

A second feature of the requirements for increased quality control will be associated with a modest employment growth in occupations which have the specific function of improving the product quality. Filers,

grinders, and polishers represent one of these occupational groups. In many industries, the production process will also be upgraded through the use of improved equipment. The major increase of filers and grinders will probably be found in the primary-metals industry and the fabricated-metals industry, as this function becomes relatively more significant within the supplier industries.

Insurance Agents, Brokers, and Underwriters

Insurance coverage is rapidly expanding in all sectors of the population. A part of this growth in the level of insurance is associated with the fact that income levels are rising and increased discretionary income is available for such investments. The income agent or broker usually specializes in selling life insurance, or property and liability insurance, on a person-to-person basis.

In 1950, there were 67,853 insurance agents, brokers, and underwriters in the study area. By 1960, the number had grown to 87,428. The estimated growth in employment for workers in this occupation during the 1970's is nearly double that experienced between 1970 and 1960, reflecting the fact that an increasing number of families is expected to depend upon life insurance for estate protection, for medical care, for retirement income, and even for college-education funds for their children.

Machinists

The number of machinists employed may be directly related to the metal-working activities of the major durable-goods industries in the study area. The employment demand for machinists will be largely influenced by two significant factors. First, qualified machinists are the result of extensive apprenticeship training. Total employment of machinists will undoubtedly be constrained by the lack of entrants into these programs. Second, the metal working machinery utilized is undergoing continued technological improvement. Therefore, the productivity of individual machinists may be expected to continue to increase.

The number of machinists employed in primary-metals and fabricated-metals industries is expected to parallel the employment increase in those industries. In the electrical-machinery industry, some decline is foreseen in the number of machinists employed as this industry produces output with a heavier emphasis on electronic products. In the motor-vehicles industry, the role of machinists in total employment is not expected to be significantly affected by any overall technological changes. Therefore, total employment growth in the motor-vehicles industry is expected to result in the demand for additional machinists over 1960 levels.

Mechanics and Repairmen

The mechanics and repairmen category includes automobile mechanics radio and television repairmen, and miscellaneous repairmen. In 1960, the auto-accessory industry accounted for 9.0 percent of all mechanics and repairmen. Business and repair services accounted for over 20.0 percent, and the transportation industry accounted for over 7.0 percent. The role of mechanics and repairmen in the motor-vehicles and in auto-accessories industries is not expected to change significantly during the next 15 years, although growth in the general economy and in replacement demand will create many new job openings.

Salesmen and Sales Clerks

Salesmen are concentrated in the trade industries. Wholesale and retail trade accounted for nearly 83.0 percent of all salesmen in 1960. The insurance industry also employs a large number of salesmen, and the growth in employment of salesmen is expected to be significant, with salesmen accounting for an increasing proportion of total employment. In 1960, the insurance industry accounted for 7.8 percent of all sales workers in the United States. It is expected to account for more than one-tenth of all sales workers as the rising level of consumer income generates increased demands for insurance and increased competition among insurance companies.

Like many of the occupational categories selected for analysis in this study, the sales category incorporates a heterogeneous grouping of specific jobs. Sales workers include personnel who are selling a highly technical product requiring an individual with an engineering background, as well as personnel in department stores who are selling relatively simple and undifferentiated products. Overall, the increasing complexity of products will be associated with requirements for more specialized training of sales personnel. Hence, for a portion of sales workers, a significant upgrading of skill level will be associated with the employment growth in the overall category.

Service Workers

The service-workers category included consideration of employment of hospital attendants, cooks, janitors, protective-service workers, and waiters. In all of these occupations, the considerations involved in estimates of future employment are similar. Especially important are the following:

- (1) The growth of professional services, especially the growth of medical services and education, will cause a demand in basic service occupations that are related to the care and upkeep of the physical plant and which are associated with the servicing of the major segment of employment. In other words, occupations such as cooks, janitors, and protective-service workers are related to the general employment level in these individual industries.
- (2) The number of attendants in hospitals, as projected, also reflects the general shortage of professional skills which will be evident in the medical-services industry. The use of electronic monitoring devices and disposable products in the hospital will accelerate. Nevertheless, these alternatives are expensive, and it is anticipated that hospital attendants will continue to be employed in increasing numbers to assist the professional staff of the facilities.

- (3) The growing level of consumer income will result in an increased proportion of food expenditures being devoted to food consumed outside of the home. Thus, the number of eating and drinking places will increase substantially, resulting in a need for an increased number of cooks and waiters to support the growth in such establishments. Additionally, the number of cooks required by facilities such as dormitories, university and school cafeterias, and other institutional establishments will result in an increasing demand for these employees.

It is important to note that the employment of service workers is a function of the types of demands that are evident in the general population. Service workers are not typically the product of technological-process requirements, although technological improvements such as mechanical floor sweeping and floor polishing will affect the nature of employment for janitors and sextons. It is generally agreed that the increasing level of educational attainment and rising consumer disposable income during the 1970's will combine to result in growing demands for services that are inadequately provided today.

Technicians, Electronic

Electronic technicians assist engineers in designing and developing equipment, systems, components, and products. In addition, they may carry out complete tasks of installation, trouble shooting, and maintenance. Their work requires a considerable amount of knowledge and skill beyond that of the typical high-school graduate. Part of this skill can be gained through experience.

Employed primarily in manufacturing,* electronic technicians accounted for 0.07 percent of the study area's employment in 1960 and they represent a rapidly expanding source of employment. Electrical and electronic technicians grew at a phenomenal 17.0 percent annual rate during the 1950's. While this rate of growth is expected to moderate, this occupational group is expected to continue to expand significantly more rapidly than total employment through the 1970's.

Several trends are apparent in electronics which will influence the need for electronic technicians and their training requirements. The application of electronic techniques in industrial and commercial operations appears to be increasingly attractive. Larger amounts of funds will be spent for electronics equipment to automate and mechanize production processes. This is especially true for computers, for numerical controls for machines, and for a broad range of instrumentation. Also, demand is expected to grow for communications products in public utilities, mobile radios, airlines, etc. Thus, the electronics technician will be required to acquire a different background knowledge in the future.

Technicians, Engineering and Physical Sciences

The basic factors affecting employment of technicians in other engineering and physical-science categories is similar to those discussed above. It is significant to note the exceptional growth which is expected in this category. However, in as much as it will include a number of emerging technician categories such as instrument technologists, ceramic technologists, graphic-arts technologists, scientific data-processing technologists, environmental-control technologists, and architectural and building-construction technologists--categories which are expected to grow in importance as a result of technological change.

*New York State Department of Labor, Technical Manpower in New York State, Special Bulletin 239, Volume I, Division of Research and Statistics, Albany, New York, December, 1964, p. 22.

Technicians in other engineering and physical sciences ranked third in the rate of growth among the 14 occupational categories listed in this report--growing at an annual rate of 6.4 percent between 1950 and 1960. The number employed in the study area nearly doubled during this period, from 24,658 in 1950 to 45,698 in 1960. The national growth rate was even more rapid--7.3 percent annually between 1950 and 1960.

An indication of the variety of technicians is provided in Table A-3, which lists selected scientific and technical societies pertinent to the various technologies and the combined membership of the various societies in 1965.

Technicians, Medical and Dental

Expenditures for medical care are increasing sharply. Per capita private expenditures for medical care increased 121 percent between 1948 and 1961.* Total medical expenses for the aged averaged about twice those for younger persons. For example, persons under 65 spend an average of \$29 per person on physicians, whereas persons 65 or over spend \$55. In recognition of the need for medical attention which is prevalent among older persons, the Medicare program was initiated by Congress in 1966. This is simply one of the several forces which are expected to lead to a rapid growth in the medical sector of professional and related services.

However, the increased effectiveness of health-insurance programs and increased demand by the general population for better health care will not necessarily guarantee a proportional increase in the number of physicians. In recent years, the number of physicians per 1,000 population has remained relatively constant. It is clear that, during the same time, demands for improved health care have been increasing. Thus, it is evident that this shortage will be readily overcome.

*Public Health Service, U.S. Department of Health, Education and Welfare, Chartbook of Basic Health Economics Data, Publication No. 947-3, United States Government Printing Office, February, 1964, p. 21.

Note: The industry distribution of occupations in this section was taken from: (1) 1960 Census of Population, Volume 1, Characteristics of the Population, Part 1, U.S. Summary, Table 125, and (2) Morris A. Horowitz; et. al., Manpower Requirements for Planning: An International Comparison Approach, Volume II, Statistical Tables, Northeastern University, Boston, December, 1966.

TABLE A-3. SELECTED SCIENTIFIC AND TECHNICAL SOCIETIES
PERTINENT TO VARIOUS TECHNOLOGIES

Area of Specialization	Number of Societies	Combined Membership for 1965
Aeronautical and Aerospace Technology	10	78,025
Agricultural Technologies	47	113,496
Architectural and Building- Construction Technology	12	79,891
Chemical Technology	23	229,344
Civil Technology	14	129,838
Electrical and Electronic Technology	7	284,080
Fire Protection Technology	2	22,290
Fisheries and Oceanography Technologies	5	5,240
Forestry and Forest Products Technology	10	72,674
Health-Related Technologies	41	822,271
Instrumentation Technology	5	48,760
Mechanical Technology	10	150,252
Metallurgical and Related Technologies	10	146,920
Printing and Graphic-Arts Technology	2	2,779
Sanitation and Environment Control Technology	10	55,993
Scientific Data-Processing Technology	4	35,650
TOTAL	212	2,277,503

Source: Scientific and Technical Societies Pertinent to the Education of Technicians, Technical Education Program Series No. 7, U.S. Department of Health, Education, and Welfare, Office of Education.

The increasing demand for medical services will require that increasing numbers of medical technicians be used to assist the physician and surgeon in his services. Further, the increase in the use of sophisticated diagnosis and treatment techniques, especially the use of advanced technological equipment, will also generate an increasing demand for medical and dental technicians.

The number of medical and dental technicians in the study area nearly doubled between 1950 and 1960, growing at an annual rate of 5.8 percent--six times as fast as total employment.

Toolmakers and Diemakers

The importance of the durable goods industries is repeated in each one of the major craft activities. In the case of toolmakers and diemakers, the machine trades, except electrical industry, accounted for nearly one third of total tool and diemakers in the U.S. in 1960. Even with the introduction of numerical control and chemical machining, it is anticipated that tool and diemakers will continue to play an important role in metal fabrication. The crucial problem will be the availability of these skilled craftsmen. While training programs in correctional institutions are not likely to provide the deep skills associated with this craft, training in the machine trades will be relevant to this important employment category.

In 1950 and 1960, the study area accounted for approximately one-half of U.S. employment in this important occupation.

Truck and Tractor Drivers

The major category of employment in the general occupational classification of operatives that will experience significant growth during the 1970's is the group of occupations which relates to the commercial operation of motor vehicles. The growth in employment of route men and delivery men will be a result of growth in the portion of the retail trade industry which currently employs motor-vehicle operators to distribute their

merchandise. In 1960, there were over 398,000 truck and tractor drivers in the study area. As a result of the wholesaling and distribution functions carried out within the study area, it is anticipated that the number of persons employed in this category will increase significantly during the 1970's.

The number of truck and tractor drivers will also increase as a result of increased employment in construction, in which the number of truck and tractor drivers is expected to increase as a result of the use of heavy equipment, and in the transportation industry in which the physical distribution of goods will continue to be accomplished through truck transport. In 1960, the transportation industry accounted for approximately 33 percent of all truck and tractor drivers, with an employment of 513,000 persons nationally. Significantly, truck and tractor drivers as an occupation within the transportation industry is expected to increase, reflecting the continued development of truck transportation relative to rail transportation as a major source of employment, including developments related to terminal distribution of air freight.

APPENDIX B

EXHIBITS

EXHIBIT 1

Staff Utilization
(Terre Haute)

EXHIBIT 1. STAFF UTILIZATION
(Terre Haute)

Work Day: Mon.-Tues.-Wed. 12:15 - 8:45PM
Thurs.-Fri. 7:30 - 4:00PM

Weekly Schedule (September 11th thru May 17th)

NAME	TIME	Monday	Tuesday	Wednesday	Thursday	Friday
List, Charles Supervisor Education	12:15 - 4:00PM	Administrative	Administrative	Administrative		
	4:00 - 4:30PM	-----	Lunch -----	-----		
	4:30 - 8:45PM	Floor Supervision Evening Sch.	Floor Supervision Evening School	Administrative		
	7:30 - 4:00PM				Administrative	Administrative

Work Day: Mon.-Tues. 12:15 - 8:45PM
 Wed.-Thurs.Fri. 7:30 - 4:00PM

Weekly Schedule (September 11th thru Nov. 30th)

NAME	TIME	Monday	Tuesday	Wednesday	Thursday	Friday
Johnston, Charles Assistant Supervisor (Supportive Education)	12:45 - 4:00PM	Administrative	Administrative			
	4:00 - 4:30PM	----- Lunch -	-----			
	4:30 - 5:30PM	Preparation	Preparation			
	5:30 - 6:30PM	English 9A (Main Instit.)	English 9A (Main Instit.)			
	6:30 - 7:30PM	English 9B (Main Instit.)	English 9B (Main Instit.)			
	7:30 - 8:45PM	Floor Supervision Evening School	Floor Supervision Evening School			
	7:30 - 4:00PM (Wed.-Thur.-Fri.) Only			Administrative	Administrative	Administrative

Note: Mr. Johnson will retire from the Service on or about December 1, 1967

Work Day: Mon.-Thurs.-Fri. 12:00 - 8:30PM
 Sat.-Sun. 7:30 - 4:00PM

Weekly Schedule

NAME	TIME	Monday	Tuesday	Wednesday	Thursday	Friday
Walsh, C.C. Recreation Supervisor (General)	12:00 - 8:30PM	Recreation	Recreation	Recreation		
	7:30 - 4:00PM				Recreation	Recreation

Work Day: Mon. thru Fri. 7:30 - 4:00PM

Weekly Schedule

NAME	TIME	Monday	Tuesday	Wednesday	Thursday	Friday
<u>Moles, Wilfred</u> Instructor (Farm Machinery Repair)	7:30 - 4:00 PM	Voc. Trng. Farm Machinery Repair	Voc. Trng. Farm Machinery Repair	Voc. Trng. Farm Machinery Repair	Voc. Trng. Farm Machinery Repair	Voc. Trng. Farm Machinery Repair

Weekly Schedule (September 11th thru May 17th) Work Day: Mon. thru Thurs. 12:15 - 8:45PM
 Fri. 7:30 - 4:00PM

NAME	TIME	Monday	Tuesday	Wednesday	Thursday	Friday
Ward, Kenneth Supportive Related Trades Instructor	12:15 - 1:45PM	Preparation	Preparation	Preparation	Preparation	
	1:45 - 3:45PM	Basic Shop Drafting (Main Instit.)	Basic Shop Drafting (Main Instit.)	Basic Shop Drafting (Main Instit.)	Basic Shop Drafting (Main Instit.)	
	4:00 - 4:30PM	----- Lunch -----	----- Lunch -----	----- -----	----- -----	
Period: 5:30 - 8:45 PM Evening School Vocational Education classes	4:30 - 5:30PM	Preparation	Preparation	Preparation	Preparation	
	5:30 - 6:30PM	Commercial Art (Main Instit.)	Commercial Art (Main Instit.)	Drafting Mechanical - Architectural (Main Instit.)	Drafting Mechanical Architectural (Main Instit.)	
	6:30 - 7:30PM	Commercial Art (Main Instit.)	Commercial Art (Main Instit.)	Drafting Mechanical - Architectural (Main Instit.)	Drafting Mechanical - Architectural (Main Instit.)	
Period: 7:30 - 4:00 PM Vocational Aptitude Testing	7:30 - 8:45PM	Inspection Hobby Shop Activities	Inspection Hobby Shop Activities	Inspection Hobby Shop Activities	Inspection Hobby Shop Activities	
	7:30AM-4:00PM (Fri. only)	-	-	-	-	Conduct and Grade - G.A.T.B. Test

Work Day: Mon. thru Fri. 7:30 - 4:00PM

Weekly Schedule

NAME	TIME	Monday	Tuesday	Wednesday	Thursday	Friday
<u>Hambrock, Howard</u> Supportive Related Trades Instructor Period: 7:30 - 4:00 PM Vocational Training Supportive Education	8:00 - 9:00 AM	Measuring Devices (Main Instit.)	Supportive Ed. Farm Machinery Repair (V.T. Farm)	Observation OJT Classes (Main Instit.)	Supportive Ed. Farm Machinery Repair (V.T. Farm)	Measuring Devices (Main Instit.)
	9:00 - 10:00AM	Blueprint Reading (Main Instit.)	Supportive Ed. Farm Machinery Repair (V.T. Farm)	Blueprint Reading (Main Instit.)	Supportive Ed. Farm Machinery Repair (V.T. Farm)	Blueprint Reading (Main Instit.)
	10:00 - 11:00AM	Basic Metalurgy (Main Instit.)	Preparation	Basic Metalurgy (Main Instit.)	Preparation	Basic Metalurgy (Main Instit.)
	11:00 - 12:00AM	Related Shop Math (Main Instit.)	Preparation	Related Shop Math (Main Instit.)	Preparation	Related Shop Math (Main Instit.)
	12:00 - 12:30PM	-----	-----	Lunch -----	-----	-----
	12:30 - 1:45PM	Preparation	Preparation	Preparation	Preparation	Preparation
	1:45 - 2:45PM	Basic Electricity (Main Instit.)	Basic Electricity (Main Instit.)	Basic Electricity (Main Instit.)	Basic Electricity (Main Instit.)	Basic Electricity (Main Instit.)
	2:45 - 3:45PM	Basic Electricity (Main Instit.)	Basic Electricity (Main Instit.)	Basic Electricity (Main Instit.)	Basic Electricity (Main Instit.)	Basic Electricity (Main Instit.)

Work Day: Mon. thru Thurs. 12:15 - 8:45PM
 Weekly Schedule (September 11th thru May 17th) Fri. 7:30 - 4:00PM

NAME	TIME	Monday	Tuesday	Wednesday	Thursday	Friday
Taylor, Joseph Supportive Education Instructor	12:15 - 8:45PM	Library				
	12:15 - 4:00PM		Library	Library	Library	
	4:00 - 4:30PM	-----	----- Lunch -----	-----	-----	
	4:30 - 5:30PM		Preparation	Preparation	Preparation	
	5:30 - 6:30PM		Social Educ. Mental Health (Main Instit.)	Algebra (Main Instit.)	Algebra (Main Instit.)	
	6:30 - 7:30PM		Floor Supervision Evening Sch.	Geometry (Main Instit.)	Geometry (Main Instit.)	
	7:30 - 8:45PM		Floor Supervision Evening Sch.	Applied Math (Main Instit.)	Applied Math (Main Instit.)	
	7:30 - 4:00PM (Fri. only)					Library

Work Day: Mon. thru Fri. 7:30 - 4:00PM

Weekly Schedule

NAME	TIME	Monday	Tuesday	Wednesday	Thursday	Friday
<u>Street, James</u> Supportive Education Instructor Period: 8:00-10:00 AM Vocational Training Supportive Education	8:00 - 9:00AM	Remedial Math (V.T. Farm)	Remedial Math (Main Instit.) V. T.	Remedial Math (V.T. Farm)	Remedial Math (Main Instit.) V. T.	Supervise S. A. T. Test
	9:00 -10:00AM	Remedial Reading (V.T. Farm)	Remedial Reading (Main Instit.) V. T.	Remedial Reading (V.T. Farm)	Remedial Reading (Main Instit.) V. T.	Supervise S. A. T. Test
	10:00 -11:00AM	Preparation	Preparation	Preparation	Preparation	Supervise S.A.T. Test
	11:00 -11:30AM	-----	----- Lunch	-----	-----	-----
	11:30 -12:45PM	Preparation	Preparation	Preparation	Preparation	Preparation
	12:45 - 1:30PM	Remedial Math Grades (1-4) (Main Instit.)	Remedial Math Grades (1-4) (Main Instit.)	Remedial Math Grades (1-4) (Main Instit.)	Remedial Math Grades (1-4) (Main Instit.)	Remedial Math Grades (1-4) (Main Instit.) Beta Test
	1:30 - 2:15PM	Remedial Reading-Grammar Grades (1-4) (Main Instit.)	Remedial Reading-Grammar Grades (1-4) (Main Instit.)	Remedial Reading-Grammar Grades (1-4) (Main Instit.)	Remedial Reading-Grammar Grades (1-4) (Main Instit.)	Remedial Reading-Grammar Grades (1-4) (Main Instit.)
	2:15 - 3:00PM	Math Grades (5-8) (Main Instit.)	Math Grades (5-8) (Main Instit.)	Math Grades (5-8) (Main Instit.)	Math Grades (5-8) (Main Instit.)	Math Grades (5-8) (Main Instit.) Beta Test
	3:00 - 3:45PM	Reading-Grammar Grades (5-8) (Main Instit.)	Reading-Grammar Grades (5-8) (Main Instit.)	Reading-Grammar Grades (5-8) (Main Instit.)	Reading-Grammar Grades (5-8) (Main Instit.)	Reading-Grammar Grades (5-8) (Main Instit.)

EXHIBIT 2

Duties of the Academic Staff
Weekly Time Schedule
Analysis of Responsibilities and Functions
(Terre Haute)

EXHIBIT 2

DUTIES OF THE ACADEMIC STAFF
WEEKLY TIME STUDY
ANALYSIS OF RESPONSIBILITIES AND FUNCTIONS
 (Terre Haute)

Duties	Johnston	Taylor	Street	Boyd*
	Hrs.	Hrs.	Hrs.	Hrs.
1. Inmate crew; check in passes, etc.	1/2			
2. Opening locked storage areas, offices, classrooms	1/2	1		
3. Preparation of all callouts	1/2	1/2		1/2
4. a) Collect and direct outgoing mail b) Divide and distribute incoming mail	1		1/2	
5. Handling written correspondence	10	1		
6. Checking classroom attendance	1/2	1/2		
7. Telephone calls: Incoming	3	1/2	1/2	1/2
Outgoing	2	1	1/2	1/2
8. Classroom teaching	4	7	25	1
Preparation, grading papers, etc.	1	2	5	1/2
9. Interviewing and counseling	9	5	1	5
10. Searching central file jackets	1/2	1/2		1/2
11. Administer, grade, and record all types of tests		10	1/2	
12. Handling inmate release clearances and property	1/2	1/2	1/2	1/2
13. Handling educational films	1/2			
14. Handling self-study activities		5		
15. Handling supplies and orders	1/2	1/2		1/2

*No longer on staff

Duties	Johnston	Taylor	Street	Boyd
	Hrs.	Hrs.	Hrs.	Hrs.
16. Class supervision		1/2		
17. Dictating progress reports	1/2	1/2		1/2
18. Record keeping	1	1/2	1/2	1
19. Program development (library, visual aids, Academic and Social Education)	1	1/2	1/2	1
20. Library				22
21. Preparation of reports	1			1/4
22. Gavel Club Activities (sponsor of 2 clubs)	1/2			
23. Sanitary Supervision	1/2	1/2	1/2	1/2
24. Supervision work of employees	1			
24. Property inventory	1/2	1/2	1/2	
25. Miscellaneous				
Totals*	40	38	35	36

* Based on a 35-hour week (5 hours allowed for annual leave training, staff meetings, etc.)

EXHIBIT 3

Description of Remedial Math
(Terre Haute)

EXHIBIT 3. DESCRIPTION OF REMEDIAL MATH
(Terre Haute)

SUPPORTIVE EDUCATION

Mr. James Street

Remedial Math: Farm Camp - Monday & Wednesday 8 to 9 a.m.

Remedial Math: Main Institution - Tuesday & Thursday 8 to 9 a.m.

Since the math classes at the farm and institution are essentially the same, a general description will suffice for both classes. Once a man has been assigned to V.T., he is called to the class for a diagnostic test in arithmetic. For this purpose, "The Los Angeles Diagnostic Tests Fundamentals of Arithmetic", Forms 1 & 2 are given. This test is standardized for pupils in grade levels two to eight. Not only does it measure an achievement level, but it provides a means of diagnosing the errors in the arithmetic skills of individuals pupils. If a man scores below 8.0 grade level, he is considered in need of remedial math.

This diagnostic test makes it possible to start where the pupil is having difficulty. For example, in long division one student may require particular help in finding the correct quotient figures through the use of trial divisors; another pupil may need help in placing quotient figures correctly, or in handling zeroes in the quotient. Whatever the difficulty, remedial drill activities are provided. These drill exercises are usually programmed to meet the needs of a particular skill we are trying to develop. Consequently, the student is encouraged and enabled to discover and correct his weakness.

In teaching remedial math, an effort is made to follow a definite plan of development whereby but one step is taught at a time. By the use of step-by-step processes and appropriate drill exercises, the mastery of certain skills is assured. Most of the subject matter of arithmetic is definitely related, and where the material is properly graded for study, the mastery of one step leads directly to the mastery of the step that follows. Thus the first step is mastery of whole numbers; then common fractions; decimals, and percentages. Of course, in each step, an effort is made to build these problems around his V.T. interest which gives him further incentive for mastering the subject.

For remedial math, we have five major objectives:

1. To guide pupils in discovering the meaning, order, and logic of our number and numeral system.
2. To build a clear understanding of the operations of addition, substration, multiplication, and division of whole numbers, fractions, decimals, and percents.
3. To develop problem-solving ability, and the understanding needed to use the ability in practical job situations.
4. To develop skills for effective and economical mental and written computation.
5. To encourage growth of desirable attitudes and work habits in arithmetic.

After all steps have been successfully completed, the "California Survey of Arithmetic Achievement Test" is given. Either Form 1 or 2 is given, based upon the judgment of the teacher.

EXHIBIT 4

High School Curriculum
(Terre Haute)

EXHIBIT 4. HIGH SCHOOL CURRICULUM
(Terre Haute)

1st Period Mon & Tues: 5:40-6:30

Subject

- * Bookkeeping I & II
- * Typing I & II
- * Economics
- * English 9A (2nd half)
- * English 10
- * Commercial Art
- Mental Health (Tue) 9/11-11/3
- Money Management (Tue) 11/10-1/12

2nd Period Mon & Tues: 6:40-7:30

Subject

- * Bookkeeping I & II
- * Typing I & II
- * Economic Geography
- * English 9B (1st half)
- * English 11
- * Commercial Art
- Arithmetic (0-5.0)

3rd Period Mon & Tues: 7:40-8:30

Subject

- * Bookkeeping I & II
- * Typing I & II
- * Sociology
- * English 12
- Grammar (0-5.0)

1st Period Wed & Thurs: 5:40-6:30

Subject

- * Bookkeeping I & II
- * Typing I & II
- * Algebra 9
- * U.S. History
- * Physics
- * Drafting (Mech & Arch)

2nd Period Wed & Thurs: 6:40-7:30

Subject

- * Bookkeeping I & II
- * Typing I & II
- * Geometry
- * U.S. Government
- * Biology
- * Drafting (Mech & Arch)
- Grammar (7-10.0)
- Arithmetic (5-7.0)

3rd Period Wed & Thurs: 7:40-8:30

Subject

- * Bookkeeping I & II
- * Typing I & II
- * Applied Mathematics
- * Citizenship
- * General Science
- * Speech (Public Speaking)
- Arithmetic (7-10.0)
- Grammar (5-10.0)

Wednesday and Thursday Evenings - All Three Periods: Drawing & Painting -
course last all three periods so other courses cannot be taken on these nights.

* All courses with the Asterisk (*) marked in front of them can be taken for
high school credit. Minimum entrance grade level for enrollment in the
high school program is 8.0.

EXHIBIT 5

Supportive Education in Vocational Training
(Terre Haute)

EXHIBIT 5. SUPPORTIVE EDUCATION IN VOCATIONAL TRAINING
(Terre Haute)

(A) BLUEPRINT READING

The purpose of this course in Blueprint Reading is to insure mastery in blueprint reading and to cover the range of drawings, sketches and prints which the trainee will require in order to qualify as an advanced apprentice in his designated field of work. Use is made of many of the newer tested teaching-learning methods and curriculum development practices. The trainee works at his own rate of progress and is graded accordingly. All trainees complete a "Basic Blueprint Reading and Sketching" course, then progress to an advanced course in their trade area. The advanced course is intended to cover the broader blueprint reading problems peculiar to their trade area and by the use of these blueprints in solving problems they would meet in their later employment. Normally each trainee must have completed the mechanical drafting course as a prerequisite. The trainee is enrolled in this class when his need for this type of training is mutually agreed upon by both the shop instructor and the supportive education teacher and where it is deemed necessary for qualifications as an advanced apprentice in his trade area.

(B) BASIC ELECTRICITY

The purpose of this course is to present to the vocational trainee the rudiments of Basic Electricity. By means of carefully executed experiments carried out in the classroom each trainee is given the opportunity to study the principles of elementary electricity. In addition to the experimental portion of the course, use is made of film strips, charts, handouts, and other training materials. The course covers in approximately 40 hours of instruction the following subject areas: magnetism, circuitry, electromagnetism, bells, relays, transformers, and both A.C. and D.C. motors.

It is not the intent of this course to make skilled electricians of each trainee. Rather it is hoped that the trainee completing the course would have a better appreciation of the role that electricity plays both in the home and in industry. All vocational trainees in the main institution are required to take this course with the possible exception of those assigned to the paint shop.

(C) RELATED SHOP MATHEMATICS

This course is designed to assist the trainee in solving those mathematical problems peculiar to his trade area. Trainees who have completed the basic mathematic supportive course or those who are finding difficulty in understanding the application of mathematics in their trade area are assigned at the mutual agreement of the shop instructor and the supportive education teacher. Use is made of programmed instruction materials and trade mathematic textbooks for each shop area. Trainees work on an individual basis and are given personal assistance as necessary.

(D) MEASURING DEVICES

The purpose of this course is to teach the trainee the basic principles of measurement. Subject matter covered is adapted to the needs of each trainee in this general field. This course covers the modern measuring tools, new standards of precision, estimation, linear measurements, use of calipers and dividers, how to transfer measurements, laying out with accuracy, measurement of screw threads, measuring angles, vernier tools and how to use them, reading the micrometer (several types), use of dial indicators, use of gage blocks, limits of tolerance, reading charts, an understanding of the metric system and other miscellaneous measurements, and how to care for measuring instruments. This course is required for all machine, sheetmetal, woodworking, and electrical, and auto shop trainees. Other shop trainees are given instruction when it is deemed necessary by the shop instructor for such training. It has been found that all vocational trainees have benefited from this instruction at the present time. The course has only been operating for two months and it is anticipated that a wider range of subject matter will be included in the near future.

(E) BASIC METALS

This course is designed primarily for the machine and welding shop trainee who is required to have a working knowledge of metals in his vocational program. Other shop trainees are assigned when the shop instructor deems it beneficial to his overall progress in the related information areas of their programs. The course includes instruction in elementary metallurgy and will help the trainee to better understand the characteristics of the metals he is handling. Course coverage includes an understanding of iron and steel manufacture, heat treatment of the standard steels, principles of testing various metals, reading physical properties charts, effect of alloying in metals, and methods of forming metals. Use is made of audio-visual materials and various publications which give descriptive information of much of the course content. Normally the trainee can complete the course in approximately twenty-six (26) hours of instruction.

(F) BASIC DRAFTING

The purpose of this course in Basic Drafting is to familiarize the trainee with the proper use of mechanical drafting instruments and to assist him in solving a series of practical drawing problems peculiar to his trade area. This course is designed as an introductory course to help the trainee to visualize in three dimensions, to develop and strengthen his technical imagination, to think precisely, to read and write the language of his chosen trade, and to gain experience in making working drawings commensurable to those he will later find in industry. Use is made of several filmstrips which are based on the textbook currently in use as a teaching tool for the course. The trainee works at his own rate of progress and is graded accordingly. Normally this course is a prerequisite course for the Blueprint Reading course required for all mechanical trade trainees. The trainee is enrolled in this course early in his program and is usually able to complete the requirements within a four month period. Each class is limited to ten trainees (the number of training stations available) and meets a total of three hours a week each afternoon Monday through Thursday.

EXHIBIT 6

Operations Performed in Shop Training
(Terre Haute)

EXHIBIT 6. OPERATIONS PERFORMED IN SHOP TRAINING
(Terre Haute)

A. AUTO MECHANICS

Machines Used: Grinder, Drill Press, Valve Grinder, Seat Hone,
Cylinder Hone, Distributor Check Machine, Spark Plug
Cleaner, Grease Guns, Battery Charger.

Tools Used: Socket Sets, Pullers, Timing Light, Hammer, Chisel,
Screwdrivers, Punch Drift, Special Tools, Compression Test
Gage, Feeler Gage, Michrometer Scale, Hydrometer, Vice,
Torch, Reamers, Flaring Tools.

Service and Adjustments:

Spring Leaf & Coil Torsion
Cooling System
Wheels & Tires
Suspension Alignment
Lighting, Head & Tail Lights
Dashboard Instruments
Transmission Manual
Transmission Automatic
Steering Worm Adjustment
Valve Adjustment
Clutch Adjustment
Automatic Transmission Adjustment
Brake Adjustment
Parking Brake Adjustment
Fan Belt Adjustment

Trouble Shooting:

Electrical System
Battery & Cables
Voltage Regulators
Coil
Condensers
Timing
Tune-up

Engine Overhaul:

Remove Carbon
Grind & Reset Valves
Rebore Fit Pistons
Connecting Rod Bearings
Camshaft Fit Bearings
Crankshaft Bearings
Timing Gear or Chain
Hydraulic Lifters

Lubricants & Fluids:

Water & Anti-Freeze
Motor Oil
Transmission Oil
Brake Fluid
Grease

Body Repair:

Window Lifts
Power Seats
Bumping
Painting
Locks
Radio

Component Overhaul:

Starter & Controls
Generator, Voltage Regulator
Carburetor & Automatic Choke
Water Pump
Oil Pump & Filter Screen
Fuel Pump, Vacuum & Electric
Distributor
Clutch
Automatic Transmission
Manual Transmission & Overdrive

Differential
Brakes & Drums
Master Cylinder
Wheel Bearings
Drive Shaft Bearings
Shock Absorbers
Power Brake Booster
Power Steering Assembly
Windshield Wiper Motor, Vacuum or
Electric
Heater Blower, Defroster
Air Conditioning

B. ELECTRIC SHOP

Machines Used: Drill Press, Grinder, Coil Winder, Power Pipe Cutter,
Lathe, Under Cutter, Hydraulic Pipe Bender.

Tools Used: Pliers, Screw Driver, Pipe Pliers, Tape Rule, Voltage Tester,
Side Cutting & Needle Nose Pliers, Specialized Meters, OHM Meter,
AMP Meters, Rectifiers, Oscilloscope, Tube Testers, Megger.

Installations:

Conduit
Wiremold
Incandescent Lights
Flourescent Lights
Pull-Splice #16-1/0
Pull-Splice #1/0 500 M
1-2-3-4 Way Switch
1-3 Phase Motor Switch
3 Phase Magnetic Starters
Limit Devices
1-3 Phase Motors
Thermostat Controls
Low Voltage Signal System
Motor Drives
Distribution Transformers

Trouble Shooting:

Lighting Circuits
Motor
Clean Equipment, etc.
Electric Heaters
Electric Furnace Controls
Switch Gear
Welders
Electric Grills

Motors:

1 Phase Motors
3 Phase Motors
Motor Coils

Miscellaneous:

Elevators
Related Mechanical
Appliances
Telephones
Movie Projectors
Television

Radio:

Testing
Servicing
Assembly

C. FARM MACHINERY REPAIR

Tractor Repair:

Lubricate
Trouble Shoot Engine
Tune-Up Engine
Overhaul Engine
Check Hydraulic System
Repair Hydraulic System
Trouble Shoot Transmission
Overhaul Transmission

Corn Planters:

Repair Seed Containers
Repair Drop
Adjust Mechanisms in Field

Manure Spreader:

Repair Drive Mechanism
Adjust Feed Chains
Repair Feed Chains

Harvesting Machines:

Repair Combine Engine
Repair Power Take-Off Drive
Repair Sieves
Repair Auger
Repair Sickle
Repair Drive
Adjust Cornpicker Chain
Repair Cornpicker Chain
Repair Cornpicker Sprocket
Time Cornpicker
Adjust Cornpicker Snapping Rolls
Replace Cornpicker Snapping Rolls
Adjust Cornpicker Husking Mechanism
Replace Cornpicker Husking Mechanism
Repair Ensilage Cutters
Repair Ensilage Cutterheads
Repair Blower
Repair Engine Drives
Repair Elevator Chain
Correct Wagon Alignment
Repair Wagon Bed

Repair Elevator Flights
Repair Elevator Receiver
Replace Wagon Wheel Bearings

Tillage Machines:

Adjust Plows for Field Conditions
Replace Plow Shares
Replace Landsides
Replace Cutters
Adjust Disk
Repair Disk Arbor Bolts
Adjust Cultivator to Rows
Replace Shovels
Replace Sweeps
Adjust Disk Hillers

Wheat Drill:

Adjust for Various Grains
Make Necessary Repairs

Fertilizer Spreader:

Clean Spreader After Use
Adjust
Rebuild

Hay Machines:

Mower Safety Factors
Repair Sickle
Repair Pitman
Repair Sickle Driver
Repair Rotary Mowers
Replace Blades
Adjust Conditioners for Field Use
Repair Conditioner Drive
Repair Conditioner Rolls
Replace Rake Teeth
Replace Rake Drive
Repair Baler Knotter
Repair Baler Twister
Repair Bale Chamber
Repair Plunger

Welding:

Oxy-Acetylene Aluminum
Oxy-Acetylene Stainless
Oxy-Acetylene Sheetmetal
Arc Steel
Arc Cast
Arc Aluminum

D. MACHINE SHOP

Machines Used: Power Saw, Shaper, Boreing Mill, Drill, Press, Turrent Lathe, Metal Lathe, Milling Machine, Grinder, Drop Shear, Punch Press, Band Saw.

Tools Used: Scale, Calipers, Micrometers, Screwdriver, Pliers, Hammer, Center Punch, Center Guage, Combination Square, Scribe, Drill Bits, Mallet, Wrenches, Chisels, Taps, Rules, Files, Wheel Dresser, Wire Brushes, Bench Stones, Emery Cloth, Depth Guage, Thread Guage, Sidecuts, Hack Saw.

General Operations:

Sawing
Filing
Layout
Drilling
Tapping

Grinding:

Flat Surfaces
Hand Tools and Drills
Interval Cylindrical
External Cylindrical

Shaper:

Plan Shaping
Step Shaping
Beveling
Recessing
Form Shaping
Keyway Cutting

Drill:

Power Sawing
Plain Drilling
Counter Sinking
Counter Boring

Milling:

Slotting - Slitting
Plain Milling
Gang Milling
End Milling
Gear Cutting

Lathes:

Centering
Facing
Finish Turning
Shoulder Turning
External Threading
Cutting Off
Radial Turning
Drilling - Boring

D. (Continued)

Lathes (continued):

Reaming
Recessing
Interior Threading
Free - Hand Turning
Knurling

Miscellaneous:

Punch Press Operation
Drop Shear Operation
Arber Press Operation

E. PAINTING

Machines Used: Paint Mixer, Glass Cutting Machine, Paint Spray Guns.

Tools Used: Paint Brushes, Rollwers, Hand Saw, Screw Drivers, Hand Drills, Wire Brush, Trowel, Star Drill, Scrapers, Putty Knives, Glass Cutters, Pliers, Measuring Instruments.

Spray Gun Operation:

Material Preparation
Spray Booth Clean-up
Surface Preparation
Application
Gun Clean-up

Application Operations:

Sealer
Oil Stain
Latex
Enamel
Varnish
Undercoat
Filler
Other

Surface Preparation

Washing
Scraping
Snading
Puttying
Patching

Miscellaneous Operations:

Remove Finish
Patching & Matching
Rubbing & Polishing
Care of Equipment
Scaffolding
Glazing
Other

Material Preparation:

Enamel
Latex
Primer
Color Mixing
Other

F. PLUMBING

Machines Used: Pipe Machine, Grinder, Drill Press, Tap Machine, Hand Drill, Pipe Bender, Welding Equipment, Power Snake.

Tools Used: Measuring Instruments, Flaring Tools, Chisels, Hand Taps, Hand Reamer, Hand Threader, Hammers, Caulking Tools, Screw Drivers, Vises, Soldering Irons, Lead Furnace, Shovels, Torches, Hand Snakes.

General Operations:

Pipe Cutting
Pipe Reaming
Pipe Threading
Caulking Joints
Soldering
Swedge Copper Joints

Maintenance & Repair

Valves
Faucets
Flushometers
Grease Traps
Water Pumps
Lavatories
Toilet Stools
Drains
Septic Tank

Installation:

Pipe (All types)
Vents
Traps
Drains
Valves
Faucets
Septic Tanks
Toilets (Fixtures)
Water Pumps

Miscellaneous:

Rough-In-Test
Figure Materials
Trouble Shooting

G. SHEETMETAL

Machines Used: Crimper, Bench Punch, Burn Wheel, Edger, Setting Down Machine, Bar Folder, Brake, Square Shears, Lock Former, Bench Roll, Electric Drill Press.

Tools Used: Blow Torch, Soldering Irons, Wrenches, Hammers, Stakes, Pliers, Dividers, Hand Shears, Mallets, Combination Square, Carpenter Framing Square, Circular Rules, Straight Rules, Punches, Scriber, Screw Drivers, Vices, Vice Grips, Acid Brush, Wire Brushes, Cold Chisel, Hand Drill, Cutting Tool.

(Continued)

General Operations:

Pattern Tracing
Layout on Metal
Figure Bill of Materials

Miscellaneous:

Roof Repair
Gutter Repair
Lock Forming
Duct Work

Fabrication & Assembly:

Shoaring
Braking
Forming
Drill and/or Punch
Riveting
Soldering
Seaming
Lock Forming

H. STEAMFITTING

Machines Used: Pipe Threading Machine, Grinder, Drill Press, Tap Machine, Hand Drill, Pipe Bender, Welding Equipment.

Tools Used: Measuring Instruments, Hand Wrenches, Flaring Tools, Chisels, Hammers, Hand Taps, Hand Threader, Hand Reamer, Caulking Tools, Screw Drivers, Vises, Soldering Irons, Lead Furnace, Stillson Wrenches.

General Operations:

Measuring
Pipe Cutting
Pipe Reaming
Pipe Threading
Bonding
Assembling
Soldering

Miscellaneous:

Vacuum Guages
Ammonia Lines
Filters
Figure Materials
Trouble Shooting

Installation:

Pipe (all types)
Radiators
Pipe Hangers
Steam Guages
Water Pumps
Valves

Maintenance & Repair:

Clean Steam Traps
Rebuilding Steam Traps
Replacing Steam Traps
Cleaning Steam Valve
Rebuilding Steam Valve
Replacing Steam Valve
Greasing Expansion Joint
Packing Expansion Joint
Replacing Expansion Joint
Cleaning Reducers and Regulators
Rebuilding Reducers and Regulators
Replacing Reducers and Regulators

I. WELDING

Machines Used: Grinder, Drill Press, Power Hack Saw, Hand Drill,
Pipe Bender, Arc Welder, Oxy-Acetylene Regulators.

Care and Use of Hand Tools: Measuring Instruments, Wrenches, Chisels,
Hand Taps, Files, Hand Reamer, Hand Threader, Hammers,
Screw Drivers, Vises, Soldering Irons, Torches, Clamps,
Vice Grip Pliers, Hack Saw, Chipping Hammer, Bars-Pry &
Pinch, Portable Grinder, Electrode Holders.

Arc Welding:

Butt
Lap
Tee
Corner
Edge
Groove
Fillet

Acetylene Welding:

Butt
Lap
Tee
Corner
Edge
Groove
Fillet

Gas & Arc:

Cut & Burn
Brazing
Cast Iron
Aluminum
Stainless Steel
Other Alloy

Miscellaneous:

Test
Figure Materials
Trouble Shooting

J. WOODWORKING

Machines Used: Jointer, Planer, Cut Off Saw, Mortiser, Lathe Sharper,
Portable Sander, Drill Press.

Tools Used: Measuring Instruments, Saw Plane, Scraper, Hammer, Chisel,
Screwdriver, Vise.

J. (Continued)

Hand Operations:

Sanding
Sawing
Planing
Chiseling

Assembly Operations:

Hammer and Nail
Gluing
Hardware Applications
Screw Assembly

Power Machine Operations:

Jointer
Planer
Cut Off Saw
Table Saw
Band Saw
Mortiser
Lathe
Shaper
Portable Sander
Drill Press

Miscellaneous:

Tool Sharpening
Saw Filing
Power Machine Maintenance
Finish Removal
Figure Material

EXHIBIT 7

Textbooks Used in Remedial Math and Grammar
(Terre Haute)

**EXHIBIT 7. TEXTBOOKS USED IN REMEDIAL MATH AND GRAMMAR
(Terre Haute)**

Programmed Materials -

Intermediate Grades: 3-4-5-6

Publisher

Arithmetic of Whole Numbers, 2 Vols.	Encyclopedia Britannica
Addition - Hancock & Holden	Addison - Wesley Publishing Co.
Subtraction - Hancock & Lucas	"
Multiplication - Hancock & O'Brien	"
Division - Hancock & Schneider	"
Basic Mathematics - (A problem solving approach)	"
Addition	McGraw-Hill Publishing Co.
Subtraction	"
Multiplication	"
Division	"
Arithmetic 4003	Universal Electronics Lab.
Workbooks on Grades 3-4-5-6	Steck-Vaughn Company
Textbooks (conventional):	
The New 'Discovering Numbers'	John C. Winston Co.
Growth in Arithmetic	Harcourt, Brace & World, Inc.

Programmed Materials -

Junior High Grades: 7-8-9

Arithmetic	Universal Electronic Lab.
Fractions	McGraw-Hill Publishing Co.
Decimals	"
Word Problems	"
Measurements	"
Ratios and Proportions	"
Modern Mathematics	"
Basic Mathematics - Bobrou	Encyclopedia Britannica
Seventh Grade Math - Murphy	"
Modern Math - Bobrou	"
Textbooks (conventional):	
Refresher Math with Practical Application - Stein	Allyn and Bacon, Inc.
Secondary School Mathematics	Holt, Rinehart, and Winston
Everyday General Math - Betz	Gin and Company

EXHIBIT 8

Textbooks Used in Vocational Training (Supportive)
(Terre Haute)

**EXHIBIT 8. TEXTBOOKS USED IN VOCATIONAL TRAINING (SUPPORTIVE)
(Terre Haute)**

**"Practical Problems in Mathematics" for Automotive Trades;
Delmar Publishers Inc., Albany, N.Y.**

**"Experimental Electricity for the Beginner" by Leonard R.
Crow, Univers Scientific Co., Inc., Vincennes, Indiana.**

**"Blueprint Reading and Sketching", Carpentry Trades, Residential;
Delmar Publishers, Inc., Albany, N.Y.**

**"Basic Blueprint Reading and Sketching" by Thomas Olivo and
Albert V. Payne; Delmar Publishers, Inc., Albany, N.Y.**

**"Building Trades Blueprint Reading and Sketching" (Basic
Course); Delmar Publishers, Inc., Albany, N.Y.**

**"Blueprint Reading and Sketching", Plumbing Trades, Residential
and Commercial; Delmar Publishers, Inc., Albany, N.Y.**

**"Blueprint Reading for Machine Trades", Volume 1 and 2; Delmar
Publishers, Inc., Albany, N.Y.**

**"Electrical Trades Blueprint Reading and Sketching", Residential
Commercial, and Industrial; Delmar Publishers, Inc., Albany, N.Y.**

**"Automotive Interpretation Drawing" by Louis Jensen; Delmar
Publishers, Inc., Albany, N.Y.**

**"Basic Mathematics Simplified" by Thomas Olivo, Volumes 1-11;
Delmar Publishers, Inc., Albany, N.Y.**

**"Mechanical Drawing", French and Svensen; McGraw-Hill Book Co.,
N.Y.**

**"Typewriter Mechanical Training Manual" by Clarence L. Jones,
Volumes 1-11; Ames Supply Co., Downers Grove, Illinois.**

**"Fundamentals of Sheetmetal Layout" by L. F. Vogt, A Basic
Systems Program; E. I. duPont de Memours & Co.**

**"Elementary Metallurgy" by W. T. Frier; McGraw-Hill Book Company,
N.Y.**

EXHIBIT 9

Vocational Training Summary
(July 1, 1966 - June 30, 1967)
(Terre Haute)

EXHIBIT 9. VOCATIONAL TRAINING SUMMARY
(July 1, 1966 - June 30, 1967)
(Terre Haute)

Auto Mechanics

Completions 7
 Incomplete 6
 Pres. Trainees 10

Electric Shop

Completions 8
 Incomplete 5
 Pres. Trainees 17

Welding Shop

Completions 6
 Incomplete 1
 Pres. Trainees 6

Woodworking

Completions 3
 Incomplete 6
 Pres. Trainees 8

Machine Shop

Completions 5
 Incomplete 6
 Pres. Trainees 4

Paint Shop

Completions 5
 Incomplete 6
 Pres. Trainees 6

Plumbing Shop

Completions 7
 Incomplete 4
 Pres. Trainees 10

Sheet Metal

Completions 2
 Incomplete 3
 Pres. Trainees 5

Steamfitting

Completions 4
 Incomplete 4
 Pres. Trainees 5

Farm Machinery Repair

Completions 13
 Incomplete 1
 Pres. Trainees 15

EXHIBIT 10

Breakdown Showing Reasons for Incompletions
in Vocational Training
(Terre Haute)

**EXHIBIT 10. BREAKDOWN SHOWING REASONS FOR INCOMPLETIONS
IN VOCATIONAL TRAINING (Terre Haute)**

1. Official Discharge from Institution	11
2. Adjustment Committee Action	6
3. Transfer to another institution	5
4. Institution Job Change	6
5. Inmates request and lack of interest	7
6. Transfer to Farm Camp	4
7. Poor progress in training	2
8. Medical	1
Total =	<u>42</u>

EXHIBIT 11

Job Responsibilities of Instructional Staff
(Milan)

EXHIBIT 11

JOB RESPONSIBILITIES OF INSTRUCTIONAL STAFF
(Milan)

YOUNG, Tony R. - Supervisor of Education

Responsible for overall supervision and operation of the education department to include academic, vocational, recreation and evaluation of inmates for correctional growth.

HADDOX, Cecil F. - Assistant Supervisor of Education

Assistant to the supervisor of education in the operation of the education department.

STRONG, William C. - O.R.D.

Works under general supervision of the supervisor of education as an educational specialist. Keeps the supervisor advised on problems related to technical trade training and assists with the institution vocational training activities through proposing research projects, making frequent inspections of community vocational activities, developing new evaluation procedures, recommends instructional materials and conducts in-service training for vocational instructors. Helps develop high standards for vocational programs and conducts follow-up studies on inmate occupational performance following their release.

ROSS, Foster W. - Related Trades Instructor

He is responsible for organizing and conducting related trades classes for those men who are assigned to formalized vocational training. His specialized teaching activities include such things as occupational information and trade mathematics. It is expected that he will teach classes given to professional growth activities, inmate counseling, preparation of teaching aids and in-service training in addition to some time used in community educational training industrial activities.

BAKER, Bruce E. - Masonry V.T. Instructor

Instructs classes consisting of 12 to 15 students who function at a specific academic level and possess specified aptitudes in the fundamentals of brick laying, and laying tile and blocks. Emphasis will be placed upon safety and work attitudes in connection with the use of hand and power tools, scaffolding, mortar preparation for both residential and commercial construction operations. Graduates will have mastered the entry skill or semi-skilled level for the trade and the equivalent of the first nine months of a three year apprenticeship program.

BUCHHOLZ, Charles E. - Auto Mechanic V.T. Instructor

Instructs classes consisting of 12 to 15 students who function at a specified grade level and mechanical aptitudes concerning the fundamentals of automotive design, construction and maintenance procedures and operations. Emphasis will be placed on safety and work attitudes in connection with the utilization of tools and test equipment in performing maintenance, overhaul and repair functions to modern vehicles. Graduates will have mastered the entry or semi-skilled level for the trade and the equivalent of the first 6 months of a four year apprenticeship program.

MISKERICK, John Jr. - Small Engine V.T. Instructor

Instruct classes consisting of 12 to 15 students who function at a specified academic level and possess specified mechanical aptitudes, in the principals of construction, functional systems, overhaul and tune-up procedures for small gasoline engines. Emphasis will be placed on shop and safety attitudes in connection with the repair of engines utilized on lawnmowers, snow blowers, boats, PTO's, etc. Graduates will have mastered the entry skill or semi-skilled level for the trade, and will be able to properly utilize mag-electrical systems test equipment.

STEFANSON, Kaj E. - Machine Shop V.T. Instructor

Instructs classes consisting of 12 to 15 students who function at a specific grade level and possess mechanical aptitudes in the fundamentals of machine shop operations, procedures and practices. Emphasis will be placed on shop and safety attitudes in connection with the operation of modern machines and tools comparable to those utilized by industry. Graduates will have mastered the entry skill or semi-skilled level for the trade, and the equivalent of the first 6 months of a four year apprenticeship program.

NYSTROM, Karl E. - Supportive Education Instructor

Instructs general education classes (Phases I and II), administers tests, evaluates inmates for correctional growth and serves on the basic team.

RICHARDSON, Morris - Supportive Education Instructor

Instructs general education classes (Phases I and II), administers tests, and evaluates inmates for correctional growth.

ARON, Edith - Contract Academic Instructor

Teaches senior high and college level classes in Modern Literature and Creative Writing. Counsels and evaluates progress of inmates in classes.

ENGLISH, Cliff - Contract Teacher & Night School Supervisor

Teaches classes in Phase II and III of the academic school; administers tests; counsels and evaluates progress of inmates; and responsible for supervision of night school.

ENGLISH, Phil - Contract Teacher and Test Proctor

Teaches Speech & Drama (Phase III), administers IQ, SAT and GATB tests, and supervises the library on Saturdays.

MC CREA, Larry - Contract Teacher

Teaches classes in Phase II of the academic program and evaluates inmates in his class.

MARTIN, Herb - Contract Teacher

Teaches college-level classes in Psychology & Social Adjustment. Evaluates inmates in his class.

MICHAELS, Cal - (Volunteers his time)

Conducts classes in pre-college preparation and evaluates inmates for possible success in college.

TREXLER, Bud - Contract Teacher

Teaches classes in Phase II and III of the academic program and counsels and evaluates progress of inmates.

EVANS, Norman - Contract Teacher

Teaches high school classes in U.S. Government, U.S. History and Economics. Evaluates growth for credit toward regular high school diploma.

SATARINO, Frank - Contract Teacher

Teaches high school classes in English Grammar & Composition, American Literature and English Literature. Evaluates growth for credit toward regular high school diploma.

WATKINS, Edward - Contract Teacher

Teaches high school classes in General Mathematics and Algebra. Evaluates growth for credit toward regular high school diploma.

BICKFORD, Hugh E. - Recreation Supervisor

Responsible for organizing and conducting a varied recreation program designed to meet the needs of the younger offenders.

FLECK, John Jr. - Recreation Assistant

Functions under the general direction of the recreation supervisor.

OLIVER, Robert E. - Librarian and Resource Person

Supervises and operates the library; procures learning materials and other supplies for the library; counsels and evaluates the correctional growth of inmates; and serves on the basic team. Educational advisor for study release inmates.

EXHIBIT 12

Staff Qualifications
(Milan)

EXHIBIT 12

STAFF QUALIFICATIONS
(Milan)

NAME: Tony R. Young

CURRENT POSITION: Supervisor of Education

EXPERIENCE: YMCA Physical Director - 6 years
Public Schools Secondary - 1 year
B.O.P. - approximately 7 years

EDUCATION: B.S.
M.A. Complete in January 1968. Curriculum in secondary education.

EXHIBIT 12, Page 2

NAME: Cecil F. Haddox

CURRENT POSITION: Assistant Supervisor of Education

EXPERIENCE: School Superintendent
Elementary & Secondary Teacher and Principal

EDUCATION: B.S. - Major, Elementary Education, Minor, History
M.Ed. - Major, School Admin., Minor, History

NAME: William C. Strong

CURRENT POSITION: Occupational Research and Development Coordinator

EXPERIENCE: 5 years Active duty U.S. Army - Infantry Officer
7 years Administrative Officer Okla National Guard
5-1/2 years Industrial Arts Instructor - Okla Public Schools
4-1/2 years Related Trades Instructor - Federal Prison System

EDUCATION: B.S. Ind Arts Educ - Okla State University 1948
Masters Ind Educ - Univ of Okla 1953
Reserve Officers Command and General Staff College - Ft Leavenworth,
Kans 1966

NAME: Edith Aron

CURRENT POSITION: Part Time Teacher

EXPERIENCE: Dormitory Tutor (Eng Comp) U. of N. Mex 3 or 4 years
Teaching English Comp and Intro to Lit, U. of N. Mex 1 year

EDUCATION: B.A. with distinction, History, U. of M.
M.A. Comparative Lit, U. of M.

NAME: Foster W. Ross

CURRENT POSITION: Related Trades Instructor (Vocational Training)

EXPERIENCE: Since January 6, 1960 - 8 years

EDUCATION: State of Michigan - Dept. of Education - Division of Vocational Training approved for coordination activities and to teach subjects related to trade and industrial occupations in cooperative classes - special rating for period 7/1/67 to 6/30/70 (has been licensed with them since 1960).
State of Indiana - First grade license for Teaching in High School, Science - English - Math (Majors in Biology, Chemistry, and English).
Approved by MESC for conducting GATB testing.
A.B. degree - Indiana State Teachers College, 1934 now Indiana State University.

EXHIBIT 12, Page 6

NAME: Karl H. Nystrom

CURRENT POSITION: Teacher

EXPERIENCE: Five and one-half years

EDUCATION: B.A. - Texas - Secondary

NAME: Clifford J. English

CURRENT POSITION: Contract Teacher - Evening School Supervisor

EXPERIENCE: Two years camp counselor for culturally deprived. One year graduate research assistant dept. Sociology, Eastern Michigan University. One year teaching, testing, evaluating newly committed inmates.

EDUCATION: B.S. degree E.M.U. majors Sociology and Literature - minor, Clinical Psychology.
M.A. degree E.M.U. social foundations education with emphasis in Sociology.
Currently enrolled in Ph.D. program - University Michigan in Social Psychology of Education.

EXHIBIT 12, Page 8

NAME: Herb Martin

CURRENT POSITION: Contract Teacher

EXPERIENCE: Two Years Washtenaw Community College

EDUCATION: B.S.
M.A. - Emotionally Disturbed
Enrolled University of Michigan for PhD.

EXHIBIT 12, Page 9

NAME: Philip English

CURRENT POSITION: Part Time Teacher

EXPERIENCE: Theatre Direction

EDUCATION: B.A. in Speech & Drama, Northern Michigan University

EXHIBIT 12, Page 10

NAME: Larry McCrea

CURRENT POSITION: Part Time Teacher

EXPERIENCE: Pre-Student taught F.C.I.
Student taught Roosevelt - 4th grade
Taught at Dundee Elementary (1 year)

EDUCATION: Undergraduate

EXHIBIT 12, Page 11

NAME: Morris Richardson

CURRENT POSITION: Teacher of General Education

EXPERIENCE: Eight (8) teaching elementary

EDUCATION: Texas - Michigan - Washington
B.S. - Major in Education - Minor in Health and Physical Education

NAME: Robert Ellsworth Oliver

CURRENT POSITION: Librarian

EXPERIENCE: Part Time Student Assistant, Alpena Community College Library -
2 years
E.M.U. Library - 2 years.
Student teaching - 1 semester 7th grade English, 1 semester
library practice in Elementary, Junior, and Senior High.

EDUCATION: Michigan secondary - Certificate which will become permanent
upon the completion of 10 hours of academic credit and 3 out
of 5 years of teaching.
Associate of Arts - Alpena Community College, 1961.
BSLS - Eastern Michigan University, 1967

NAME: Bud Trexler

CURRENT POSITION: Part Time Teacher

EXPERIENCE: No previous paid teaching experience.

EDUCATION: Everything completed except student teaching - therefore, no certificate from Michigan.
B.S. - EMU, Major, Math, Minors in Chemistry, Physics, and Military Science.
Working on Masters degree at EMU, will complete work by August, 1968.

NAME: Bruce Eldon Baker

CURRENT POSITION: V.T. Masonry Instructor

EXPERIENCE: No previous paid teaching experience.
15 years - Supervised and conducted masonry apprenticeship training
courses in connection with contracting business
16 years - Self-employed mason contractor

EDUCATION: B.B.A. Journalism, University of Toledo, 1951

NAME: Charles Edward Buchholz

CURRENT POSITION: V.T. Auto Mechanics Instructor

EXPERIENCE: 8 years - Auto Mechanics Instructor in North Dakota
Self-employed in farming and mechanic work for four years.

EDUCATION: 2 years - North Dakota State School of Science (General
Mechanics and Diesel Maintenance)

NAME: John Miskerik, Jr.

CURRENT POSITION: V.T. Small-Engine-Repair Instructor

EXPERIENCE: 15 years - Self-employed auto mechanic
18 years - Small Engine Repair Shop (self-employed)
Harley Davidson and Evinrude Franchise

EDUCATION: Graduate Milan High School
Harley Davidson Mechanic School (4 weeks)

NAME: Kaj Edwin Stefansen

CURRENT POSITION: V.T. Machine-Shop Instructor

EXPERIENCE: 3 years - Machine Apprenticeship Training (New York)
4 years - Machinist (New York and Connecticut)
8 months - Machine Parts Inspector
10 months - V.T. Machine-Shop Instructor

EDUCATION: High School Graduate
Graduated from School of Aviation Trades (New York)

EXHIBIT 13

Textbooks Used in General Education
(Milan)

TEXTBOOKS USED IN GENERAL EDUCATION
(Milan)

Mathematics

Real Life Arithmetic, Grades 5, 7, and 8.

Everyday General Mathematics, revised edition, Books 1 and 2.

Basic Mathematics Simplified by C. Thomas Olivo.

20th Century Bookkeeping and Accounting, first year course and advanced course.

Algebra, Book 1.

Introduction to Algebra, Parts 1 and 2.

Plane Geometry, revised edition, by Semour and Smith.

The Essentials of Modern Mathematics by Balmer and Slade.

Literature Texts

Adventures in English Literature, Olympic Edition, by Inglis and Spear.

Adventures in English Literature, Laureate Edition.

Adventures in American Literature, Laureate Edition.

The United States in Literature.

Writing Themes About Literature by Roberts (paperback).

Paperback Literature Aids

The Plain Rhetoric by S. L. Rubinstein.

Sophocles -- The Theban Plays.

Four Tragedies by Shakespeare.

A Concise Treasury of Great Poems.

The Portable Milton.

Paperback Literature Aids (Continued)

The Complete Short Stories of Mark Twain.

Life on the Mississippi by Mark Twain.

The Adventures of Huckleberry Finn by Mark Twain.

A Connecticut Yankee by Mark Twain.

50 Great Short Stories, edited by Milton Crane.

20 Grand Great American Short Stories.

The Pocket Book of O. Henry Stories.

The Red Pony by John Steinbeck.

Call of the Wild and Selected Stories by Jack London.

The Modern American Short Stories by David A. Sohn.

Been Down So Long It Looks Like Up To Me by Richard Farina.

Conservatism: A Guide To It's Past, Present and Future in American Politics by Dean Smith.

Liberatism: A Guide To It's Past, Present and Future in American Politics by Milton Viorst.

Poetry Festival, edited by John Bellenbender.

Famous American Plays of the 1920's.

Famous American Plays of the 1930's.

Famous American Plays of the 1940's.

Famous American Plays of the 1950's.

The Catcher in the Rye by J. D. Salinger.

9 Stories by J. D. Salinger.

Of Mice and Men by John Steinbeck.

History and Government

United States History, revised edition, by Wirth.

Current United States History by De Conde Dante.

The American Nation, Third Edition, by Hicks.

Our American Government by Dimond and Pfiieger.

Understanding Our Government by Bruntz.

English

Effective English for Business, 5th Edition, by Aurner and Bartness.

English Grammar and Composition, Grades 7, 8, and 9.

Economics and Civics

Economics for Our Times, Third Edition, by Smith.

Civics for Americans by Clark, Edmonson, and Dondineau.

Business Law

Applied Business Law, 7th Edition, by Fisk and Snapp.

G. E. D. Preparation

High School Equivalency Diploma Tests by Arco.

Score-High Exam Book - High School Equivalency Examination by Coyles.

Programmed Instruction Materials

<u>TITLE</u>	<u>AUTHOR</u>	<u>PUBLISHER</u>	<u>SUGGESTED GRADE LEVEL</u>	<u>SUMMARY OF CONTENT</u>	<u>No. of Copies</u>
Basic Composition Series 11 Writing Skills Laboratory	Nymann, Rudd, Bergmann, Roth, Wyatt	Science Research Associates	5-6	Laboratory contains basic and supplementary lessons, answer booklets which provide test answers, a teachers handbook, and a writers notebook, which contains writing assignments, ideas and answer pages for recording test responses.	One
Basic Composition Series 111 Writing Skills Laboratory Part 1: Narration	Same as above	Science Research Associates	7-8	Same description as above.	One
Reading Laboratory Series Reading Lab. 11 Reading Lab. 11b Reading Lab. 11c Reading Lab. 11la Reading Lab. 11lb	Parker Parker Parker Parker Parker	Science Research Associates	4 5 6 7-8 8-9	Classroom Kits. Multi-level Skill-building materials and remedial aids.	Three Three Three Three Three
Learnings in Science Series Earth's Atmosphere Weather and Climate Solar System Biogeography	Parker and Stotler	Science Research Associates	4-6 4-6 4-6 4-6	Classroom kits. Each lab contains for the student: Research booklets, record books, key cards and key-model booklets; and for the teacher; the teacher's handbook, instructional aid booklet, laboratory picture chart, and content guide chart.	Three Three Three Three
Spelling Word Power Laboratory 11a 11b 11la	Parker and Stotler	Science Research Associates	4-7 4-7 4-7	Classroom kits. Consists of comprehensive sets of learning materials that incorporate modern techniques of multi-level instruction.	One One One
Words	Susan Markle	S.R.A.	7-8	Sequential, self-teaching linear program for vocabulary development.	Thirty

Programed Instruction Materials (Cont'd)

<u>TITLE</u>	<u>AUTHOR</u>	<u>PUBLISHER</u>	<u>SUGGESTED GRADE LEVEL</u>	<u>SUMMARY OF CONTENTS</u>	<u>NO. OF COPIES</u>
Programed Math for Adults	Sullivan Associates	McGraw-Hill		For use from elementary school up.	20
Book 1: Addition					20
Book 2: Advanced Addition					20
Book 3: Subtraction					20
Book 4: Multiplication					20
Book 5: Division					20
Book 6: Fractions					20
Book 7: Decimals & Percentages					8
Teacher's Guide, Books 1-5					30
Progress Tests, Books 1-5					20
Book 8: Measurement					
Book 9: Personal Math					
Book 10: Consumer Math					
General Science Programed Learning Laboratory	Accelerated Instruction Methods Corporation	Macmillan Company		For use from elementary school up. A General Science Course of Study.	50
Book 1: Motion					50
Book 2: Force					50
Book 3: Energy & Work					50
Book 4: Simple Machines					50
Book 5: Earth					50
Book 6: Light					50
Follett Basic Education Programs		Follett Publishing Company	4-8	Basic literacy, sequenced & individually paced. May not be fully "programmed". Teacher Direction Required.	30
Unit 1: Reflections					30
Unit 2: Lend an Ear					30
Unit 3: As A Matter of Fact					30
Unit 4: The Sound Around Us					30
Unit 5: Lets Talk It Over					30
Unit 6: Say It On Paper					30
Unit 7: What's Behind The Cover					30
Unit 8: The Job In Your Future					30
A Programed Course in Grammar and Usage J. Blumenthal	Harcourt, Brace and World		7-8 9-10 10-12	Grammar, Usage and mechanics of English. Content usually presented in the grades indicated. Suitable for use on other levels, including adult, according to need. Test booklets and teacher manual.	50
English 2200					50
English 2600					50
English 3200					50

EXHIBIT 13, Page 6

Programmed Instruction Materials (Cont'd)

<u>TITLE</u>	<u>AUTHOR</u>	<u>PUBLISHER</u>	<u>SUGGESTED GRADE LEVEL</u>	<u>SUMMARY OF CONTENT</u>	<u>NO. OF COPIES</u>
Reading For A Purpose	J. Adair & R. Corry	Follett Publishing Company	0-6	Sight-word approach. Reading, writing, English. Speaking, listening word recognition, comprehension.	32
How A Bill Becomes Law	F. Newman	Macmillan Co	10-12	Mechanics, aspects and influences of law making in the U.S. Congress. Includes committee hearings, filibusters, lobbying, etc. Reviews. Teachers manual.	30
A Programmed Approach to Writing		Ginn & Co.	7 8	Fundamentals of writing, concept development transformational grammar with traditional terminology.	60 60
Book 1 Book 2					
Help Yourself to Read, Write & Spell	Educational Development Corporation	Ginn & Co.	4+ 4+	Picture techniques at adult level for culturally deprived or foreign born in Reading and Writing English. Teacher's handbook. Book 2 deals with daily life and relations with others, business letters, job applications, newspaper reading.	50 50
Book 1 Book 2					
Kott Language Skills Program	B. Chapman, L. Schulz, et. al.	Allied Education Council	1-2-3	For adults basic literacy instruction. Involves aspects of programmed instruction. Requires teacher direction.	30 30
300 Series					
300 A					
300 B					
600 Series					
600 A					
600 B					
900 Series					
900 A					
900 B					
Communications					
1 Getting Started	J. Bauer	Follett Publishing Company	0-2	Reading, writing, spelling, English grammar. A linguistic approach. Picture of object plus word in oral vocabulary to the word in spelling. Context clues to reading.	30
11 On The Way			3-4		30
111 Full Speed Ahead			5-6		30

Programmed Instruction Courses

Machine Shop:

Whole Numbers
Fractions
Decimals & Percent
Ratio & Proportion
Measurements
Calipers
Verniers
Sketching
Reading Eng Drawings
Simple Algebra
Safety
Drills, Part I
Drills, Part II
Grinders, Pedestal & Bench
Reamers - Solid
Reamers - Expansion
Reamers - Adjustable
Bearings - Plain
Bearings, Anti-Friction
Positive & Negative Numbers
Using Tables of Squares &
Squares Roots
Gear Ratios
Gears - Installation
Spur Gears
Worms & Worm Gears
Welding

Auto Mechanics:

Whole Numbers
Fractions
Decimals & Percent
Ration & Proportion
Measurements
Calipers
Verniers
Bearings - Plain
Bearings, Anti-Friction
Gear Ratios
Gears - Helical
Bevel Gears
Drills, Part I
Drills, Part II

Safety
Pumps - Positive Displacement
Welding
Spur Gears
Sketching
Grinders, Pedestal & Bench
Reading Eng Drawings
Chains & Sprockets
Roller Chains
Chains & Sprockets
Sprockets & Drives

Small Engine Repair:

Whole Numbers
Fractions
Decimals & Percent
Ratio & Proportion
Measurements
Bearings - Plain
Bearings, Anti-Friction
Grinders, Pedestal & Bench
Roller Chains
Chains & Sprockets
Sprocket & Drives
Chains & Sprockets
Coupling Alignment
Drills, Part I
Drills, Part II
Sketching
Welding
Safety

Masonry:

Whole Numbers
Fractions
Decimals & Percent
Ratios & Proportion
Measurements
Area & vol of common fig
Sketching
Welding - Oxyacetylene
Cutting & Tacking
Safety

EXHIBIT 14

Equipment - Tools - Materials for Vocational Training
(Milan)

4

EXHIBIT 14

EQUIPMENT - TOOLS - MATERIALS FOR VOCATIONAL TRAINING
(Milan)

A. Machine Shop

Major Equipment

- 2 - 10" Engine Lathes
- 4 - 12" Engine Lathes
- 1 - 14" Engine Lathes
- 2 - Vertical Milling Machines with horizontal attachments

- 1 - Surface Grinder - 6" x 18" table
- 1 - Cylindrical Grinder with internal attachments
- 1 - Drill Grinder, Collet type 1/3 H.P.
- 1 - 6" Tool Grinder, Pedestal type
- 1 - 8" Bench Grinder
- 1 - 6" Bench Grinder
- 2 - 7" Bench Mod Shapers
- 1 - Vertical Band Saw, 16"
- 1 - Horizontal Band Saw

- 2 - 15" Floor Model, Drill presses
- 2 - 14" Floor Model, Drill presses
- 1 - Micro High Speed (3500 RPM) Drill press

- 1 - 250 Amp Arc Welder
- 1 - Set of oxygen-acetylene welding equipment
- 1 - Set of Super A Johansen - Blocks
- 1 - Optical Comparator, 14" Screen
- 1 - Rockwell Hardness Tester
- 1 - Air Compressor, 100 cu. ft. per min. w/80 gallon tank
- 2 - Geometric, Die Heads
- 1 - Block Granite Surface Plate, 18" x 24"
- 1 - Height Gauge 18"
- 16- Sets of Machinist Tools with Chest

Additional hand tools, measuring instruments, gauges, electrical hand drills, taps and dies, etc. 16 - Work tables with vises.

B. Auto Mechanics

- 1 - Generator, Alternator, Regulator Tester (Off-car)
- 1 - Generator, Alternator, Regulator Tester (On-car)
- 1 - Distributor, Condenser Tester
- 1 - 6-12 Volt 60 amp. Battery Charger
- 1 - Wet Type Piston Pin Honing Machine
- 1 - Valve Seat Grinding Set
- 1 - Valve Refacing Machine
- 1 - Brake Shop Set (1 - Brake Drum Lathe, 1 - Brake Disc Lathe and
1 - Brake Shoe Grinder)
- 1 - Electronic Engine Analyzer
- 1 - Wheel balance - on car electronic type
- 1 - Front end alignment, pit type
- 1 - Brake shoe riveter, air type
- 1 - Chassis - dynamometer, 200 road HP, continuous operation type
- 1 - Piston pin bushing set
- 1 - Oxygen-acetylene welding set
- 1 - 240 amp. Arc welder
- 1 - 25 ton arbor, press, hydraulic type
- 1 - Pneumatic hammer set
- 1 - 2-1/2 ton floor jack
- 1 - Automatic trans jack
- 1 - Shop crane, 1 ton cap., hydraulic
- 3 - Rotary engine stands
- 24 - 6' x 28" work benches - one with vise
- 1 - parts washer, 30 gallons cap. - chemical type

Overhead exhaust system on order

Air lines to be installed within shop in near future

Training Aids Materials

- Chevrolet 2 - V8 and 1 - 6 cylinder engines
- Buick 2 - V8 cylinder engines
- Ford 4 - V8 and 2 - 6 cylinder engines
- Oldsmobile 3 - V8 engines
- Ford 2 - Automatic transmissions and 1 standard
- Chevrolet 2 - Automatic transmission
- Oldsmobile 2 - Automatic transmission
- Buick 1 - Automatic transmission
- Buick 2 - Rear end assys
- Chevrolet 1 - Rear end assy
- Ford 4 - Rear end assys
- Oldsmobile 2 - Rear end assys

Training Aids Materials (Cont'd)

Assortment of Drive Shafts and universal joints
Assortment of Rochester and Ford carburetors
Assortment of Alternators, generators and starters
1 - Buick 1954
2 - Oldsmobiles 1957's
1 - Chevrolet 1958
Additional hand tools, measuring instruments, gauges, etc.

Textbooks and Shop Manuals

Shop Manuals - 1967- Ford, Buick, Oldsmobile, Pontiac, American Motors.
Text Books - 12 Copies Auto Mechanics by McGraw-Hill
Motors Encyclopedias - 20 copies by Goodhart Wilcox
Motors Manual

C. Masonry

1 - Masonry Saw
1 - Mortar Mixer (electrical)
1 - Welder (electrical)
3 - Wheel Barrows
1 - Mortar Box & Hoe
3 - Shovels
5 - Brick Tongs
12 sets of Mason hand tools with mortar boards
Materials - Block bricks, tile, sand and mortar

Text and Work Books

12 - Bricklaying Vocational Training, Structural Clay Products, Student textbook and workbook study guides, Institute
12 - Bricklaying, Delmar Publishers Inc.
12 - Masonry Mathematics, Delmar Publishers Inc.
12 - Building Trades Blueprint Reading & Sketching, Delmar Publishers, Inc.

D. Small Engine

- 1 - Cylinder hone
- 1 - 250 Amp Arc Welder and Accessories
- 1 - Valve refacing machine
- 1 - Valve reseating machine
- 1 - Magneto tester
- 1 - Arbor press
- 1 - 6" Bench grinder
- 1 - Small parts cleaner
- 1 - Drill press
- 1 - Portable air compressor
- 1 - Outboard test tank
- 1 - Cylinder hone
- 1 - Small engine dynamometer
- 2 - Model 23 Briggs & Stratton
- 5 - Model 80302 Briggs & Stratton
- 4 - Model 92902 Vertical Shaft
- 1 - 2 cycle Power Products
- 3 - 2 cycle Lawn Boy
- 1 - 4 cyl. water cooled Continental
- 2 - 3.9 H.P. Outboards
- 2 - 6 H.P. Outboards
- 2 - 45 H.P. Scott Outboards
- 1 - 75 H.P. Evinrude
- 1 - 7 H.P. Motorbike motor

Additional handtools, measuring instruments, guages, etc.

EXHIBIT 15

Class Schedule for General Education
(Milan)

EXHIBIT 15

CLASS SCHEDULE FOR GENERAL EDUCATION
(Milan)

November 2, 1967

<u>INSTRUCTOR</u>	<u>ROOM</u>	<u>HOURS</u>	<u>MONDAY</u>	<u>TUESDAY</u>	<u>WEDNESDAY</u>	<u>THURSDAY</u>	<u>FRIDAY</u>
Mrs. Aron	#5	6-7:20 PM	Intro to Mod Lit	-	-	Intro to Mod Lit	-
	#5	7:30-8:50 PM	Creative Writing	-	-	Creative Writing	-
Mr. C. English	#5	1-2 PM	Phase II	Phase II	Phase II	Phase II	-
	#5	2-3 PM	Phase II	Phase II	Phase II	Phase II	-
	#5	3-4 PM	Phase III B	Phase III B	Phase III B	Phase III B	-
	Office	6-9 PM	Night Supv	Night Supv	-	Night Supv	-
Mr. P. English	#1 & 2	8-12 AM	-	IQ & SAT Test	-	-	-
	#3	8-12 AM	-	-	-	GATB Testing	-
	#2	6-9 PM	-	-	Speech & Drama	-	-
Mr. McCrea	#3	6-8 PM	Phase II Ind	-	Phase II Ind	-	-
Mr. Martin	#2	9-10:20 AM	-	-	-	Ph 3 Psych of Soc Adj	-
	#2	10:30-11:50 AM	-	-	-	Ph 3 Psych of Soc Adj	-
Prof. Michaels	#3	6-7:20 PM	-	Pre-Coll #3	-	-	-
	#3	7:30-8:50 PM	-	Pre-Coll #3	-	-	-
Mr. Richardson	#4	8-9 AM	Phase I	Phase I	Phase I	Phase I	Phase I
	#4	9-10 AM	Phase I	Phase I	Phase I	Phase I	Phase I
	#4	10-11 AM	Phase II	Phase II	Phase II	Phase II	Phase II
	#4	1-2 PM	Phase I	Phase I	Phase I	Phase I	Phase I
	#4	3-4 PM	Phase I	Phase I	Phase I	Phase I	Phase I
Mr. Trexler	#5	8-9 AM	Phase I	Phase I	Phase I	Phase I	Phase I
	#5	9-10 AM	Phase II	Phase II	Phase II	Phase II	Phase II
	#5	10-11 AM	Phase II	Phase II	Phase II	Phase II	Phase II
	#5	1-2 PM	-	-	-	-	-
	#5	2-3 PM	-	-	-	-	-
	#5	3-4 PM	-	-	-	-	-
	#3	7-9 PM	Phase II & III	-	-	Modern Math	-

EXHIBIT 15, Page 2

INSTRUCTOR	ROOM	HOURS	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Mr. Evans (PT)	#5	6-7 PM	-	U.S. Govt	U.S. Govt	-	-
	#5	7-8 PM	-	U.S. History Economics	U.S. History Economics	-	-
	#5	8-9 PM	-	-	-	-	-
Mr. Satarino (PT)	#1 & 2	6-7 PM	Grammar	-	-	Grammar	-
	#4	7-8 PM	American Lit	-	-	American Lit	-
	#4	8-9 PM	English Lit	-	-	English Lit	-
Mr. Watkins (PT)	#4	6-7 PM	General Math	-	-	General Math	-
	#1 & 2	7-8 PM	Algebra	-	-	Algebra	-

ERIC Clearinghouse
 APR 29 1969
 on Adult Education