INMATES WERE EXPERIMENTAL SUBJECTS IN A PROJECT FOR VOCATIONAL TRAINING AND PLACEMENT. OF THE 46 WHO COMPLETED TRAINING IN MAY, 35 WERE PAROLED AND EMPLOYED, AND 11 WERE Awaiting parole confirmations. A second group were enrolled. To overcome some student weaknesses, a remedial night school class was initiated. This problem could be eliminated by raising the upper age limit from 21 years to make more qualified students available for selection. Plans for a coordinated pre-release program were being made to allow inmates the opportunity of interviewing for jobs outside the center prior to parole. A tentative followup program was established. Plans for field testing the developed program were completed. The board of directors were to review a proposal for developing demonstration vocational programs for the disadvantaged which would utilize mathematical programs and audiovisuals synchronized for computerized instruction. Socioeconomic information on the new trainees is presented. The extensive appendices include—(1) a project evaluation, (2) a followup study of Draper's manpower development and training act graduates, (3) "A Transfer of Training Concepts" by John M. McKee, (4) justification statement for extension of Office of Manpower, Automation, and Training contract 02-01-07, (5) a description of prevocational training, (6) four trainee case studies, and (7) information on the instructional material development unit. (Em)
FIFTH PROGRESS REPORT
May 1, 1965 to July 1, 1965

EXPERIMENTAL AND DEMONSTRATION MANPOWER PROJECT
FOR
TRAINING AND PLACEMENT OF YOUTHFUL INMATES
OF
DRAPER CORRECTIONAL CENTER
AT
ELMORE, ALABAMA

Manpower Development and Training Act

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## Appendices

- Appendix A - Project Evaluation (Persisting problems and proposed solutions)
- Appendix B - Follow-up Study of Draper's MDTA Graduates
- Appendix C - Vocational Education for Institutionalized Offenders and Mental Patients: A Transfer of Training Concepts
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The second section of five six-month vocational courses is well underway with instructors reporting far more rapid progress in these classes than with the first group. The new trainees have exhibited more confidence in the staff than did the previous inmates at the beginning of their training. Although this progress and confidence can be attributed to many factors, the inmates are now convinced that the project actually exists for their benefit and that it will help them return to society equipped to earn a decent income. They have seen that the Parole Board is actually interested in the program and cooperates with the project in parole and placement procedures. They have seen former inmates trained, released, and placed in jobs. As a consequence, the new trainees are eagerly participating in a program that will benefit them in the same manner.

Problems not anticipated in the beginning of the project have limited to some extent the accomplishment of the original experimental and demonstration features. These problems and their proposed solutions are described in Appendix A. It is felt that a staff now familiar with the "convict culture," penal rules and regulations, pardons and paroles procedures, employer requirements, and public acceptance of ex-prisoners will be able to work effectively toward the solution of the problems, provided there is sufficient time allowed to accomplish the overall objectives of this E & D Project.

**Purposes and E & D Features**

The purpose of the experimental-demonstration project is to provide a special program for the selection, counseling, testing, evaluation, training, and placement of a minimum of 120 youthful inmates, from 16 through 21 years of age, whose variety of problems prevents their profiting from conventional programs in vocational training. Programmed instruction and several allied training methods are being developed and used to instruct the inmates and to overcome their defeatist attitudes. Reduction of training time without sacrifice of the quality and amount learned is a project goal.

**Experimental and Demonstration Features**

The specific features of the program will seek to demonstrate that:

1. Institutionalized youthful offenders can be successfully evaluated, selected, counseled, and trained for a vocation.
2. Programmed materials can reduce the preparatory and vocational training time which is necessary for traditional training methods.

3. Employers throughout the State of Alabama can be induced to hire parolees who have completed training in this program.

4. Intensive vocational and personal counseling can assist in modifying psychological and behavioral problems of these inmates and enable them to become employable persons who are capable of adjusting to the demands of free society.

5. Direct family counseling can effect an easier transition from the prison to the home and also improve the community's acceptance of the parolee.

6. Male college students employed by the project who are studying counseling and guidance can receive qualified field training for practicum credit.

7. Volunteers can be recruited from the surrounding communities to assist in the prerelease program.

8. Community involvement can be generated to establish local committees to sponsor individual inmates who will be paroled to the community.

Administration

All new employees have begun working. Three college counselors who resigned to return to college were replaced with three others who were employed for the summer. One of the new students is a graduate of prelaw from the University of Alabama; another is a sophomore from the University of Alabama who is studying mathematics; the third student is a sophomore from Auburn University who is studying drama. College students working this summer will not receive credit for their field work.

Our Radio-Television Repair Instructor, Mr. Ussery, was appointed to the Pardons and Paroles Board. His appointment should allow a two-way understanding of our problems involving paroles.

Interviews are being granted to applicants for the Radio-Television Repair Instructor position. Boys from South Alabama Junior College, Huntingdon College, Auburn University, and the University of Alabama are also being interviewed for work as college corpsmen for the fall semester.

An additional staff member who would have at least a master's degree in guidance and counseling, and preferably work experience as a parole supervisor, would enable us to begin our concentrated follow-up program and would provide the other staff members with a much better understanding of the functions and responsibilities of the Pardons and Paroles Board. (Refer to Appendix A., pp. 2 & 3.)
The staff has been involved in planning and organizing specific details necessary for follow-up and evaluation of students already paroled and placed in jobs. The Follow-up Study of Draper's MDTA Graduates, as proposed, is included in Appendix B. Some of these procedures are underway; however, staff members qualified to conduct this most important phase of the project have heavy responsibilities in carrying out their duties with the new trainees and have little time left. The project instructors have been helpful in contacting by telephone and visiting those students who were placed in accessible areas.

Dr. McKee, Project Director, made a presentation at the Inservice Training Conference for Superintendents of Institutions for the Mentally Ill and Mentally Retarded which was held in Atlanta, Georgia, on June 22-23, 1965. His paper, entitled "Vocational Education for Institutionalized Offenders and Mental Patients: A Transfer of Training Concepts", is included in this report as Appendix C.

Remodeling of the electrical appliance shop was completed, and it is now possible for these students to get the instruction necessary to assist in the servicing of larger appliances. Another bathroom was installed by the Board of Corrections to alleviate the congestion in the one available bathroom that was not sufficient for the increased number of male personnel.

Efforts are still being made to provide some means of ventilating or cooling classrooms and office space. No money is available from the Board of Corrections. The suffocating heat and the gnats and flies make working conditions most unpleasant and inefficient. One hand must remain free to keep the gnats out of one's nose, ears, and eyes. Typing with accuracy or speed is almost impossible. No doubt some of the illnesses (diarrhea, upset stomachs, and headaches) are due to these unbearable conditions. However, the members of the staff have been very understanding and have continued to do their best without undue complaints.

Budgets for continuation of courses have been compiled for approval, by the State Division of Vocational Education. Training and renewal budgets, along with a justification statement, have been submitted to OMTA with our request for renewal of the project. A renewal of our contract is necessary if we are to complete the experimental and demonstration features outlined in the original contract. The need to place and follow-up each of the students trained was pointed out as a vital part of the project's evaluation. To win financial support for a permanent rehabilitation program from the State legislature, it will be necessary to have data on a larger number of trainees. Our need for additional time to develop and try out programmed instructional materials on a group outside the inmate population was also a most important point of the renewal request. Substantial evidence must come from other resources to prove the feasibility of the wide use of these programs with the economically deprived who have difficulty in learning through traditional methods.
Inasmuch as the project is well-staffed (with the exception of a follow-up counselor) and sufficiently equipped to pursue these objectives to their conclusion, we have requested sufficient time to do so, as described in Appendix D - "Justification Statement for Extension of OMAT Contract #82-01-07." It is our hope that the request for a renewal with its revisions will be approved.

Cooperation from many state agencies, as well as from business and industry, remains satisfactory. At the June meeting of the Huntsville Area Contractors Association, the project director and job placement officer described our project and its goals in a program which stimulated a great deal of interest from a group who will be influential in job placement activities in the Huntsville area. Already, one graduate trainee has been placed with Brown Engineering Company.

Staff members continue to appear before civic, educational, church, and community groups to tell the project story. Visitors to the project have included touring groups from the University of Alabama, Tuskegee Institute, East Alabama Presbytery Women of the Church, Troy State Teachers College, and Maxwell Air Force Base (clinical psychologists and programmed instruction personnel). A representative of the Louisiana State Penitentiary, the personnel manager of Brown Engineering Company, Huntsville, and the publisher of Southern Publications were some of the other visitors to the project during this reporting period.

Recruiting

Recruiting for the second section of vocational courses was successfully completed for beginning date, May 3, 1965. All students were oriented through a prevocational training period (refer to Appendix E). This second section of courses will terminate on October 29, 1965. Many applicants who did not meet parole eligibility requirements for the second classes are being held in reserve for the third which will begin on November 1, 1965. Thus far, no recruiting has been done for the third section. Recruiters are awaiting notification from the administration as to which classes will be conducted.

For the new classes, it was only necessary in three cases for students to sign parole waivers. One student waived six weeks "good time" in order to stay and complete his training in welding. All students signed Training Contracts which obligate them to training until course completion.

Many of the applicants who meet parole eligibility do not have enough basic education to handle the training requirements without intensive tutoring and remedial work. (Refer to Appendix A, page 1.)

If arrangements can be made with the prison classification officer for the project counselors to interview and test inmates as they are admitted...
to Draper for classification, invaluable recruitment information can be gathered that will allow the project to hold names of eligible applicants in reserve for future classes. Prospective applicants can be referred for basic educational training, minor medical attention (such as the need for glasses), or any other necessary treatment which would better prepare them to enter vocational training courses. Information obtained from tests and interviews would further serve to guide us in selection, job placement activities, and follow-up work. Because the early interviews would eliminate the necessity of calling applicants away from their scheduled prison work details, it is believed the prison officials will be receptive to the plan.

The age restriction of 16 through 21 limits the number of qualified applicants for training courses. (Refer to Appendix A, page 1.)

A further aid to recruitment would be the extension of the trainee age limit from 16 through 21 to 16 and up. Many of the inmates who have exhibited a real interest in the project are eliminated only by the present age restriction.

The Statistics Section of this report contains certain socioeconomic information on new trainees.

**Counseling**

Approximately 48 students have been involved in the counseling program, most of whom have had three or four sessions with counselors. Seven of the more psychologically disturbed students were referred to the clinical psychologist. Information in Appendix F gives examples of the psychologist's work with several emotionally disturbed students during the first training courses. He is continuing such consultation with those new trainees who are having extreme difficulty in adjusting to vocational training requirements.

A checklist of the problems that seem foremost to inmate-students was devised and administered to 69 students. The problems the students checked are serving as "cues" for counseling. Asked whether or not they were willing to discuss their problems with counselors, over 80% of the students indicated willingness, 10% felt they could handle their own since they were of a minor nature, and 10% made no reply.

A summary of the problems checked by the 69 participating students follows:

<table>
<thead>
<tr>
<th>PROBLEMS--IN TRAINING SCHOOL AND PRISON</th>
<th>NUMBER OF STUDENTS WITH PROBLEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Failing School Work</td>
<td>6</td>
</tr>
</tbody>
</table>
Needing underwear, socks, etc. 28
Needing toilet articles (shaving, bathing, etc.) 26
Family or others not writing 13
Family not visiting 12
Not able to get haircut 2
Sickness in family 4
Family needing financial help 6
Worrying about detainers (holdovers) 11
Getting up late in mornings 3
Staying away from "troublemakers" 1
Getting along with instructors 0
Getting along with classmates 0
Frequent headaches 12
Eyesight (figure includes those with glasses) 22
Sleeplessness 16
Nervousness 21
Debts owed to other prisoners 4
No safe place to keep personal things 21
Needing tattoos removed 6
Needing medical or dental care 12

Efforts to solve problems:

Individual tutoring, enrollment in night school courses, and other efforts have reduced the number of students (6) having difficulty with their studies during the first two weeks of training. Two Auto Service Station Mechanic-Attendant students are still having some difficulty, but they are presently making passing grades.

When students complained about their clothing being lost in the prison laundry, the Warden was notified and began taking corrective steps. However, many students still do not have sufficient underwear.

The one razor blade furnished the inmates each week by the prison system is not conducive to good grooming, for students complain that they cannot shave properly with it. Razor blades are obtainable from the prison store, but very few inmates have enough money to buy them. This unsolved problem interferes considerably with the personal-social rehabilitative efforts of the project toward good grooming.

Letters have been written to inmates' families, explaining their enrollment in the vocational school and their need for encouragement from home. Families who had previously done neither are now both visiting and writing to the inmates.

Welfare and other agencies were contacted with regard to sickness and financial problems in the inmates' homes and are cooperating in helping to make these problems less critical.
Solicitors and judges who were contacted concerning students' holdovers are, in many instances, awaiting the project counselors' reports concerning rehabilitation before they make decisions about the detainers. Some of the detainers have been dropped by the authorities.

Tardiness to classes at the beginning of training has been eliminated either by arranging for "wake-up buddies" to arouse inmates who oversleep or, in some cases, by subjecting tardy students to disciplinary treatment (weekend confinement).

All students with eyesight problems have been referred to the prison doctor and have been given eye examinations. Glasses will be furnished to those who need them as soon as possible.

Students who complained of sleeplessness or nervousness, and other psychological symptoms have had sessions with the project counselors. The more extreme cases have been referred to the clinical psychologist.

Tattoos have been removed for all students who indicated this need.

Many of the students are responding to a noon sick call arranged for attention to their medical and dental needs.

No students have been dropped from the second section of training. The following chart shows the enrollment:

<table>
<thead>
<tr>
<th>Class</th>
<th>Section</th>
<th>Present Enrollment</th>
<th>Terminations for good cause</th>
<th>Terminations for bad cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barbering</td>
<td>II</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Bricklaying</td>
<td>II</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Auto Serv. Sta.</td>
<td>II</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mech.-Attendant</td>
<td>II</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Small Elec. Repair</td>
<td>II</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Welding</td>
<td>II</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Radio-TV Repair</td>
<td>I</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Technical Writing</td>
<td>I</td>
<td>9</td>
<td>0</td>
<td>1 (granted early parole*)</td>
</tr>
</tbody>
</table>

An unexpected early parole necessitated the dropping of one student from the Technical Writing Class. The administration and staff did not feel that this inmate-student was ready for parole. The inmate has recently committed another felony and been returned to prison.
Prevocational Training

The first group of students began classes in October, 1964, without the benefit of prevocational training. Recruitment and selection of students had been conducted in haste due to the beginning date of courses following the delayed approval of this project. Many of the selected students were not very sure of their choices of training. Some wanted to change courses after about two or three weeks of training; a few found it very difficult to adjust to an academic and vocational training environment; still others were unprepared for the fact that they would spend some of their time upgrading their basic education and personal-social skills rather than spend all of their time in the shop work which most appealed to them. A Prevocational Training Week was planned in order to offset the problems encountered with the first group of trainees and was conducted for applicants for the second courses in May, prior to the beginning of classes. Philosophy, purposes, plans, and evaluation of the prevocational period are outlined in Appendix E. The evaluation indicates the need for more involvement of the instructors with the administrative staff in planning for future sessions of this nature.

Training

It is the responsibility of the State Division of Vocational Education to administer the program at Draper Correctional Center through the designated training agency, the Rehabilitation Research Foundation of Alabama, in cooperation with the Alabama Board of Corrections. The program is being coordinated by the State Director of Vocational Education. Supervision for organization and development of the program is provided by the State Supervisor of Manpower Development and Training Program. The Project Director, with the aid of consultants, planned and organized the training program, as well as the experimental-demonstration phase of the project. Direction and coordination of all phases have been the responsibility of the Assistant Project Director.

Program Purposes and Objectives

A significant purpose of this project is to adapt to traditional vocational training certain recently developed but proven teaching techniques. These techniques are now being applied with success (generally, under the name of programmed instruction) by various agencies, such as the Training Branch of the U.S. Communicable Disease Center, the U.S. Air Force staff and Training Command, The Agency for International Development, and many schools and industries. We propose to create programmed materials for several basic trades for which such materials do not now exist, and to put them to work in a vocational education project designed to train a group of male, youthful offenders who are clearly hardcore employment problems upon release. Our further purpose is to develop the necessary guides that will make these materials and their proper use available to both correctional and public educational institutions.
The specific purposes of the training phases of this project are as follows:

1. To select and train a group of incarcerated, youthful offenders for several useful trades. The selected courses for the project are as follows: Combination Welding, Radio and T.V. Repair, Small Electrical Appliance Repair, Automobile Service Station Mechanic-Attendant, Barbering, Bricklaying, and Technical Writing.

2. To significantly reduce the preparatory and vocational training time through the construction of programmed materials of two kinds:
   a. Programs that serve as adjuncts to existing training materials, making these materials easier for the student to understand
   b. Programs that replace existing materials, particularly those that are most inadequate for the more difficult parts of the training job

3. To assess ways of improving the training and programming activity and to insure proper placement and guidance of the trainees after parole

4. To make available to correctional and public educational institutions both the training materials and the procedures for their use

The MDTA codes, occupational titles, DOT codes, length of training, and the number of trainees, for each course, are shown in the table below:

<table>
<thead>
<tr>
<th>CODE</th>
<th>TRAINING AREA</th>
<th>DOT</th>
<th>LENGTH OF TRAINING</th>
<th>NO. OF TRAINEES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ala-(YM)5001-001</td>
<td>Combination Welder</td>
<td>4-85.040</td>
<td>26 weeks</td>
<td>10</td>
</tr>
<tr>
<td>Ala-(YM)5001-002</td>
<td>Small Electric Appliance</td>
<td>7-83.058</td>
<td>26 weeks</td>
<td>10</td>
</tr>
<tr>
<td>Ala-(YM)5001-003</td>
<td>Radio &amp; Television Repairman</td>
<td>5-83.416</td>
<td>52 weeks</td>
<td>10</td>
</tr>
<tr>
<td>Ala-(YM)5001-004</td>
<td>Automobile Service Sta. Mech.-Att.</td>
<td>7-81.011</td>
<td>26 weeks</td>
<td>10</td>
</tr>
<tr>
<td>Ala-(YM)5001-005</td>
<td>Barber</td>
<td>2-32.01</td>
<td>26 weeks</td>
<td>10</td>
</tr>
<tr>
<td>Ala-(YM)5001-006</td>
<td>Technical Writer</td>
<td>0-06.90</td>
<td>52 weeks</td>
<td>10</td>
</tr>
<tr>
<td>Ala-(YM)5001-007</td>
<td>Bricklayer</td>
<td>5-24.011</td>
<td>26 weeks</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>70</td>
</tr>
</tbody>
</table>
Remedial or Basic Education

The primary objective of the remedial class is to overcome deficiencies in language arts, mathematics, and many other areas of knowledge vital to a particular vocation. A secondary objective is to evaluate the effectiveness of self-instructional materials as a teaching technique.

In comparison to the first class, the progress of this class is well ahead of schedule. At the present time, more than 230 self-instructional programs have been completed and more than 335 points have been accumulated (refer to Fourth Progress Report, p. 10). Three students have already earned certificates of achievement. Whereas it took four months of work for the first six-month classes to reach this point, this new class has accomplished it in only two months.

Problems have developed with several students who have educational levels below sixth grade. These students are unable to perform satisfactory work. Persons with such a low level of educational attainment should not be enrolled in the future until such time as their levels can be raised. (Refer to Appendix A, page 1.)

Twenty-four students are attending the night school classes designed to overcome their basic education deficiencies. Classes are being conducted in the Experimental School and include courses in reading improvement, elementary mathematics, English, vocabulary development, and blueprint reading.

The Technical Writing and Radio-Television Repair classes used the Autotutor Mark II teaching machines during this reporting period. After approximately two weeks, the use of the machines had to be discontinued due to a lack of necessary electrical current. The machines proved to be reliable and interesting. The programs purchased for use with them were quite poor, however. The material or information was presented in such a manner that the students quickly lost interest and therefore began a complicated guessing-game to complete the programs. If new programs are developed presenting less material in each frame and using more illustrations, the machines may become a more effective teaching device.

Steps have been taken to correct the power problem; thus we hope the use of the machines may be continued in the near future.

Some means of cooling the classroom must be found. The heat and humidity cause such great physical discomfort that concentration on anything is difficult.

Supplementary

This class has continued to follow the original plans with the exception of separating the Radio-Television and Small Electrical Appliance classes which
enabled us to continue into more advanced subjects with the Radio-T.V. group now in their eighth month of training. More progress is possible in the smaller classes.

A representative of the Southern Bell Telephone Company conducted a seminar on the proper use of the telephone (to which staff members were invited). Actual telephones and recording equipment motivated students to participate in the seminar, and the session was very effective.

Supplementary classes are on schedule. A safety awareness program was planned to help students become more aware of safety procedures in the shops.

The following films were shown during this period:

1. Shop Safety - U.S. Army
2. Man and Safety - U.S. Air Force

The general objective of this course is to augment the vocational preparation being given to students by retraining them to more socially acceptable goals. All students spend two hours per week in Supplementary Class for personal-social relations training. In addition, Barbering, Radio-Television Repair, Electrical Appliance Repair, and Auto Service Station Mechanic-Attendant Classes spend two hours per week in this class for training in Distributive Education.

Community leaders have been cooperative in appearing before the inmate students to conduct lectures, seminars, and demonstrations. The present lack of space makes it necessary for these leaders to repeat their presentations several time in one day in order to appear before all the students. Although the small group presentations are more advantageous for the students, the necessary repetition is both time-consuming and tiring for those leaders who have served the project thus far.

There are a few students enrolled in the project that will not be able to get the full benefit of their classes unless they attend the night school classes that are available.

Motivation—even in a salaried training course of a professional organization—has long been noted as a major problem in Technical Writing. The lack of immediate reinforcement for the trainee who may work for many weeks before he has the opportunity to view the results of his efforts takes a heavy toll upon his continuing motivation. Especially is this true for the technical writer whose work in preparing programmed materials is of such detailed nature that it is intrinsically punishing to the most diligent of workers.

To cope with this problem, artificial motivation was introduced into the learning situation of the Technical Writing Class through the informal application of the "High Probability Event" factor.
It was hypothesized (as empirical evidence amply supports) that learning is difficult and is a low probability event. (Particularly is this true when the subject matter is as technically complicated as mathetics.)

The second assumption was that many things exist which the students had rather be doing than writing training materials (high probability event).

Based on these assumptions, each student was questioned to determine his own particular high probability event, the questioner being careful to channel the student into activities compatible with the general school structure. Once the high probability event was determined for each student, the situation was structured so that a student was allowed to participate in a high probability activity of his own choosing as soon as he had completed a definitive task in connection with technical writing (low probability). It was found that the high probability activities selected by the students were not only compatible with their training in technical writing, but, in fact, were also highly desirable supplements to their training: reading textbooks and newspapers; taking programmed instructional courses of their own choosing; listening to music; writing short stories or poems; exercising, etc.

Although this experiment is incomplete, immediate results in increased motivation and esprit de corps have been noted.

The experimental use of role-playing as an educational tool has been decreased due to the fact that these sessions were becoming therapeutic in nature, and the instructor felt he was not qualified to supervise therapeutic role-playing.

The college preparatory program continues during the time allotted for remedial work for those students interested in immediately pursuing a college career, three of whom are highly motivated and work diligently on their special studies.

Eight lessons have been completed and are in the evaluation process. Twelve lessons are in production. It has been demonstrated that the intensified training in theory during the first six months has transferred only marginally well to actual practice; although production of materials has actually exceeded the objectives of the course, the overall quality of these materials is only fair, with the exception of several notable programs produced by three of the highly qualified students.

The problem of inadequate space has apparently been solved with the transfer of two students to the editing department and two students to the barber class for much of the day. The major problem during this reporting period has been the difficult working conditions caused by lack of ventilation and the presence of insects.
Shop and Related Classrooms

Because of the shortage of applicants eligible for parole for these second six-month training courses, we found it necessary to accept at least nine students whose educational levels were too low for the workbook and shop-related studies. This problem tends to hinder the progress of the classes as a whole. The more capable students become bored and less responsive than they would be if the pace of the class were a greater challenge to them. It is hoped that the extra help available to the slow students through remedial and night school classes will make it possible for them to grasp enough of the material presented to them to graduate at entry level.

In general, the students in the second courses are a better behaved group. They seem intensely interested in applying themselves to the work required in their training courses.

Students who graduated from previous classes and are awaiting parole have been able to assist a few of the instructors in teaching shop skills to students. Because these graduate assistants are able to do a good job of teaching skills in which they are adept, the instructor can give more individual attention to those students for whom the skills are difficult.

The new films we obtained on auto mechanics contain some excellent illustrations and will be invaluable teaching aids in the Service Station Mechanic-Attendant Class.

Charles Leonard, a graduate bricklayer, proposed to give $20.00 for tools to the outstanding bricklayer who completes training in October.

Materials Development Unit

The following mathetical lessons have been completed by members of the Materials Development Unit who also serve in an advisory capacity to the Technical Writing Class:

"Mixing Mortar"
"Using the Four-foot Level"
"Reading Circuit Symbols"
"Marking Batterboards"
"Extracting Square Root"
"Using Fractions"
"Setting up the Builder's Level"

These lessons are currently in the evaluation process.

The relatively young and unsystematic discipline of mathetical programming is one for which training materials do not presently exist; therefore, it has required much experimentation.
Research procedures involving programmed instruction have been recorded as they developed, and a detailed outline of approximately 100 pages has been prepared. This outline is currently being used in training technical writers and is believed to be adequate for the present project. The Chief Programmer is continuing his preparation of a reference book on the practices and procedures of mathetics. (For a description of mathetical programming and its comparison to other methods, refer to Appendix G, Materials Development Unit, "Mathetics."

Plans for the next period include tryout and revision of completed lessons, especially in the considerable task of field testing. Plans for field testing programmed materials are also included in Appendix G. These tests will encompass both those lessons produced by the Materials Development Unit and those developed by the Technical Writing Class. Some of the experiences of the Chief Programmer and members of his staff in the training of technical writers and the development of programmed lessons are reflected in Appendix G.

The production of the programmers, editor, artists, and typists has fallen considerably due to the poor working environment created by insufferable heat and the presence of insects. Moving the new artist into the editing and art department has caused this area to be impossibly cramped, but there seems to be no immediate solution to this problem.

Job Development and Placement

Placement activities during this report period were highly concentrated in order to finalize job commitments for graduates. Jobs have been secured for all inmate graduates eligible for parole (35). All placements have been in training-related jobs except in three instances, in which case a training-related job was not available in the desired location at the time of parole. Efforts are being continued to obtain jobs which will allow the three exceptions to make effective use of the skills they have acquired. Eleven are presently awaiting parole approval.

Trainees have been placed on jobs in the following locations in Alabama:

Montgomery (11) Russellville (1) Opelika (1)
Birmingham (3) Alexander City (1) Mobile (1)
Geneva (2) Gadsden (1) Fayette (1)
Anniston (2) Huntsville (1)
Prattville (1) Greenville (1)

Others were placed in Texas, Georgia, Louisiana, Illinois, and Nebraska.

Project personnel, through their contacts in their particular trade, have been instrumental in the effective placement of many of the trainees by providing the placement officer with job leads.
Individual record files are being established for students in new classes. Background information concerning previous work experience, work location desired, residential situation, family responsibilities, and possibilities of parole protests from individuals within the communities is currently being obtained to complete the files. (Refer to information in the Statistics Section of this report.)

Each new trainee is being photographed in civilian clothes. The photographs, which will be placed with individual records, are especially helpful because the trainees are not available for personal interviews with prospective employers, unless it is possible for the employer to come to the prison. Employers, as do most people, generally feel that they can judge an individual, at least to some degree, by a photograph of him. Photographs of young men who are neatly dressed and smiling help to dispel the average individual's concept of an "ex-convict." All requests for employment are accompanied by the photographs, and they are already serving their purpose well.

The placement officer and the vocational counselor continue to work closely with the State Board of Pardons and Paroles in coordinating parole and placement activities. The State Board, as well as the local parole supervisors, aid in solving placement problems whenever possible. However, all inmates must have an approved job prior to parole, and most employers will not finally commit themselves to hiring an inmate until they have interviewed him in person. The conflict created by this situation has caused some delay in obtaining employment for our graduates. (Refer to Appendix A, pp 2-4, for specific problems in Job Placement.) Efforts are being made to alleviate this situation through the establishment of a prerelease program. All inmates in the prerelease program will have been interviewed and tentatively approved for parole by the Parole Board. They would be placed on a "trusty" basis and be allowed to make personal visits to the prospective employers place of business for personal interview. The establishment of such a program would greatly facilitate immediate placement of paroled trainees. (For further information concerning the need for a prerelease program, refer to Appendix A herein, and to our Fourth Progress Report, Appendix F, pp. F-ii-F-iii.)

Better placement has resulted from employers' throughout the state becoming more fully informed about the project. Various members of the staff have participated in an increased public relations campaign by making speeches to community organizations. The placement officer has recently made presentations to the following organizations: Kiwanis Club, Civitan Club, Joint Legislative Council, Association of University Women, the Pilot Club, and the Association of Huntsville Area Contractors.

Arrangements have been made with one of the state's leading television stations to produce a feature film depicting the problems of inmates in their adjustment to free society. The presentation of this film to viewers throughout Alabama should result in a more widespread understanding of the rehabilitation program and its goals than we have thus far been in a position to promote.
Administrators continue to grant interviews to newspaper and magazine reporters. An article that appeared in the "Sunday Magazine" distributed in several sections of the state featured our Materials Development Unit and its Chief Programmer, Joe H. Harless. A copy of the article is included in Appendix H.

Follow-up

The placement officer, the instructors, and other members of the staff have maintained as much contact as possible with recently placed trainees. It appears, thus far, that the majority of the inmates are adjusting to free society and that employers, in general, are satisfied with their job performance. Such information as instructors or other staff members have available (refer to Appendix I) is reported to the job placement officer for the trainee follow-up files. Not nearly as much follow-up work as is needed is being done because the placement officer spends most of his time contacting prospective employers and coordinating parole and placement of currently enrolled students as well as conducting public relations activities necessary to develop jobs for the trainees who will graduate in October.

A Follow-up Study of Draper's MDTA Graduates prepared by the staff of the Rehabilitation Research Foundation of Alabama is included in Appendix B. This study was made in an effort to establish a well-planned program through which the project can ascertain the degree of successful adjustment to free society afforded the inmate through the rehabilitation program. Contained in the study are follow-up questionnaires prepared to request information from employers, trainees, and trainees' families concerning the trainee's stability on the job, advancement in salary and position, personal behavior on the job and in the community, family and other influences, additional knowledge acquired about his particular trade, indications of materials taught which have not proven practical in the field, as well as his general outlook on society. In order to properly conduct the follow-up program as designed, it will be necessary to employ an additional staff member who would serve as a follow-up counselor. (Refer to Appendix A, pp. 2 & 5.)

SUMMARY

Youthful offenders serving prison sentences at Draper Correctional Center, Elmore, Alabama, are experimental subjects in the Vocational Experimental-Demonstration Manpower Project for training and placement. All of the 46 trainees graduated in May who have been paroled (35) have been placed on jobs. Eleven of the graduates are awaiting parole confirmations. As much follow-up as possible is being conducted by present staff members.

The second group of trainees are well into their courses and are making excellent progress. The apparently successful placement of the
first group of trainees has made an impression within the prison population to the extent that the new students were eager to begin their training and participate in the benefits of improving their personal-social behavior and getting good jobs in the free world.

Some students were accepted for training whose grade levels were too low to perform workbook and shop related activities. A special night school class was organized to help overcome the resulting problems. Many prisoners who are interested in vocational training are qualified applicants in every respect other than being somewhat over the age limit. If the age limit were lifted, it would not be necessary to accept for training applicants who did not meet grade-level requirements.

Though some of our space problems have been solved, the counselors and placement officer are still working under a great handicap, because the noise from the shop areas and the lack of privacy interfere considerably with their activities. Also, testing large groups of students is virtually impossible because of the constant use of our larger rooms for instructional purposes. The editing-art department of the Materials Development Unit is terribly overcrowded. A survey of the available space in the prison area will be made to determine if other buildings might be used, or if certain annexes might be built. Every effort is being made to get ceilings in the counseling rooms as well as in classroom and shop areas. Ceilings in these areas will afford more privacy and greatly reduce noise.

Much time is spent in contacting employers and developing jobs for our graduates. One conflicting situation that exists is the fact that an inmate cannot be paroled until he has a job approved by the Parole Board. Most employers require personal interviews with job applicants before actually finalizing a job offer—a requirement impossible for the incarcerated inmate to meet because a state law prohibits his leaving prison until he is paroled. We hope to establish, through the cooperation of all responsible state agencies, a fully coordinated prerelease program that would allow those inmate trainees who have been tentatively approved for parole to be interviewed for jobs while awaiting parole. Such a program would reduce the delays in job placement that now exist. Although final placement would still be concentrated into the month prior to parole, it could be organized in such a way that placement activities would move more swiftly than they presently do.

A tentative follow-up program has been established. The brief amount of effort we've been able to put forth appears to be effective. Our next report will include some of the follow-up studies that are presently being done. Present staff members qualified to do this work simply cannot cover the entire group of placed trainees and perform their other tasks for the new trainees. This program needs to be fully instituted immediately, or we shall lose valuable time in providing these inmates the supportive services they need. An additional staff member—a Follow-up Counselor—would make it possible to do so.
We also need the services of another clinical psychologist. The clinical psychologist presently employed by the project on a part-time basis is able only to "touch" upon the needs of the emotionally disturbed students in his visits of one day every two weeks. This limited time spent with the most severely disturbed of these students allows him time to discover their problems, but does not allow him time to develop the rapport with his patients necessary to effectively treat their illnesses.

The insufferable heat, the gnats and flies, and the overcrowded conditions have been an almost unbearable combination of circumstances. We are seeking every possible means of correcting these poor working conditions. The Board of Corrections has promised to spray the area to control the infestation of insects.

Plans have been completed for field testing the programs developed to date. The Materials Development Unit is on an accelerated schedule to finish those programs under construction.

A meeting of the Board of Directors of the Rehabilitation Research Foundation of Alabama has been scheduled early in August. Review and final approval of our renewal request will be a major point on the agenda.

The Board Members will also review a proposal prepared by its staff for the Development and Demonstration of Vocational Programs for the Disadvantaged Using Computer Assisted Instruction and Synchronized Audio-Visuals. This proposal is being submitted by the Rehabilitation Research Foundation under the Vocational Act of 1963. Its objectives are to develop mathematical programs and audio-visuals that will be synchronized for use with an IBM computer, to demonstrate the effectiveness of this system of instruction in the vocational training of disadvantaged youth, and to provide more efficient in-service training for vocational instructors.

Statistics

Socioeconomic information on the new trainees is presented on the following pages in the statistical tables. All of the inmate trainees have low socioeconomic backgrounds. Most of them are from very large families—with an average of four or more siblings. A majority of the parents have never completed an elementary education. Many of the families are welfare recipients.

All except one of the trainees are serving sentences for offenses which involved stealing money or goods either through larceny, embezzlement, forgery, or burglary. Those inmates with previous work experience usually received low wages and suffered during seasonal "lay-offs." Most of them got into trouble during an unemployed period. Approximately 70 percent of them are recidivists who were confined either in reform schools, jails, or penal institutions for previous offenses.
The task of the Draper Vocational Experimental-Demonstration Project is (1) to train inmates in a vocation that will equip them to earn an adequate income when they are released from prison, (2) to teach them how to manage the wages they receive, and (3) to provide them intensive counseling toward personal and social behavior changes.

Assuming these tasks can be accomplished, recidivism can be greatly reduced, and 50 more inmates can become useful, taxpaying citizens.

Results of a prerelease questionnaire given to new students in order to discover their problems and anticipated needs with regard to being released from prison are included in the following tabulation:

<table>
<thead>
<tr>
<th>Problems Anticipated Upon Graduation and Release from Prison</th>
<th>No. of Students with problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Place to live</td>
<td>13</td>
</tr>
<tr>
<td>Employment</td>
<td>28</td>
</tr>
<tr>
<td>Clothing</td>
<td>17</td>
</tr>
<tr>
<td>Family acceptance</td>
<td>4</td>
</tr>
<tr>
<td>Marital problems</td>
<td>3</td>
</tr>
<tr>
<td>Hometown acceptance</td>
<td>3</td>
</tr>
<tr>
<td>Debts before incarceration</td>
<td>5</td>
</tr>
<tr>
<td>Getting training-related work in hometown</td>
<td>9</td>
</tr>
<tr>
<td>Needing financial support before first pay day</td>
<td>24</td>
</tr>
<tr>
<td>Expecting trials for other offenses</td>
<td>6</td>
</tr>
<tr>
<td>Habits formed inside prison--hard to quit on the &quot;outside&quot;</td>
<td>3</td>
</tr>
<tr>
<td>Acquiring tools and equipment needed for work</td>
<td>14</td>
</tr>
<tr>
<td>Living up to the expectations of rehabilitative efforts</td>
<td>1</td>
</tr>
</tbody>
</table>

The questionnaire responses have been of value to us in our effort to set up a program that will provide inmates supportive services both at the time of their graduation and upon release from prison, and as they begin working in the jobs for which they were trained.

Frequently distribution of trainees in the Metropolitan and California Achievement Test Scores by National Grade Placement is shown on page 31 of the Statistics Section.
### Training Course: Bricklaying

<table>
<thead>
<tr>
<th>Trainee No.</th>
<th>Crime</th>
<th>Recidivist</th>
<th>County from which Sentenced</th>
<th>Past Work Experience</th>
<th>Married</th>
<th>Family Welfare Recipient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gd. Lar.</td>
<td>Yes</td>
<td>Dallas</td>
<td>Farm</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>Gd. Lar.</td>
<td>No</td>
<td>Mobile</td>
<td>Serv.Station</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>3</td>
<td>Burg. 2nd.</td>
<td>No</td>
<td>Lee</td>
<td>Bricklayer</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>4</td>
<td>Gd. Lar.</td>
<td>No</td>
<td>Mobile</td>
<td>Power Co.</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>5</td>
<td>Gd. Lar.</td>
<td>Yes</td>
<td>Mobile</td>
<td>Dairy Hand</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>6</td>
<td>Armed Rob.</td>
<td>Yes</td>
<td>Blount</td>
<td>Truck Driver</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>7</td>
<td>Burg.</td>
<td>Yes</td>
<td>Blount</td>
<td>Farming</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>8</td>
<td>Burg.</td>
<td>No</td>
<td>Jefferson</td>
<td>Yard Work</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>9</td>
<td>Burg.</td>
<td>No</td>
<td>Mobile</td>
<td>Kitchen</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>10</td>
<td>Gd. Lar.</td>
<td>No</td>
<td>Shelby</td>
<td>Farm</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### Training Course: Barber

<table>
<thead>
<tr>
<th>Trainee No.</th>
<th>Crime</th>
<th>Recidivist</th>
<th>County from which Sentenced</th>
<th>Past Work Experience</th>
<th>Married</th>
<th>Family Welfare Recipient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2nd Forg.</td>
<td>Yes</td>
<td>Jefferson</td>
<td>Fireman</td>
<td>Divorced No</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Gd. Lar.</td>
<td>Yes</td>
<td>Madison</td>
<td>Bakery</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>3</td>
<td>2nd. Burg.</td>
<td>Yes</td>
<td>Jefferson</td>
<td>Wood Shop</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>4</td>
<td>2nd. Burg.</td>
<td>Yes</td>
<td>Mobile</td>
<td>Mechanic</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>5</td>
<td>Asst.to Rob.</td>
<td>No</td>
<td>Bibb</td>
<td>Bus Boy</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>6</td>
<td>Gd. Lar.</td>
<td>Yes</td>
<td>Jefferson</td>
<td>Roofing</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>7</td>
<td>2nd Burg.</td>
<td>Yes</td>
<td>Jackson</td>
<td>Upholstery</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>8</td>
<td>Burg.&amp; G.L.</td>
<td>No</td>
<td>Montgomery</td>
<td>Power Plant</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>9</td>
<td>Gd. Lar.</td>
<td>Yes</td>
<td>Dale</td>
<td>Cook</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>10</td>
<td>Burg.&amp; Escape</td>
<td>No</td>
<td>Houston</td>
<td>Clerk</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

### Training Course: Small Electric Appliance Repair

<table>
<thead>
<tr>
<th>Trainee No.</th>
<th>Crime</th>
<th>Recidivist</th>
<th>County from which Sentenced</th>
<th>Past Work Experience</th>
<th>Married</th>
<th>Family Welfare Recipient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Embezz.</td>
<td>Yes</td>
<td>Houston</td>
<td>Projectionist</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2</td>
<td>Burg. 2nd.</td>
<td>No</td>
<td>Mobile</td>
<td>Ser.Sta.Att.</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>3</td>
<td>Gd. Lar.</td>
<td>No</td>
<td>Mobile</td>
<td>Ser.Sta.Att.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>4</td>
<td>Gd. Lar.</td>
<td>Yes</td>
<td>Mobile</td>
<td>Farming</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>5</td>
<td>Burg. 2nd.</td>
<td>Yes</td>
<td>Tallapoosa</td>
<td>Shoe Shine</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>6</td>
<td>Burg.</td>
<td>Yes</td>
<td>Cullman</td>
<td>Carpenter Hlpr.</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>7</td>
<td>Burg. 2nd.</td>
<td>Yes</td>
<td>Houston</td>
<td>Cook</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>8</td>
<td>Gd. Lar.</td>
<td>Yes</td>
<td>Jefferson</td>
<td>Tile Setter</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>9</td>
<td>Burg.</td>
<td>No</td>
<td>Pike</td>
<td>Stock Clerk</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>10</td>
<td>Burg.</td>
<td>Yes</td>
<td>Sumter</td>
<td>Cook</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>11</td>
<td>Burg. 2nd.</td>
<td>Yes</td>
<td>Lawrence</td>
<td>Farm Hand</td>
<td>No</td>
<td>No</td>
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</tbody>
</table>
### SOCIO-ECONOMIC INFORMATION

#### Section II

**Training Course:** Auto Service Station Mechanic-Attendant

<table>
<thead>
<tr>
<th>Trainee No.</th>
<th>Crime</th>
<th>Recidivist</th>
<th>County from which Sentenced</th>
<th>Past Work Experience</th>
<th>Married</th>
<th>Family Welfare Recipient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2nd Burglary</td>
<td>Yes</td>
<td>Mobile</td>
<td>Oil Field Work</td>
<td>Divorced</td>
<td>No</td>
</tr>
<tr>
<td>2</td>
<td>Gd. Larceny</td>
<td>Yes</td>
<td>Lauderdale</td>
<td>Farm</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>3</td>
<td>Burglary</td>
<td>Yes</td>
<td>Colbert</td>
<td>Ser. St. Attend</td>
<td>Divorced</td>
<td>No</td>
</tr>
<tr>
<td>4</td>
<td>2nd Burglary</td>
<td>Yes</td>
<td>Elmore</td>
<td>Farm</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>5</td>
<td>Gd. Larceny</td>
<td>Yes</td>
<td>Houston</td>
<td>Cleaning Office</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>6</td>
<td>Gd. Larceny</td>
<td>Yes</td>
<td>Calhoun</td>
<td>Farm</td>
<td>No</td>
<td>No</td>
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<tr>
<td>7</td>
<td>Gd. Larc. &amp; Esc.</td>
<td>Yes</td>
<td>Franklin</td>
<td>Tractor Driver</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>8</td>
<td>2nd Burglary</td>
<td>Yes</td>
<td>Jefferson</td>
<td>Dry Cleaning</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>9</td>
<td>Gd. Larceny</td>
<td>No</td>
<td>Montgomery</td>
<td>Mechanic</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>10</td>
<td>Gd. Larceny</td>
<td>Yes</td>
<td>Jefferson</td>
<td>Upholstery</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**Training Course:** Welding

<table>
<thead>
<tr>
<th>Trainee No.</th>
<th>Crime</th>
<th>Recidivist</th>
<th>County from which Sentenced</th>
<th>Past Work Experience</th>
<th>Married</th>
<th>Family Welfare Recipient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Embezzlement</td>
<td>No</td>
<td>Montgomery</td>
<td>Mechanic</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2</td>
<td>Burglary</td>
<td>Yes</td>
<td>Jefferson</td>
<td>Mechanic</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>3</td>
<td>Larceny</td>
<td>Yes</td>
<td>Jefferson</td>
<td>Construction</td>
<td>Divorced</td>
<td>No</td>
</tr>
<tr>
<td>4</td>
<td>Robbery</td>
<td>Yes</td>
<td>Lauderdale</td>
<td>Service St.</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>5</td>
<td>Burg. Gd. Lar.</td>
<td>No</td>
<td>Jefferson</td>
<td>Roofing Laund.</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>6</td>
<td>Burglary</td>
<td>Yes</td>
<td>Mobile</td>
<td>Mechanic</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>7</td>
<td>Burglary</td>
<td>Yes</td>
<td>Jefferson</td>
<td>Farm</td>
<td>Divorced</td>
<td>No</td>
</tr>
<tr>
<td>8</td>
<td>Robbery</td>
<td>Yes</td>
<td>Jefferson</td>
<td>Odd Jobs</td>
<td>Divorced</td>
<td>No</td>
</tr>
<tr>
<td>9</td>
<td>Left Scene of Accident</td>
<td>Yes</td>
<td>Jefferson</td>
<td>Super-Market</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>10</td>
<td>Bringing Stolen</td>
<td>No</td>
<td>Morgan</td>
<td>Welding</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Property into St.</td>
<td></td>
<td></td>
<td>Tailoring</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Plumbing</td>
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</table>
FREQUENCY DISTRIBUTION
OF
ALL TRAINING COURSES

METROPOLITAN ACHIEVEMENT TEST &
CALIFORNIA ACHIEVEMENT TEST SCORES
NATIONAL GRADE PLACEMENT

<table>
<thead>
<tr>
<th>NATIONAL GRADE PLACEMENT RANGE</th>
<th>READING</th>
<th>MATH</th>
<th>ENGLISH</th>
<th>COMPOSITE GRADE LEVEL</th>
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<tbody>
<tr>
<td>12 and above</td>
<td>13</td>
<td>10</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>11 to 12</td>
<td>7</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>10 to 11</td>
<td>7</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
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<td>9 to 10</td>
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<td>8 to 9</td>
<td>18</td>
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<td>14</td>
<td>16</td>
</tr>
<tr>
<td>7 to 8</td>
<td>3</td>
<td>16</td>
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<td>12</td>
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<td>6 to 7</td>
<td>3</td>
<td>14</td>
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<td>5</td>
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<td>5 to 6</td>
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<td>7</td>
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<td>8</td>
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<td>4 to 5</td>
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<td>0</td>
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<td>2</td>
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<td>3 to 4</td>
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<td>2 to 3</td>
<td>1</td>
<td>0</td>
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<td>0</td>
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<td><strong>TOTAL</strong></td>
<td><strong>71</strong></td>
<td><strong>71</strong></td>
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Project Evaluation
(Persisting problems and proposed solutions)

Appendix A

Compiled by
Staff Members
1. **Problem: Low grade level of applicants.** Many of the applicants who meet parole eligibility do not have an adequate grade level education to handle the training requirements without intensive tutoring and remedial work.

   **Proposed solution:** Raising the age limit would make more available applicants who have higher grade levels of education. Applicants can be evaluated three to six months prior to their admission into the vocational program. Those applicants who are educationally deficient will be placed in the Experimental School at Draper which concentrates on basic education. The counselors and remedial teacher will prescribe the programmed courses for each student. Prescriptions will be based on educational deficiencies and target training requirements. The project has already demonstrated that the average grade gain of the 46 graduates was .9 grades. This was accomplished on an eight hour per week schedule of remedial work for 26 weeks. With more concentrated study each day (6 to 8 hours) for six months a more appreciable grade gain will be shown. When these students enter the vocational program they will be able to handle required reading of manuals and workbooks. This will also enable the vocational instructors to spend more time with shop instruction and less time in teaching basic fundamentals in the classrooms.

   Arrangements will be made with the Draper Classification Officer so that the counselors can interview all incoming inmates, test them, and hold eligible applicants in reserve for future classes. This arrangement will also eliminate having to take applicants away from work details for testing and interviewing.

2. **Problem: Age limitation.** The age restriction of 16 through 21 limits the number of qualified applicants for the training courses.

   **Proposed solution:** If the age requirements were extended from 16 through 21 to 16 through 29, more applicants eligible for parole could be admitted. This would also make available more applicants who have higher educational qualifications. Many older inmates with good qualifications have shown much interest in the project. Permission to extend the age limit must come from OMAT.

3. **Problem: Inadequate space and time for counseling and testing.** The counseling offices afford very little privacy. There are no ceilings over them; thus, the counselor and counselee are aware that other counselors and counselees in adjoining offices can hear them. Loud noises from adjacent shop areas interfere with normal counseling.
Lack of space in the counseling area limits the number which can be handled in group testing and counseling—not to mention the noises and distractions that are not conducive to good testing conditions. Classroom space for testing is limited due to the constant use for instructional purposes.

**Proposed solution:** An investigation will be made to determine if a new trade school building can be built which will house all of the facilities of the present school. Recommendations for more space have been made. A survey of available space in the prison area will be made to determine if other buildings might be used or if certain annexes might be built. Every effort is being made to get ceilings in the counseling rooms as well as in other classroom and shop areas. This will give more privacy with less distraction. Also, the approval of air conditioning by OMAT will permit the ceilings being put in the rooms.

4. **Problem: Job placement.**
   (1) Most employers desire personal interviews with job applicants, whether the applicant is a civilian or an inmate awaiting parole. Such interviews are not possible with inmate trainees because they are in the custody of the Department of Corrections and cannot be released for interviews at the employer's place of business. Because of distance, employers generally will not travel to Draper to interview the prospective employee. Since all inmates must have a confirmed job prior to actual release on parole and are not generally available until that time, placement activities are somewhat restricted to personal contacts by the Placement Officer.

   (2) When the Placement Officer is able to obtain an agreement to employ, the employer usually desires that the trainee be available for work within a week of the initial contact. In some instances jobs cannot be held open until the trainee is released from custody. It usually requires a minimum of two weeks for the State Pardons and Paroles Board to confirm the job and process the paper work necessary for release from the institution. Because a definite date for release cannot be established, it is difficult to get an employer's commitment to hire a parolee.

   (3) Intense placement activities are concentrated into the month immediately prior to actual parole. This concentration is caused by the fact that employers will not generally agree to hire a trainee even a month prior to parole date since he cannot guarantee that the job will remain unfilled for that period of time. It becomes necessary for the Placement Officer to spend a great deal of his time "on the road" contacting employers; yet, he also needs to be in the office to coordinate parole activities with the State Parole Board and to follow up on commitments previously given by employers.

   **Proposed solution:**

   (1) We intend to establish, through the cooperation of all responsible state agencies, a fully coordinated prerelease program for those inmate trainees who have been tentatively approved for parole.
These inmates would be classified as "trusties," and they would be allowed to accompany the Placement Officer to the prospective employers' business establishment for personal interviews. They would also be available to demonstrate their skills and take certain examinations required by various employers.

Inmates in the prerelease program would also be able to make arrangements for living accommodations, purchase clothing, acquire tools necessary in their trade, obtain drivers licenses, solve family problems and obtain aid from various governmental and community health agencies.

(2) Where inmates have been tentatively approved for parole pending approval of the job by the Parole Board, we hope to obtain permission of the Board to release the inmate to the job immediately upon confirmation by the Placement Officer and the local Parole Supervisor. This would allow an inmate to be available when the job is open.

(3) We also intend to investigate the possibility of acquiring the services of a man who would serve as a Follow-up Counselor for the project. If possible we should also like to have him qualified by the Parole Board as a "Parole Supervisor-at-Large" authorized by the Board to make investigations and recommendations concerning jobs for prospective parolees. This new staff member should meet all necessary requirements of the Project and of the Parole Board. His salary would be paid by the Project.

The Follow-up Counselor would work closely with the Placement Officer in coordinating all initial placement activities. Schedules could be arranged so that either the Placement Officer or the Follow-up Counselor would be available at the Project to coordinate necessary parole and job activities.

The Follow-up Counselor and Placement Officer would both be available for presentations to various civic clubs, trade and other community organizations. This public relations activity is extremely important, because much of the success of the project thus far has been the direct result of public acceptance of the program and the trainees it produces. This acceptance has been achieved through a somewhat limited public relations program due to other overriding responsibilities of staff members. A more concentrated effort should produce even better results.

5. Problem: Job development needs. A great deal of difficulty has been experienced in placing some of the trainees. A preliminary survey by the Placement Officer shows that most contractors around the state are interested in hiring only experienced bricklayers instead of apprentices and that major appliance repairmen are needed more than just the small appliance repairmen.

Proposed solution: More advanced training in bricklaying and additional instruction for larger appliances will be included in the vocational program.
The Placement Officer has received many requests from building contractors for carpenter and cabinetmaker trainees. It appears there is a genuine shortage of entry level employees in these trade areas. We intend to initiate a comprehensive survey to determine if the need is great enough to establish a training program in these and other areas where shortages exist.
Follow-up Study of Draper's MDTA Graduates

Appendix D

Rehabilitation Research Foundation of Alabama
Draper Correctional Center
Elmore, Alabama
Follow-up Study of Draper's MDTA Graduates

Rehabilitation Research Foundation of Alabama
Draper Correctional Center
Elmore, Alabama
The Draper inmate is paroled to a job that typically is temporary, low-salaried, and usually classified as common labor. In many instances he has had very little work experience in the "free world." Less than 20 percent of them have held even a semi-skilled job. Over 90 percent of the parolees have families in the lower income bracket; hence, they face social and financial barriers to further educational and vocational training. Most authorities agree that inability to hold an adequate job is the chief cause of their recidivism. The unskilled jobs they do take in order to comply with parole requirements (employment is necessary for parole release) usually return them to the conditions that originally fostered their delinquency.

It seems, then, that the effectiveness of the vocational and educational programs at Draper cannot be adequately determined until parolees can be observed and evaluated in a "free world" setting—on jobs and in further vocational and educational training. An evaluation of this type requires a systematic follow-up program whereby follow-up counselors will keep close contact with the paroled employee. Counselors will study his performance, his industry, family relationships, on-the-job up-grading, educational advancement, personal problems, social problems, and other vocational and educational opportunities.

The counselors will make every effort to contact in person all parolees who have been placed by the Project in order to gather information from the parolee, his family, his employer, and when necessary from his Parole Supervisor. Basic questionnaires (attached) will be used by the counselors in obtaining this information.
Since the Project will graduate approximately 120 students each year, a full-time counselor assisted by the Job Placement Counselor and the Vocational Counselor will be required to conduct the follow-up program. The number of graduates will increase each six months, and employment of additional staff members may be required in order to reach all the parolees. For the program to be effective each graduate should be counseled at least monthly for a minimum of three years but preferably for five years. The number of contacts will depend upon the staff available and may be increased or decreased according to the individual situation of the counselee.

**Purposes of the Follow-up Study**

1. To detect and act on any tendencies by the parolee toward recidivism
2. To help the parolee who becomes unemployed to get another job
3. To find out from the parolee's experiences what areas of the existing curriculum might be changed or amended to better help other parolees when they are released
4. To foster better acceptance by society of the parolee--particularly by employers and community groups
5. To determine how effective the vocational training and rehabilitation efforts have been
6. To investigate educational resources available to the parolee within the community where he works and lives
7. To refer the parolee to educational programs in the community
8. To share all pertinent data with penal authorities for their consideration and possible use
FOLLOW-UP QUESTIONNAIRE

GRADUATE

Name of Graduate _______________________________________

Date __________________________ Address _______________________

Circle YES by any of the problems listed below that you now have. Circle NO if you do not now have this problem. Answer other questions in space provided.

YES  NO 1. Not having adequate clothing
YES  NO 2. Not being accepted by family
YES  NO 3. Problems concerning wife
YES  NO 4. Problems concerning children
YES  NO 5. Not being wanted back in hometown
YES  NO 6. Having habits formed inside prison that are hard to quit
YES  NO 7. Staying away from "troublemakers" and "trouble places"
YES  NO 8. Worrying about sickness in my family
YES  NO 9. Not being able to meet the expectations of my employer
YES  NO 10. Needing medical or dental treatment
YES  NO 11. Feeling ill-at-ease among customers and other people with whom I come in contact
YES  NO 12. Drinking
YES  NO 13. Not getting along with employer
YES  NO 14. Not getting along with customers
YES  NO 15. Not getting along with fellow workers
YES  NO 16. Do you think that you are underpaid considering the work that you do?
YES  NO 17. Is your work interesting to you?
YES  NO 18. Do you consider your previous vocational training to be adequate for the demands that are made upon you now?
YES  NO  19.  Is there opportunity for advancement within your present job?

YES  NO  20.  Do you perform the greater part of your work during the day?

YES  NO  21.  Do you feel that you are "overworked" on your job?

YES  NO  22.  Are you presently enrolled in any type of school or training program?

YES  NO  23.  Are you a member of any recognized club or organization?

YES  NO  24.  Not including your vocational training, are you hampered by a lack of education?

YES  NO  25.  Do you make frequent out-of-town visits to friends or relatives?

YES  NO  26.  Not having enough money to support myself

YES  NO  27.  Not having enough money to buy needed tools and equipment

YES  NO  28.  Having to give my family financial help

YES  NO  29.  Not being able to successfully budget my money

YES  NO  30.  Not being able to pay debts

YES  NO  31.  Have you established a credit since your release?

32.  How much is your indebtedness?

   (1) Less than $50  (2) Between $50 and $100  (3) Between $100 and $200
   (4) Between $200 and $500  (5) More than $500

YES  NO  33.  Have you been able to save any money?

YES  NO  34.  Have you established a checking account in a bank?

35.  How much money do you allow per week for each of the following:

   Room $  Food $  Clothing $  Savings $  
   Entertainment $  Other $  

   $  Describe

   $  $  $
YES NO 36. Do you have a girl friend?

YES NO 37. Are you dating more than one girl?

38. Who are your closest female friends?

YES NO 39. Do you have any close male friends?

40. How many good friends without prison records have you made in the "free world"?
   _1   2   3   4   5   6   __more

41. Who are your closest male friends?

42. How do you spend your leisure (spare) time?
   __ (1) reading
   __ (2) sports activities*** (specify activities) (bowling, skating, spectator, etc.)
   __ (3) watching TV
   __ (4) movies
   __ (5) dating
   __ (6) attending church
   __ (7) talking with "old" friends
   __ (8) talking with "new" friends
   __ (9) hobbies (specify hobbies)
   __ (10) stay by myself most of the time
   __ (11) other (specify others)

YES NO 43. Are you satisfied with your present living quarters?

YES NO 44. Had you rather be living and working in a different town?
FOLLOW-UP QUESTIONNAIRE

EMPLOYER

Graduate's name ___________________________ Date ______________

Employer's name ___________________________

Firm ___________________________ Address ___________________________

Please circle either YES or NO

YES NO 1. Does the employee possess the necessary skills to effectively perform his job?

YES NO 2. Does the employee willingly accept rules and regulations governing the position which he holds?

YES NO 3. Does the employee cheerfully accept constructive criticism from those offering advice about the performance of his job?

YES NO 4. Is the employee eager to improve his skills in the trade?

YES NO 5. Has the fact that the employee is an ex-prisoner produced a negative reaction from customers?

YES NO 6. Does the employee own adequate clothing for his position?

YES NO 7. Does the employee maintain a neat appearance?

YES NO 8. Does the employee appear to be in satisfactory health?

YES NO 9. Is there a problem of having the employee's friends visit or call him too often while he is at work?

YES NO 10. To your knowledge has the employee ever reported to work while under the influence of alcohol?

YES NO 11. Do personal problems seem to have an adverse affect on his performance?

YES NO 12. Has anything occurred to give you reason to doubt his integrity?

YES NO 13. Would you be willing to recommend the employee to other employers?

CHECK ONE

1. How often is the employee absent from work? Never ____ Seldom ____ Occasionally ____ Frequently ____

2. How often has the employee been late in coming to work? Never ____ Seldom ____ Occasionally ____ Frequently ____

3. To what extent has the employee progressed in his trade since the beginning of his employment with you? None ____ Slightly ____ Moderately ____ Greatly ____

4. In general, how would you rank the relationships between the employee and the following:

6
A. The employer— Satisfactory ___ Un satisfactory ___
B. The customers— Satisfactory ___ Un satisfactory ___
C. The Fellow-workers— Satisfactory ___ Un satisfactory ___

5. Do you believe that the employee has a positive attitude toward the project in rehabilitation which he has completed at Draper Correctional Center? Yes ___ No ___ Undecided ___

6. Do you believe the employee has a desire to succeed? Yes ___ No ___ Undecided ___

7. Does the employee have difficulty in budgeting his money? Yes ___ No ___ Undecided ___

8. How would you rank the employee's work performance? Below par ___ Satisfactory ___ Above average ___ Superior ___

9. How many hours each week is the employee employed by you? Under 20 hours ___
   21 - 30 hours ___
   31 - 40 hours ___
   Over 40 hours ___

10. What is the employee's average weekly income, including commissions and/or wages? Under $50.00 ___
    51 through $75.00 ___
    76 through $100.00 ___
    Over $100.00 ___

Rank the employee with relation to the following personality traits:

<table>
<thead>
<tr>
<th>PERSONALITY TRAITS</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDUSTRY, ENERGY.</td>
<td>Energy is application to school duties day by day.</td>
<td>Usually indifferent</td>
<td>Sometimes lazy</td>
<td>Average in industriousness.</td>
<td>Hard worker; willing to do more than assigned.</td>
</tr>
<tr>
<td>RELATIONS WITH OTHERS. Helpfulness and cooperativeness with associates and superiors in manner and act.</td>
<td>Surly, troublesome indifferent.</td>
<td>Sometimes difficult to work with.</td>
<td>Usually tactful and obliging; self-control</td>
<td>Always congenial and cooperative.</td>
<td>Highly cooperative; inspires cooperation.</td>
</tr>
<tr>
<td>EMOTIONAL STABILITY. Ability to control emotions.</td>
<td>Loses his head easily.</td>
<td>Apathetic; unresponsive.</td>
<td>Usually well controlled</td>
<td>Balance of responsiveness and control.</td>
<td>Notable and unusual control of emotions.</td>
</tr>
<tr>
<td>LEADERSHIP. Ability to get others to cooperate.</td>
<td>Unable to lead.</td>
<td>Not usually a leader.</td>
<td>Sometimes displays leadership.</td>
<td>Leads well under most circumstances.</td>
<td>Displays marked ability to make things go.</td>
</tr>
<tr>
<td>APPEARANCE. Such factors as cleanliness of clothing and personal hygiene of hair, teeth, nails, etc.</td>
<td>Untidy, careless dressed.</td>
<td>Clean, but careless of appearance and grooming.</td>
<td>Average in grooming and dress.</td>
<td>Neat dress well groomed.</td>
<td>Outstanding in taste and care.</td>
</tr>
<tr>
<td>ABILITY TO LEARN. Ease in learning new methods, adapting to new situations, tasks.</td>
<td>Unable to learn.</td>
<td>Learns slowly.</td>
<td>Average rate of adaptation.</td>
<td>Above average in capacity.</td>
<td>Outstanding in mental ability and alertness.</td>
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<tr>
<td>PUNCTUALITY.</td>
<td>Always tardy.</td>
<td>Seldom on time.</td>
<td>On time but needs some prodding.</td>
<td>On time most of the time.</td>
<td>Always on time.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WORKMANSHIP. Skill of student in use of tools.</th>
<th>Sloppy</th>
<th>Many mistakes</th>
<th>Some mistakes</th>
<th>Good</th>
<th>Exceptionally Clean</th>
</tr>
</thead>
</table>
FOLLOW-UP QUESTIONNAIRE

FAMILY

of

(Name of Graduate)

Date

Person interviewed

Relationship

Address

Please circle YES or NO (and make comments, as necessary, in the space provided)

YES NO 1. To your knowledge, is the graduate fulfilling the obligations placed upon him by his employer?

YES NO 2. Is he contributing to the financial support of your family?

YES NO 3. Do you feel that the vocational training he received while in Draper Correctional Center has produced favorable results in his free-world behavior?

YES NO 4. Has he had problems in his adjustment to free society?

YES NO 5. Does he choose friends who have respect for the law and social order?

YES NO 6. Does the family accept him now as a member of the family rather than as an ex-convict?

YES NO 7. When not working, does he participate in any activities that might lead him into trouble with the law?

YES NO 8. Is his attitude toward the family favorable?

YES NO 9. Is he married?
YES NO 10. Is his wife living with him in your home?

YES NO 11. If he and his wife live with you, does this situation present additional problems?

YES NO 12. Does he confide in the family when problems arise?

YES NO 13. Is his personal appearance appropriate for the demands of his job?

YES NO 14. Does he accept the responsibilities of his job?

YES NO 15. Is the relationship between him and his employer satisfactory?

YES NO 16. Does he have the confidence he needs to successfully perform the tasks required in his job?

YES NO 17. Does he adequately budget the money he earns from his work?

Remarks:__________________________________________________________

______________________________________________________________

______________________________________________________________

______________________________________________________________

______________________________________________________________
Vocational Education for Institutionalized Offenders and Mental Patients:
A TRANSFER OF TRAINING CONCEPTS

Appendix C

John M. McKee, Ph.D.
Director
Rehabilitation Research Foundation
Elmore, Alabama
It may astonish you that I intend to make a serious comparison between two institutionalized groups--the offender and the mentally ill. But the fact is that the overlap of personality traits, of treatment approaches, of community and family attitudes, of pre- and postrelease problems--even of the attitudes of the caretakers of the two groups--is so great that upon examination of these similarities, we may discover commonly useful rehabilitation techniques and programs.

If there is any trait which offenders and the mentally ill have in common, it is a lack of self-confidence stemming from a life of frustration and failure. Both are frightened of competing in "free society" on the terms of normal, productive living. Indeed, they are ill-equipped to compete--in many instances, even to remain free.

Only a small percentage of both groups have a vocational skill, and few have experienced much job satisfaction. They are migratory, seldom holding a job for more than a year or living in any one locale for any extended period of time.

*Presented to the INSERVICE Training Conference for Superintendents of Institutions for Mentally Ill and Mentally Retarded, sponsored by the U.S.P.H.S., Region IV, Atlanta, Georgia, June 22-23, 1965.
The offender typically comes from a low socioeconomic class; so do the majority of the public mental hospital patients. Members of both groups are undereducated and are usually school dropouts.

Near their release date, persons in both groups experience separation anxiety (called "prerelease pains" in prisons); they are apprehensive about their futures and unsure of family acceptance. Marital problems, caused partly by institutionalization, are usual for both. Once released, neither is accepted by an employer, neither is usually trained for a vocation; therefore, each needs intensive follow-up services. The most critical time following the release of each is the first two or three months. In short, the offender and the mental patient are generally unequipped for survival in free society.

Statistically, the number in mental hospitals and correctional institutions is about the same: over 5,000 of each group are institutionalized in Alabama. While it is true that many offenders are in jails, it is true at the same time that many psychiatric patients are in private and general hospitals. Recidivism for both groups is about 30 to 40 percent. Once either is institutionalized, the chances of returning escalate, precipitated partly by the fact that he returns to the old "stimulus controls" that caused his condition in the first place. However, first admissions—particularly those over 30 but under 50—have the best chances of early rehabilitation and remaining free following release.

The prison even has the counterpart of the hospital's chronic, backward patient, and our respective states of knowledge about how to get him out and keep him in free society is about the same.

Then, there is that condition described by Stanton and Schwartz (The Mental Hospital, Basic Books) which may be called "institutionalitis" wherein...
the mental patient becomes so beautifully adjusted (perhaps subdued is a better word:) to the routine, to the familiar, that he doesn't want to leave. If after 20 years you try to move him out, he has no place to go, no relative who will receive him, no community that will have him, no job, no skill, no friends. This same situation exists in prisons, too.

Then you bring in new rehabilitation programs; you "make waves"; you hire an aggressive new treatment man. You must superimpose the modern upon the archaic. Your ideas are resisted; for, you see, the staff itself has become "institutionalized."

In another area of comparison, we might observe that the purpose of criminal laws is to get the offender out of the community into confinement. Society also has its laws to do likewise for the mentally ill. But the task of modern institutional programs is to get these two groups out.

To hasten the day of release, both prisons and mental hospitals have certain treatment approaches which are quite similar. Therapy teams of psychiatrists, social workers, and psychologists are employed. Treatment procedures emphasize getting both inmates to "face up to reality" and demask themselves. The potentially powerful impact of the psychiatric aide and the correctional officer may be equated.

Learning theory application is assuming an increasingly important role in behavior and personality change attempts. Behavior-change approaches seek to train the inmates to predict or rely upon certain consequences for particular actions. However, inconsistencies of the social settings (technically, "uncontrolled reinforcement schedules") in prisons and hospitals prevent consistent treatment results.
The average citizen shows the same uncomfortable reactions toward the offender—whether institutionalized or free—as he does toward the mentally ill. Many people still regard the patient as sinful; certainly they do the offender. Thus, the public confuses its moral values with a more objective or scientific viewpoint towards society's outcasts.

There are, of course, critical differences between the two population groups—mental patients and imprisoned offenders—many of which go without saying. Whereas both groups exhibit psychological deficit, the offender is relatively free of classical psychoneurotic traits. Psychosomatic symptoms are actually far less prevalent in the offender population than in the free-society citizenry. Psychosis is very rare; it occurs more frequently among the correctional officers and other institutional personnel! Of course, the condition of the offender is doubtlessly more a product of learning and less of physiology. And, the offender has more of a capacity to participate in society and be loyal to it, albeit this society is one of his own making—the criminal subculture.

Finally, the mental patient manifests a marked disturbance in interpersonal relations, reflecting itself in an alienation. Thus, opposition to authority is very personalized and idiosyncratic, as contrasted to the offender's oppositionism, which is quite in-group conscious.

While it is true that there are significant differences between the two types of inmates, the overlapping similarities would lead to the reasonable assumption that what works in one setting may, with minor modification, be applicable in another. If our case to this point has been well made, then mental hospitals may profit from an unusual education and rehabilitation effort at Draper Correctional Center—a prison for youthful adult males near Montgomery, Alabama. Since rehabilitation programs must compete against time (the average time served at Draper is about 18 months,
and the average time in our rehabilitation program is only six months), we must work quickly if changes in behavior are to occur. Our chief concentration of effort is on academic and vocational education. The inmates are being taught through the recently developed method of "programmed instruction," which permits a high degree of individualized instruction, and under proper supervision, the inmate students teach themselves. They move through the materials at an astonishing speed; and learning—as measured by acquisition and retention studies—is thorough. Moreover, the student is right well over 90 percent of the time—an inconceivable state of affairs for the offender who has been proved wrong over 90 percent of the time. As one prisoner put it: "Getting all these right answers makes me look—and feel—a lot smarter. I'm making like a genius, Doc!" The genius is more truthfully centered in the materials themselves, because they have been prepared in a special, ingenious way. A subject is "programmed" when it is broken down into small sequential bits or steps (sometimes called frames) and presented to the learner a step at a time. The student responds to each bit by filling in an incomplete sentence, or by making a choice of several alternative answers. The student sees the correct answer immediately after making his response. Below are several typical frames from a programmed algebra course:

1. Read this statement: 
   
   In algebra letters stand
   
   for _____ (fill in blank) numbers

2. In algebra _____ stand
   
   for _____.

   etc.

   The frames quickly move the learner from simple concepts to the most complicated abstractions in algebra in mere hours. Programmed instruction
(P.I.) usually cuts in half the time required to reach the same degree of mastery using conventional instruction. Moreover, the teacher is freed to perform the nondidactic functions he has always wanted to: observe and meet individual differences, counsel and encourage, and plan ahead for each person.

As a matter of fact, P.I. is an application of the principles of psychological learning theory observed in the animal learning laboratories and transferred to the classroom. The particular approach that is applied is reinforcement theory as developed by B. F. Skinner, psychologist of international renown.

At Draper we have conducted an experiment in programmed learning over the past four years, and we have discovered that the new educational technology really works. One hundred inmate students attend an academic school that teaches almost exclusively by P.I., and 70 more participate in a vocational training program in which seven trade areas are taught, including welding, radio-television repair, technical writing, auto service station mechanic-attendant, bricklaying, barbering, and electrical appliance repair. The class of technical writers are being trained in programmed lesson writing. We long ago found out that intelligent prisoners who never even attended college could program materials. Shortly after our experiment began, two inmates brought me a stack of neatly typed sheets. The cover read: "Fingering Movements of the Trumpet: A Programmed Course." It contained 1164 frames. I thumbed through it and became convinced I could play the several short tunes which the course claimed the student could do upon completion. I so told the budding programmers. One of them remarked, "You can, Doc, if you're as smart as any of three I just tested out on the program."

Incidentally, one of those young men will begin his fourth year in college this coming fall.
But, back to the vocational program. The entire project is financed under provisions of the Manpower Development and Training Act; participating in the funding are the U.S. Office of Education and the Department of Labor. Each class has ten students. We have excellent "free-man" instruction and the latest equipment. Men are carefully screened by a series of tests and questionnaires. Then, the selection process begins. Next, prospective candidates receive an orientation in each vocational area, and in remedial and personal-social education. During this time they become acquainted with the entire program and all the trade areas. This experience either solidifies their initial choice of training or redirects them to another, more realistic vocation.

While this activity is going on, an analysis of test data, file records, ratings, and other information is made to arrive at a general idea of the students' capabilities and areas of deficiency.

Next follows a consultation with each vocational instructor. Areas of principal importance to each particular vocation are discussed. The remedial instructor can learn from the vocational instructor what particular characteristics and abilities he observes while each student works in his shop and classroom. For example, the bricklaying instructor found one student unable to read a scale ruler.

The next step is to conduct an interview with each student for the purpose of discussing with him his attitude and knowledge about programmed instruction. Questions are answered and misconceptions are clarified; after which, specific weaknesses and needs of the student are pointed out to him.

Following the latter interview, tentative courses are listed for a student to take. Pretests are then given to determine whether or not the student needs a particular course or any part of it. If not, the prescription is altered and pretests are again given. Primarily, these pretests
are prepared by the instructor; however, we have found that the short California Test Bureau's branching-type programs serve as adequate pretests in certain work.

As soon as the final prescription is formulated, the student is given the programs and told their purpose and how they relate to his vocation. He is also shown how to use the programs before he begins working on them under supervision.

While programmed materials are used as they are developed by our programmers in skill training and related study, our principle use of P.I. at the present time is in remedial or basic education classes. The remedial curriculum consists chiefly of math and language arts. The purpose of these courses is to eliminate the deficiencies of the student so that he can more readily learn the vocational materials. The remedial class has an instructor whose assistant is a member of Draper's unusual College Co-op program. Twenty students per session are assigned to the remedial classroom for a period of two hours per day.

The instructor and his assistant give detailed supervision to the student by being constantly on the move to answer questions, to inspect work, or to explain problems arising out of the materials on which he is working. Individual conferences are frequently held to review progress, to go over test results, and to provide that personal element so vital to the students' learning.

Certain incentives are employed in encouraging all students to maintain high productivity goals. For example, each course has a point value, and when 15 points have been earned, a student is awarded a "Certificate of Achievement." A total of 649 points were accumulated by all the students in classes recently graduated. It is not uncommon to use small amounts of money as rewards for accomplishing specific goals. Also, the use of both
group and individual progress charts is a reinforcement to learning.

Statistical data on the progress of students in remedial or basic education reveal something of its effectiveness. Only one percent of the students falls below 85 percent on final mastery tests. The average grade gain for 70 students in remedial over a six-month period was .9 grades. This gain was achieved with only 8 hours per week instruction in which each student received a total of 208 instructional hours.

In my judgment, a transfer of training concepts can be made from institutionalized offenders to the hospitalized mentally ill. Tooling up for training will be very expensive, but vocational rehabilitation should logically commence while the patient is hospitalized, for it is a vital element of his therapeutic program. If the training job isn’t completed by the time the patient is ready for release, he could continue his vocational preparation in the community trade schools, perhaps under the supervision of a state’s vocational rehabilitation service.

A hospital superintendent should seek out the consultation of at least four groups before launching a vocational training program. The first is the state’s employment office which will survey employment needs. The state’s vocational rehabilitation service, a group with considerable experience in training and evaluating mental patients, will assist the hospital staff in assessing the physical and mental capabilities and aptitudes of candidates. A third group is the state’s department of vocational education who will provide the technical know-how of instructional programs and equipment needed.

Finally, experts in programmed instruction should be consulted to demonstrate how this new technology can be utilized. Universities are frequent sources of people who are knowledgeable in this field.
I wish to make a final recommendation: most of what has been suggested for the mentally ill can be applied for the retarded, also. This latter group learns well through programmed instruction, too, and in one Southeastern institution (Partlow State School and Hospital, Tuscaloosa, Alabama), a demonstration-type vocational training project is being carried out through the collaboration of state vocational rehabilitation personnel and institutional authorities. Excellent results are being obtained.

In summary, then, I should urge hospital authorities to consider the value of vocational training programs within their institutions, seeking, at the same time, to do a superior job by putting into practice the latest in educational technology.
Justification Statement
for
EXTENSION OF OMAT CONTRACT #82-01-07

with

The Rehabilitation Research Foundation of Alabama

Appendix D
JUSTIFICATION STATEMENT
for
EXTENSION OF OMAT CONTRACT #82-01-07
with
The Rehabilitation Research Foundation of Alabama

When our original OMAT Contract (#82-01-07) terminates in October, approximately 120 youthful offenders will have been evaluated, selected, counseled, trained, and partially placed. Although the experimental and demonstration features are all in progress and well underway, they have not been, nor will they be in October, fully explored and demonstrated as set out in the original objectives. At least 26 months additional time is needed to accomplish them.

Below is a detailed account of our progress in reaching each objective and statements of what remains to be done.

Objective 1: To select and train a group of incarcerated, youthful offenders for seven occupational trades, and to place and to parole them in jobs.

At the expiration of the original contract, approximately 120 incarcerated, youthful offenders will have been evaluated, selected, counseled, and trained; however, 70 students, who will graduate in October, will not have been placed in jobs. But, even when 120 trainees are successfully placed, this will not constitute a sufficient number to demonstrate to either the Board of Corrections or the Pardons and Paroles Board that the project has been successful and should be supported by these two agencies. We have been advised (refer to letters in Appendix A) that impressed though they are with the accomplishments to date, more data are necessary. We concur in this judgment, because in terms of numbers of inmates incarcerated and paroled each year, the sample of only 120 men is actually very small and inconclusive. Sampling procedures for scientific research dictate at least 200 to 300 more.

Since one of the demonstration features is the reduction of recidivism through such a program, no fair measure of recidivism can be made in a period less than three years, for it is during the first three years that a majority of the cases of recidivism occur. The third year is especially significant for certain types of cases.

Finally, it will be necessary to provide the parolees with the follow-up services that are part of our plan. And, unless these services are rendered, it must be assumed that results will be biased in an adverse direction.
Objective 2: To reduce significantly the preparatory and vocational-training time through the construction of programmed materials and to make available to correctional and public educational institutions both the training materials and the procedures for their use.

A great deal of time was consumed during the first six months of the project in employing writers, training them in programming techniques, and setting up the in-house programming unit. Fourteen programmed lessons will have been developed and field-tested at the termination of the original contract in October; 15 additional programs will be in the development stage. Following completion of field tests and revisions, the programmed lessons must be integrated into the curriculum of the vocational education project designed to train a group of male youthful offenders, and data must be collected with regard to their use in order to demonstrate that programmed materials developed in the project can significantly reduce preparatory and vocational training time. Unless these data are collected, the programs and procedures for their use will be of little use to correctional and public educational institutions.

When the original contract expires, we shall not have had sufficient time to conduct tryouts of the materials already developed, nor sufficient time to prepare enough programmed materials, nor a sufficient number of trainees for curriculum tryout; thus, we shall not have demonstrated this feature.

During the extension period, field-tested programs can be put to work in the curriculum of the project, guides for their use can be developed, the programs under construction can be finished, and a sufficient number of additional lessons can be produced, tested, revised, and tried out with much greater efficiency by a staff now thoroughly trained. However, none of the programs can be tried out in the curriculum unless the vocational training program is continued.

Objective 3: To induce employers throughout the State of Alabama to hire parolees who have completed this program.

We have been able to obtain the cooperation of many employers in hiring trained parolees where previous hiring practices excluded the "ex-convict." Inroads have been made to opening other doors that are presently closed to ex-prisoners, yet an extensive amount of work remains to be done in this area in order to expand our existing file of interested, cooperative employers. All 35 trainees, eligible for parole, have been placed (31 in jobs related to their training) which fact is a testimony to the success obtained so far with our placement program.

One of the most convincing methods of inducing employers to hire parolees who have successfully completed training is to be able to furnish them examples of trainees who have been successfully placed and have remained on the job.
Since one or two years are required to determine job stability for these trainees, the extension of time will allow statistics of this nature to be furnished on trainees who have just been placed in jobs. It is felt that these statistics will be instrumental in securing jobs for inmates trained during the extension period.

On one occasion, we were instrumental in preventing the elimination of a course: Recently an attempt was made to pass a state-wide uniform barber code through the State Legislature which would prohibit convicted felons from acquiring barbering licenses. The Project Director and the Placement Officer appeared before a Legislative Committee in opposition to the proposed bill, and fortunately, the proposal was shelved for further study. Consequently, all paroled barber trainees have now been placed in barber shops earning an average income of $75 per week.

Objective 4: To provide follow-up services through counseling the parolee and his family, and through the utilization of community resources.

The Job Placement Officer and the proposed Follow-up Counselor will develop and carry out a program of follow-up services. This activity is just getting underway since the first group of trainees has only recently been placed in jobs. Cooperation of local employment services, parole supervisors, VRS counselors, labor organizations, and local mental health and alcoholism clinics is being obtained. The ultimate plan is to coordinate the entire follow-up program with community action groups throughout Alabama.

The follow-up program is designed to answer the following questions:

1. Can the parolee maintain stable employment?

2. Will the parolee commit additional felonies and be returned to prison?

Both time and more trainees are necessary to answer these questions. Guidelines and procedures for community cooperation do not come automatically, but must be developed. And, an adequate sample must be made to arrive at conclusive results.

Family counseling services have not been provided to the extent we have planned. If the proposed Follow-up Counselor is employed, more adequate services will be provided. Meanwhile, a thorough study has been undertaken to determine the general acceptance of the individual trainee by the community in which he desires placement. A number of factors considered include those listed below:

1. Original crime committed by the trainee and resentment, if any, within the community.
2. Family and social background to which the trainee will be returning. It must be determined if these associations would adversely affect the trainee’s social rehabilitation and adjustment to a "free" society.

3. Availability of employment in the field for which the student has received training and the specific conditions to which he would be exposed.

4. Beginning salary and possibility of advancement in initial placement and whether individual would have to support a family or just himself.

5. Trainee's availability to supervision by parole supervisors and project personnel.

6. Availability of additional training facilities in the community.

The Job Placement Officer in his placement activities finds that he does not have time to make full contact with all parents and fully investigate all home conditions throughout the state. With additional personnel and sufficient time to carry out this phase of the project, we are convinced that a follow-up counseling program will prove effective.

Objective 5: To provide accredited field training experiences for college students (males) studying guidance and counseling.

When the project was initiated (October, 1964), we proposed to demonstrate that college students studying guidance and counseling could be employed by the project and receive graduate credit. A college co-op training program was devised and submitted to the University of Alabama and to Auburn University. Both schools approved the plan. Three students from the University of Alabama began work in January, 1965. One of the students received six semester hours credit toward a Ph.D. in psychology. One student from Auburn University began work in April, 1965. He received six quarter hours in guidance practicum toward an M.Ed. Other colleges are requesting this opportunity for their students.

With an extension of time, we plan to involve more colleges and students in this training program. It is felt that students studying sociology, criminology, and related fields will also benefit from this experience. Already many college students have made application for next year. There is a dire need for qualified personnel in criminal rehabilitation work.

Specifically, this program will accomplish the following:

1. Provide successful college students with whom unsuccessful inmates may identify and associate
2. Interest qualified students in the field of corrections and criminal rehabilitation

3. Provide college students with a job which will help finance their graduate work

4. Establish favorable public relations with colleges and professional groups

5. Provide excellent practical experience for students entering any area of guidance and counseling.

Here, again, more time is required to accomplish this objective.

**Objective 6:** To compile evaluative data that can be used to substantiate results and improve upon program.

The following records will be compiled on each trainee:
- from the institutional files, the trainee's personal history and behavior while in custody;
- from school files and retraining evaluation, his psychological, vocational, intelligence, and academic achievement measurements, as well as case records while in training which will reflect behaviors relative to social rehabilitation. Information about pretraining evaluation and other sources will be used to construct a "success profile" including such items as intelligence quotient, academic achievement, (break from the) "convict culture," physical abilities and restrictions, and gross personality factors, such as extreme immaturity. This profile will be used to project an estimation of success. Experimentally, persons at various deviations from the profile will be accepted, rescheduled, deferred, or rejected as trainees.

The supportive services will be organized to get men on jobs and keep them there. After placement certain records and reports will have to be gathered and evaluated to provide instant feedback of vital information. Movement of parolees, performance, successes and failures, types of problems met by parolees, and a range of other significant events will require recording and processing. This information will be systematically obtained and fed into the data processing unit of the Board of Corrections in order to accomplish the following:

1. Demonstrate that vocational training and intensive counseling can reduce the rate of recidivism

2. Detect areas where the curriculum can be improved and expanded

3. Accumulate supportive evidence to induce a greater number of employers to hire parolees who have completed the training program

4. Prepare guidelines for other prison rehabilitation programs
5. Demonstrate that a permanent rehabilitation program in prisons is practicable in order to gain financial support from the State.

6. Point out the need for and benefits of a prerelease program and a half-way house.

7. Compare the cost of this type of program and the resulted recidivism reduction with the cost involved in institutionalizing recidivists.

A college corpsman will be assigned the task of aiding the Placement Officer and counselors in keeping records up to date, providing summary information on each student, and providing summary information on the parolees as a group.

We hypothesize that our testing, counseling, training, and placement services have been of great value to the inmate trainees; however, we lack sufficient data and information to substantiate this assumption. The increased number of successful participants resulting from an extension of this project would provide enough evidence to help us achieve the objectives outlined in our original proposal. Continuation of the project would provide us with sufficient data to validate our results and allow us to prepare guidelines for other prison rehabilitation programs on the basis of the valuable information we shall have accumulated.

Objective 7: To follow through with the public's increasing interest in and favorable reaction to our efforts toward rehabilitating youthful offenders.

The following services need to be carried forward:

1. Keep the public informed of the project's objectives, needs, and results through the continuation of a concentrated and well-planned public relations program.

   The following methods have been used to create interest as well as to convince the public of the rehabilitation value of such training for prisoners and others in free society who desire vocational training:

   a. Printed materials
   b. Mass media
   c. Speakers
   d. Group visitations
   e. Personal contacts
   f. Special meetings and conferences
   g. Films and slides

2. Train more staff members to make presentations,
particularly to prospective employers throughout the state, in order to insure the cooperation needed for public support in the placement of trainees.

Since trainees desire placement throughout the state, there must be more intensive means of informing the public, particularly prospective employers, about the project. This can only be accomplished through the continuation of a well-planned public relations program consisting of newspaper publicity, television, radio, brochures, trade magazine articles, and presentations by members of the staff to various organizations around the state. All staff members need to be trained to make presentations in order to meet the increasing number of requests for information concerning the project.

To help establish local community action committees that will cooperate with the vocational counselor, job placement officer, and follow-up counselor by sponsoring a particular inmate who will be paroled to the community.

A statewide advisory committee has been formed, composed of leaders in labor, management, employment services, education, vocational rehabilitation, ministers, probation and parole, legislation, juvenile law, and social welfare. This committee confers with the Rehabilitation Research Foundation, Mr. A. Frank Lee, the State Commissioner of Corrections, and with Dr. John H. McKee, Project Director, to advise them on matters of general policy, public communications, and future support and direction.

An effort will be made to involve the community in which the trainee will be placed in the program. This activity will necessitate the involvement of the paroles' families and the community leaders. This part of the program will be coordinated with the development of jobs. Through community action committees, a variety of services and facilities will be made available to the graduate. Close liaison will be maintained with the parole supervisor, family, employer, and the paroled graduate.
Proposed AMENDMENTS

to

OMAT CONTRACT #82-01-07 RENEWAL

with

The Rehabilitation Research Foundation of Alabama

Two amendments should be made to the original contract in order to accomplish the objectives as set out by our justification statement, dated August 6, 1965. They are described as follows:

1. Lift the age limit of eligible applicants for training from 16 through 21 to 16 and up.

   Justification: The age restriction presently in effect limits the number of applicants who qualify in all other respects for the training courses. If the age limit were extended, more applicants eligible for parole could be admitted. This change would also make available more applicants who have higher educational qualifications. Many older inmates with good qualifications have shown much interest in the project's opportunity for training.

2. Permit the addition of one staff member who would serve the project as a Follow-up Counselor.

   Justification: The problems involved with placement and parole consume so much of the Placement Officer's time that he is unable to carry out our follow-up plans. Nor does the Personal Counselor have the time to perform these activities, for he is in constant demand by presently enrolled students who need his guidance. Unfortunately, the Parole Supervisor, who is employed by the Pardons and Paroles Board, has more than he can possibly do to give any more time to follow-up services.

   It is our belief that a person who has a master's degree in guidance and counseling and work experience as a parole supervisor would serve the project well as a Follow-up Counselor. In addition to carrying out the follow-up program, he would be qualified by the Parole Board as a "Parole Supervisor-at-Large" and be authorized by the Board to make investigations and recommendations concerning jobs and home programs for prospective parolees.

   The Follow-up Counselor would work closely with the Placement Officer to coordinate placement activities, conduct the public relations program, and carry out the proposed follow-up program. When it is necessary for one of these staff members to travel over the state, the other could be available at the project office to coordinate necessary parole and job activities.

   A Follow-up Counselor with experience as a parole supervisor would provide a much better understanding in the functions and responsibilities of the Pardons and Paroles Board.
Prevocational Training

Appendix E
PREVOCATIONAL TRAINING

Philosophy

It was our belief that a prevocational training period would provide the individual accustomed to failure and despair a time to assess himself, to make decisions concerning himself, and to express a willingness to embark on a program of vocational and personal-social rehabilitation.

We further believe that instructors and staff members would be able to motivate interest in the various courses through demonstrations, lectures, and discussions. In many cases, the applicants would be given an opportunity to perform some related task in the training course prior to their final decisions concerning training. This experience would then solidify their initial choices or redirect them to another, more realistic vocation.

Purposes

A prevocational training week was planned to accomplish the following:

1. Provide applicants with one day of experience in each of the five training courses available to them.

2. Provide applicants with experience in remedial and supplementary (personal-social and distributive education)

3. Provide instructors time to lay the groundwork for requirements in course training

4. Improve selection so that instructors and counselors would be able to detect serious applicants and to weed out undesirable applicants

5. Afford potential students a period of adjustment both to academic and vocational training

6. Provide an opportunity to emphasize remedial skills using special "job oriented" materials

7. Provide an environment which would afford the trainees the opportunity to evaluate themselves in relation to their job interests and desires

Plans

From a list of 118 applicants, the screening committee eliminated 50 who did not meet educational and parole requirements. Plans were then made for 68 applicants who would be involved in the prevocational training. The plans were complicated by the fact that 50 students already in training had to be taken into consideration in making a suitable schedule to handle both the regular students and the potential trainees. The regular students were given a temporary schedule for the week of May 3-7. The prevocational groups were divided into five sections with 13 and 14 potential trainees in each section. All five groups spent one day each in all five training areas. In addition, they spent six hours in remedial classes and six hours in supplementary classes.
Prior to their prevocational training, all applicants had been interviewed, tested, and given opportunities to make tentative first, second, and third choices of training. Since only 50 of the 68 applicants could be accepted, ten for each of the five areas of training, the element of competition prevailed for those who wished to demonstrate their seriousness for training. Physical facilities which ordinarily accommodate 70 students were strained with the overcrowded condition brought on by 118 students during this week; however, this did not present a serious problem since the schedule was arranged to reduce complications.

Instructors were required to submit lesson plans to the assistant project director outlining in detail what each instructor was to accomplish with each prevocational group. These plans were reviewed and revised.

To evaluate the prevocational training, students were asked to answer a questionnaire concerning their experiences. It was decided that instructors should not make an evaluation immediately after the prevocational week, but should do so two months after the students had participated in the training. The reactions of both students and instructors are covered in the evaluation section of this Appendix.

Evaluation

Instructors were given questionnaires in July and asked to evaluate the prevocational training in relationship to the two months of training which the students had received. The following general statements were made by the instructors:

1. Prevocational training was good, to very good, but probably could be accomplished in a shorter period of time (two or three days).

2. Most instructors preferred that prevocational training be conducted at a time when other classes were not in operation. Most gave reasons such as overcrowded conditions and lack of facilities to handle large numbers.

3. Instructors varied on their thoughts concerning the size of prevocational groups.

4. Due to the nature and situation of his class (all prisoners are familiar with the barber shop), one instructor felt little benefit was gained as a result of prevocational training.

5. Most instructors felt that two hours with each group would have been sufficient time to accomplish their objectives.

6. All instructors felt that students were more adjusted as they began their actual training.

7. Most instructors felt that selection of students was greatly improved.
After answering certain direct questions, instructors were asked to make constructive criticisms. The criticisms made indicated that more involvement of instructors in group planning for future sessions should allow the prevocational training to better fit the individual course needs. The overall evaluation seems to indicate the continuation of prevocational training, but shortening the time, particularly for remedial and supplementary courses.
Four Case Studies
reflecting consultation services
of
Part-time Clinical Psychologist

Appendix F

prepared by
Counseling Department
Draper Vocational Project
Four Case Studies reflecting consultation services of Part-time Clinical Psychologist

A Clinical Psychologist serves the project on a part-time basis to aid the personal and vocational counselors in arriving at a differential diagnosis and case determination for those trainees who require special evaluation of psychological characteristics that interfere with their training and placement in jobs.

The following table reflects a summary of his consultations from September through April as he worked with trainees in the first section of vocational courses.

<table>
<thead>
<tr>
<th>PSYCHOLOGICAL CONTACTS</th>
<th>September, 1964 - April, 1965</th>
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</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>Diagnostic Evaluation (only)</td>
<td>1</td>
</tr>
<tr>
<td>Interview (only)</td>
<td>1</td>
</tr>
<tr>
<td>Evaluations and Interviews</td>
<td>39</td>
</tr>
</tbody>
</table>

Four of the psychological evaluations are included in the following case histories as examples of the work the clinical psychologist is doing with the more critically disturbed of our students. After reading these histories, one can readily see that the part-time services of one clinical psychologist only begins to scratch the surface in the area of counseling needs.

Trainee #1

Background Information

Trainee #1 was a member of the Barbering Class until he escaped from Draper and was dropped from the course. He was arrested and jailed in south Alabama six
days after his escape from prison; he escaped jail, was recaptured, and has been returned to this prison.

The trainee was born in a south Alabama town and lived there with his mother, father, and one sister. He has never been married, nor has he had military experience. He completed the tenth grade, but scored 9.6 on the California Achievement Test. He worked part-time at a food store, later at a drug store where he was picked up by the police and incarcerated.

He has no previous criminal record. He was convicted of burglaries involving concession stands, service stations, coke machines, a dime store, as well as grand larceny involving the theft of an automobile from a hotel parking lot in his hometown. There is a detainer from his home county for manslaughter, first degree. The subject claims that a homosexual picked him up and made advances toward him which provoked the subject to shoot and kill him with a gun. The above convictions resulted in a nine and one-half year sentence.

Trainee #1 appears to be in good physical condition even though he fell several years ago and broke his left arm and shoulder in several places.

The Trainee's conduct in prison includes refusing to work, climbing the water tank, and being late for work. As a student in the Barbering Class, he had shown little interest although he was capable of doing much better work. The clinical psychologist's evaluation of this trainee follows:

**Psychological Evaluation**

Trainee #1 is a nineteen year old slim, blond boy who is doing poor work in the Barbering Class. He says he likes the instructor, but he is not interested in barbering. He wants to be a racer of automobiles. He reports that he has a temper and has "good and bad days," that he is "lazy in the mornings" when it almost "takes 20 people to wake (him) up."
Psychological testing and interviewing suggest that this boy is a poor risk for completion of his course. He is guarded; evasive; possesses an easily stimulated, labile and explosive emotionality; and is impulse-ridden. His general personality structure and present performance (or lack of it) coupled with his stated disinterest in the course all strongly suggest his discontinuation from the project. Negativism and oppositional traits are predominant in his personality.

I feel this boy is a very poor risk in the project and should be returned to regular prison duty.

(The next day after my interview and testing, Trainee #1 escaped from prison.)

Trainee #2

Background Information

Trainee #2 is a twenty-one year old boy who was a below par graduate of the Auto Service Station Mechanic-Attendant Class. He is serving a four year sentence for second degree burglary. In company with a fellow offender, he lived in an unoccupied house for a week. When he left, he took an electric blanket and some other items with him. He was arrested in south Alabama in 1963. Prior to this crime, he had served six months in Virginia for Impersonation (illegal wearing of an Air Force uniform). In 1961 he spent 103 days in a county jail for destroying property.

The subject was born in Florida. His parents were divorced in 1958, and his mother remarried in 1959. His mother, step-father, five brothers, and a sister presently live in Niagara Falls, N. Y. His father lives in Georgia.

His work experience includes attending a service station (four months), working in two textile mills (four months), and driving a city dump truck (while serving the 103-day jail sentence).
Trainee #2 has never been married, nor has he served in the armed forces. He completed the sixth grade in public school. He later achieved a ninth grade standing following his participation in the prison Experimental School. The California Achievement Test scores revealed a 7.8 grade level at the beginning of his vocational training and a 9.3 grade level at the conclusion of the course.

This trainee has an emotional problem and has consulted with the vocational project counselors who referred him to the clinical psychologist.

Psychological Examination

Trainee #2 is a reddish-blond haired boy of thin frame with an embarrassed, shy, nonspontaneous manner whom I have seen on two occasions.

He reports that his appetite is fair—"I eat when I can." He claims that he has lost 32 pounds since being in prison—his weight dropping from 153 pounds upon arrival to his present 120 pound weight. He says he can't eat "that food over there." He denies having trouble getting to sleep, or staying asleep. He says he does not have dreams or nightmares, but does tell of a repetitive dream when he was younger though he cannot now recall it. He has been hospitalized twice for "suicide attempts" which occurred when the trainee was about 14 or 15 years old, after his brother got hit by a car.

His first suicide attempt was made with "pills" of some kind, and five months later he says he tried again with some kind of liquid. He feels something was wrong with his chest at one time—that a cold or something required him to be hospitalized.

The trainee likes to write in his spare time, especially short stories. He keeps a diary which he feels is of publishable quality and which several staff people have read. He also enjoys reading comic books, but expresses no interest in good literature, or any writing other than his own. He is in the Auto Service Station Mechanic-Attendant class, but is not especially interested in mechanics.
The trainee expressed a feeling that he suffers from an "inferiority complex," and is very uneasy and uncomfortable around people, preferring to be by himself as much as possible.

He does not speak easily or freely, prefers to answer questions only, and then, only briefly. He appears to be schizoid, immature, somewhat overimpressed with his own abilities, and self-seeking, and manipulating.

A short form Wechsler Adult Intelligence Verbal I.Q. yields a score of 89--low average intelligence--and may reflect his poorer performance in the academic knowledge and skills, but I doubt if he would fall much higher at maximum potential than I.Q. 100--average intelligence. Certainly, he appears not remarkably gifted in verbal expression, although I have read none of his "writing." The Rorschach was not a bizarre nor psychotic production, but evidence of much anxiety and disturbed interpersonal relationships was manifest. He has much of the passive-aggressive quality in his personality structure, and this oral-dependency coupled with subtle aggressive impulses gives a picture of a schizoid-like, manipulating, passive, "foot-dragging" type of personality with ambivalence toward masculine authority figures. He both respects and fears authority figures, and appears to be disparaging in his attitude toward females. No marked sex role confusion is evidenced, although his passivity and some identification appears to be femininely oriented. He is guarded and evasive, though capable of emotional experience and expression. This is generally held in check and expressed only in the contest of passive-dependent needs. He is somewhat tense and constricted, and anxiety is fairly pervasive, but not to an incapacitating degree. He has mild capacity for fantasy and inner living.

The trainee appears to have limited motivation for accomplishment in his vocational training course, although his capacity is adequate. I do not see marked disturbance, but he does appear slightly "nervous" (anxiety), is withdrawn, somewhat schizoid, and does keep a rather rigid control of his feelings.
The basic passive-aggressive personality structure reflects an overall immaturity and manipulative petulance which is probably best expressed in "foot-dragging" conformity rather than any open sullenness or resistance. He tends to guard his thoughts, and this may appear to lead to personalization of a serious type, but I do not think this is reflected to any deep degree in his testing; it remains a superficial expression of thinking his own thoughts and relating only limited amounts to others.

Trainee #3

Background Information

The subject of this report is a graduate of the Auto Service Station Mechanic-Attendant Course and is twenty-one years old. He is now serving a sentence for two cases of grand larceny in Alabama. The subject, in company with a partner, stole an automobile in one county and left it in another. The trainee has served time in the Alabama Boys Industrial School. He was later convicted of grand larceny which resulted in his being placed on probation for three years.

The subject was born in Alabama. His parents and one brother still live in Alabama, but in a different city from the one in which he was born. He has a second brother in the Coast Guard.

After serving for two years in the Army, Trainee #3 was given a general discharge. His health is good. For one year he worked as a lineman with the telephone company in Arkansas. He held a similar job in Alabama the following year until he fell from a pole and injured his spine.

The subject completed the ninth grade in public school. California Achievement Testing reflected an 8.9 grade level as he began vocational training which was increased to 9.5 at the time of his graduation from the course.
While imprisoned here, the trainee has demonstrated a hostile and uncooperative attitude at times. He escaped once, but has made much progress in the area of acceptable behavior, especially since his enrollment in the vocational course and his sessions with counselors and the clinical psychologist. He intends to go into business for himself upon release.

Psychological Evaluation and Summary of Interviews

During his prison term, Trainee #3 has been involved in an escape and has frequently had to be removed from his cell for violations of regulations. Just prior to the time I began seeing him, however, he had stayed out of trouble for three or four months. Since that time, he has had periods of being very angry and upset, as well as being depressed, but thus far has managed to control himself. He expressed and demonstrated interest in his vocational training course, and his instructor reports good motivation and accomplishment.

The trainee's personality structure reveals a heavy tendency to utilize somatic complaints and disturbances in a hypochondriacal manner to contain and control his anxiety. He lacks spontaneity and tends to respect authority figures, if his status is not threatened by their authority. The subject has more trouble than others in controlling his feelings because of his strong drive toward action, and because he is not oriented heavily toward relationships with others. Lacking a verbal outlet or the ability to express his emotions leaves him with direct physical action as his only means of expression. His self-concept of being an independent, fully functioning, "strong man who takes nothing off of anyone" requires him to be aggressive and self-protecting through compensatory physical expression.

In my several interviews with the trainee, I believe we have made considerable progress in establishing a firm relationship and in reinforcing his retention of
outbursts of anger. He has kept himself out of trouble, although he came very close to fighting on those occasions when provoked. I am pleased with his progress and feel he will probably have fewer problems and less need to act out when he is outside prison and has other resources of expression available to him.

Trainee #4

Background Information

Trainee #4 is a nineteen year old first offender convicted of first degree manslaughter who is serving a sentence of five years. He was in the Alabama Boys Industrial School for one year during which he escaped three times while serving time there for car theft.

His home is one of the larger cities of Alabama where he lived with his mother and stepfather. His father now lives in Florida. One of his brothers lives in San Francisco, California, and three in Alabama. A sister lives in Pasadena, Texas.

The victim of the trainee's offense was his 14 year old sister. He reports that she was in his room looking for some clothing. There was an argument and the subject picked up a .22 caliber rifle and fatally shot her. He says the newspaper got the story that he shot her out of anger because she was teasing him about his hair. He claims this is erroneous and that it was just a playful act as he did not know the rifle was loaded at the time.

The subject is in good health, never having had any serious illness. He has not served in the armed forces, nor has he been married. He worked for one year as a stock and delivery boy at a grocery store until he had to quit as a result of his manslaughter charge. He has completed the 7th grade, and he scored 7.4 on the California Achievement Test.
While imprisoned here, the trainee has been placed in solitary confinement for striking another inmate with a bed rail. Contraband coffee, sugar, cream, and electrical devices used for heating water (hot sticks) have been found in his possession.

Psychological Evaluation

At Trainee 4's request and the request of the warden, the subject was referred to me for counseling. He states that he has a hot temper and "can't stay still." He says that the only person with whom he does not get in trouble or does not "holler back at" is the warden. He reports his appetite is no good and that he does not sleep well--"tossing and turning all night"--especially on weekends when expecting his folks to visit him. He reports no special interests or spare time activity and says that "I've been locked up mostly since my father left when I was seven years old" by which he was referring to foster homes, state training schools, and prisons.

A Wechsler Adult Intelligence Scale prorated his Verbal I.Q. as being 75 to 80 which is spuriously low because of his low knowledge of general information and poor abstract reasoning. His social comprehension reveals a rather short-sighted and self-centered interest with little awareness of or genuine concern for others. I would estimate his native intellectual potential to be in the high "slow learner" (I.Q. 85 to 90) to low average (I.Q. 90 to 95) range.

The MMPI was invalid either because the trainee was very confused (not likely and not corroborated in clinical interview) or because he did not understand the questions and could not read them well enough or else had no interest in performing the test accurately. All the scales except one were abnormally elevated and were of little help in evaluating him. The Rorschach, on the other hand, reveals good
intellectual ability (at least high average), a good form perception, some originality, a tendency toward aggression and hostile expression, a capacity for inner living and fantasy activity, and a capacity for relationship with others. This protocol is completely at odds with his appearance, his past history, and his clinical impression.

I talked with this boy on two occasions. I feel that with a strong authority figure who could control much of his stimulus input and directly affect the consequences of his actions, some change could be effected here. Unfortunately, he has a brother who is also in prison with him and the "mutual feedback" from his brother and others of importance to him in his immediate environment may well counteract any positive forces that could be brought to bear on him. For that reason alone, I feel the chances for course completion or success in modifying his behavior or interests are guarded to poor in prospect.
Materials Development Unit

Introduction
"Programmed Instruction: A Revolution in Education?"
"But What About the Exceptions?"
"From Where I Stand"
"Mathetics"
"Field Testing Programmed Materials"

Appendix G
INTRODUCTION

The work of the Materials Improvement Unit of the Draper Experimental-Demonstration Project in Vocational Education is closely coordinated with the training of carefully selected inmates who have chosen Technical Writing as their vocational field. These student inmates are being taught to write a special type of "programmed" instructional material that will, upon completion, be used to train students in other vocational courses.

Programmed instruction is the first major breakthrough in the effort to make learning individualized when overcrowded conditions make it impossible. The programs, usually in the form of individualized lessons, present information to the student in small portions, question him about the information presented, and furnish him immediate feedback (as to whether he is right or wrong). Because the programs build on the student's feedback information, they are, in effect, like having good tutors for each student. A student is allowed to progress at his own rate of learning--each according to his own ability and interest.

Before a program actually can be written, the program writer must go through a complex process in which he analyzes the material to be taught, using methods developed from laboratory experiments in animal learning. This complex system has been highly structured and organized into a series of charts and working papers that serve to guide the writer.

Programs developed by the Materials Improvement Unit and the Technical Writing class will be inserted into the curricula of the Draper Vocational Training Project as well as other trade and industrial schools and projects for field tryout. If the programs teach effectively, they will be published and disseminated.

The contents of this appendix was written by members of the Materials Improvement Unit as a result of their experiences in the training of technical writers and the development of programmed materials.
"PROGRAMMED INSTRUCTION: A REVOLUTION IN EDUCATION?"
by J. H. Harless

"Why Johnny can't read," the high dropout rate, and the postwar baby boom are alarming problems to parents, educators, psychologists, and industrialists, alike, who are becoming increasingly aware that today's educational methods are woefully inadequate to meet the needs of the accelerated pace of the Atomic Age.

Medicine has risen from barber-bloodletting and sideshow potions to a more scientific technology. Psychology has advanced from mystic pseudo-science to the threshold of profound discoveries made possible by a genuine science of behavior. Biochemists are probing into the very structure and origin of life itself. Areas undreamed of a few years ago are becoming complex technologies in this age of specialization. Yet, "Mr. Novak" still lectures to his class and reads to them from textbooks in much the same manner as did his ancient counterparts. In spite of the increased demands upon both teachers and students today, educational methods continue to follow the pattern they have followed for hundreds of years.

This rapid advance in other fields, as well as the implication of the world's tremendous population explosion, creates more acutely than ever the need for better teaching procedures.

Educators are investigating as a possible means of alleviating this dilemma an exciting and relatively new tool called "programmed instruction." In general, this method is an additional step toward developing a technology of education.

An effective programmed instructional text is systematically researched, designed, and written to provide the student a learning situation very much like the one a good tutor would provide. It presents information in small steps,
questions the student about that information, informs him if his answer is correct or incorrect, adds more information, questions him, and so on, until the student has actually learned an entire set of information and behaviors. On first glance, the program appears to be a test, but the questions are specifically designed to force the student's attention to the information being presented and to give him an opportunity to perform the behaviors he has previously learned.

It is perhaps an oversimplification to say it, but programs are spoken of today as belonging to one of three types—linear, branching, or mathematical—or to a combination of the three types.

The linear program is the oldest and best known of the three types. It presents information in very small steps called "frames", calls for a student response (usually filling in a blank), and gives the student the correct answer for immediate comparison with his own. The program builds slowly, adding more and more information, until the student has learned an entire area of information.

A disadvantage of this type of program is that students often become bored with the small chunks of information presented—the inability to see the "big picture," or where they are going—and the repetition of having to write the same responses several times.

The branching program presents the student with information much the same as does the linear type, but he is given alternative or multiple-choice answers from which to choose. Depending upon his answer, the student is directed to one of several pages. If he continues to give the correct answer, he moves directly through the program; should he choose an incorrect answer, he is directed to a certain page for additional information that will help him make the correct response. This technique takes into account individual differences among students—allowing the bright student to skip certain steps which are necessary for the slow student.
The third type of program, the mathetical approach, is not bound by a format as is linear or branching. It is a complex system of analysis that is performed by the program writer in an attempt to discover and to correct any potential learning problems. Matheticists use the branching technique in an attempt to solve the problems of student boredom and individual differences within a specific population; however, mathetical programs, which usually resemble workbooks, use more illustrations and present information in larger blocks than do the other types. Advocates of mathetical programming report very successful results with this system, but they admit it requires more time for preparation than do linear and branching methods.

Even though each type of programming exists for its own particular reasons, the basis of all three types is the "theory of reinforcement learning"--a concept derived from observation and analysis of animal behavior in laboratory experimentation.

Reinforcement learning theory may be summarized in the following statements:

1. A person learns by seeing the results of his actions.
2. Results that are favorable to the person tend to strengthen the likelihood of the repetition of the action that produced the favorable results. This principle is called REINFORCEMENT.
3. Delay or absence of reinforcement following an act weakens the chances of repetition of the act.
4. Learning can be developed by reinforcing desired acts and withholding reinforcement for undesirable acts.
5. Reinforcement quickens a student's pace and increases a student's interest in learning.
6. A person's learning can be developed into a complex pattern by reinforcing simple elements and combining them into chain-like sequences.

Programmed instruction is surrounded by many myths and misconceptions. Many teachers think of it as just another audio-visual teaching aid; others treat
it as a panacea for education and the ultimate in a learning instrument. At the first successes of programmed instruction, the hue and cry went up that the programs and teaching machines were intended to "replace teachers." In reality, programs are intended more to replace the hours of drill and repetition that usually devour the teacher's day, leaving him more time to handle special student problems, to provide enrichment, and to conduct research in the less explored realms of his field.

Recent research seems to indicate that some "teaching machines," the first vehicles for programs, probably serve best as novelty and motivational devices. In any event, it is apparent that the program inside the machines is the important mechanism, not the machines themselves—a fact that is amply demonstrated by the increasing number of programs that appear in book format and the lessening quantity of machines on the market. However, newer and more sophisticated machines show promise as effective tools for learning, especially in the utilization of computer assisted instruction.

The time saved in using programmed instruction and the results of its use have been greatly encouraging. It should, however, be researched, investigated, and tested further in order to improve this method in the field of teaching technology.
"BUT WHAT ABOUT THE EXCEPTIONS?"

By J. H. Harless

A group of prospective students gathered around the announcement on the bulletin board; some of them hurried into a central office; some read application forms as they left the office and walked along the hall; others began to complete the forms on the spot.

Listening to the buzzing conversation and noting the flurry of activity, the observer might have guessed it to be registration day in a trade or high school, if he could ignore the stenciled number on the boys' white uniforms and the grids of shadows cast by prison bars.

The potential students were youthful, but they were already failures--failures in school, failures in society, even failures in crime. The atmosphere in the halls that day was hopeful. The supply of application forms was soon exhausted.

One hundred seventy-six applicants registered for the first of a series of vocational courses offered by the new Draper Experimental-Demonstration Project in Vocational Education. Hank and Chuck, two exceptions to society's norm, were among them. Two failures with extreme differences in personality, education, and intelligence, these boys would later prove to be exceptions to the norm of their classmates in the Technical Writing Course for which they had enrolled.

Hank and Chuck had at least two things in common--an application for the same course and the need and plea for help, for a second chance. Both were treated in the same manner. They participated in interviews with their prospective instructor and counselors; in standardized testing of their achievement level and general aptitudes; and in a prevocational training period in which the two men, along with other potential technical writing students, were observed and evaluated before being accepted for the course.
It was learned that Hank grew up in the large population center of the North. His history of twenty-one years was one of many spectacular failures. His intellect seemed to have required his placement in special or private schools and programs for the exceptional child (intelligence test scores rated him in the very top range of the population). Although he completed high school by virtue of an equivalency test, standardized examination results demonstrated that he was capable of postcollege work.

Chuck's life history read like a fictionalized stereotype of the underprivileged Southern tenant farmer. Chuck, also twenty-one years of age, had to leave school at the sixth-grade level to work at odd jobs in order to help support his fatherless brothers and sisters. Intelligence testing rated him in the lower range of average intelligence, with a higher score in reading comprehension than his educational attainment and I.Q. score indicated. Chuck's pale, drawn appearance and stooped gait, so typical of one of his socioeconomic background, were ample evidence that he had known hunger all of his life.

Seventy inmates were selected to receive training in one of seven areas during the project's first session. Hank and Chuck are two of the ten inmates being trained as technical writers.

Beginning his first class, the technical writing instructor was fully aware that he faced one of the problems that had always plagued educators--how to teach the same subject matter to students with great individual differences in background, learning potential, and educational attainment. He knew full well the conventional approach to this problem--that of gearing the teaching load and pace to fit the "average" member of the class, but he was keenly conscious of the results--the bright student's boredom and impatience and the slow student's frustration. Statistics he had read demonstrated that the latter problem is a contributing factor
to the high dropout rate. Knowing that students, especially inmate students, desperately needed the success experiences that had eluded them all of their lives, the instructor believed that if he pitched his teaching level and work assignment to fit the average of the class, Hank and Chuck would very likely become dropouts from vocational training. This would become another failure for each of them and though each would have his peculiar reason for failure, the loss of potential would be the same for both.

Accordingly, the instructor tackled Chuck's case first. He allowed him to attend all sessions of the initial lectures and demonstrations in the theory of behavioral analysis that the class would use in learning to write self-instructional and technical manuals. As his background had indicated, Chuck's level of learning was below the general level of the class at the end of the theory training. He showed signs of frustration and even requested that the instructor drop him from the class.

Instead, Chuck was advised of the plan to prescribe programmed instruction for him in basic English, spelling, and vocabulary. He was shown how he could succeed as he followed the special remedial schedule that had been prescribed for him and worked closely with one of the experienced writers who would also give him guidance.

In contrast, Hank's sponge-like mind quickly absorbed the theory of the course, and as he rapidly outdistanced his peers, he became impatient to begin applying the vocation he was learning. Hank was offered his first challenge of putting the theory he had learned to work. While the remainder of the class finished their classroom study, he was given an assignment in which he was to do research, collect data, analyze the behaviors, and prepare a self-instructional program. In addition to his advanced work load, Hank was given supplemental reading assignments that encompassed a wide range of topics, i.e.,
experimental psychology, literature, history, math, science, economics, and topics related to social adjustment. He accepted the challenge.

Hank and Chuck did not know each other until they became classmates in the technical writing course. Once they had met, Hank demonstrated a definite air of superiority toward Chuck. With purpose but without comment, the instructor arranged for the two students to be seated next to each other in class. At first, Hank observed the slower student's work without comment. It soon became obvious to the instructor that Hank was fighting a losing battle with himself. Today, he is voluntarily serving as Chuck's unofficial tutor in addition to his already full work load, and has expressed a feeling of tremendous satisfaction in seeing his efforts blossom as Chuck's behavior changes.

A high degree of motivation and initiative was reflected in the success Chuck experienced with the programmed remedial courses. His functional vocabulary increased markedly. He now spends evenings either attending a special school in preparation for an examination for the equivalency of a high school diploma or working on a self-initiated physical improvement program. His attitude of confused cynicism has changed to one of hopeful relation and acceptance.

These two men are still exceptions to the norm, but for the first time both are receiving the reinforcement and satisfaction they need in order to move away from their experiences of failure.

Chuck may have summed up the situation well the other day when, after making an "A" on an examination for the first time, he commented, "A guy who has always been a loser sure can appreciate winning."
FROM WHERE I STAND

by H. Wayne Greenhaw

From where I stand, I see the exciting, industrious, everyday wanderings of students and teachers in the Draper Vocational Experimental Project. I hear the lectures about correct grammar and correct spelling, about the need to be a perfectionist as a technical writer. I see students working eagerly—reading, typing, working with pencils in hands as they lean forward over large pieces of paper. And I hear the plans being made to further the education of many potential students who have never had the opportunity to learn how to make a living in the world outside.

Before me now a student is putting together a lesson on soldering. It is in its twelfth draft. He has been over and over it, each time checking every inch of space in the booklet of typewriter paper, checking the drawings he has included on some of the pages to help the student who will someday learn to solder from this self-instructional lesson. I have seen him go over it every time, each time sighing with the relief of having at last finished. I have seen him come from the chief programmer's office, a little disgusted, but a little glad too, knowing that something else has to be altered, something else has to be changed. He likes the pat-on-the-back that he has received; yet, he also likes the criticism that his free-man teacher has given him because, as a student-programmer, he knows his lesson will not teach until he has written it correctly.

Next to this student is another working just as hard. He is not as far along as the first one; he is working on a big chart the technical writers call a "prescription characterization." With this chart he goes over the steps of the job his lesson will teach. He minutely examines each step to see how he will be able to teach his subject and to see if the student already knows the steps of the performance of the job. He checks each point of his prescription of how this particular task will be done.

Still another student comes through the door with the Service Station Mechanic-Attendant instructor who is a subject-matter specialist in that field.
At his desk the student questions the instructor about how to lubricate and change front wheel bearings. Politely, the man answers the student's questions which have been formalized beforehand so that they are to the point. In this system the specialist answers specifically. For the student's lesson to be exact, the expert must be exact.

As students work on their various lessons, programmers enter and leave the classroom to advise them on the mechanical and creative points of their work. These programmers are experienced technical writers. They, too, are working on lessons in particular vocational fields.

Now and then, after classes are over, the instructors meet. I see them sitting before me. The director and his assistant talk to them about their problems with the inmate students. Other men, experts in their fields, talk to the instructors about teaching.

I hear it all from where I stand.

It is never boring here.

I listen very attentively, anxiously awaiting another new discovery to be made by the chief programmer, programmers, or by the students, in the science of teaching.

Here I know that I am useful. And I have seen that the students from the Draper Correctional Center feel much the same way.

I know that I am not just a showpiece, a board of announcements. I have learned that a blackboard can be a very useful piece of equipment in this science.

And, I am proud to be the blackboard in the technical writing classroom of the Draper Project.
"Mathetics"

Materials Development Unit
Draper Correctional Center
Elmore, Alabama
Mathetics is a systematic method of analyzing, organizing and presenting a subject matter to be learned. The system of mathetics contains a body of precise practices, rules, and guidelines that an individual follows in preparing mathetical lessons.

Mathetics is usually described as one of the three "types of programmed instruction," along with linear and branching. Although it is not characterized by a set format, as is linear and branching, mathetics is at least a type of programming. The dictates of the mathetical system give the program writer a complete, systematic, and scientific investigation procedure in all phases from his preliminary interview with the subject-matter specialist through all analysis and writing to the evaluation made of the printed program.

In brief, mathetics is a complete system which carries the writer from idea to the printed functioning programs.

In general, mathetical programs are distinguished by the following:

(1) The physical appearance of the programs produced, which usually have a greater variety of styles and illustrations than programs of the linear or branching types.

(2) The amount of material contained in each teaching unit. In mathetics, the prime consideration of this point is how much the target students can absorb in one step.

1Refer to Appendix A, Fourth Progress Report, pp. D-5i & ii, for Steps and Personnel Involved in Preparation of Mathetical Programs.
(3) The systematic analysis of the behavior which is to be taught. This analysis is performed for the following reasons:

(a) To turn up all hidden bits of action and decision-making a student must master

(b) To discover any learning problems inherent in the material to be learned, or peculiar to the target population

(c) To aid the matheticist in making decisions about teaching strategies, sequence, and emphasis

(d) To aid him further in determining size of the steps which can be absorbed by the target population

(e) To give the writer a systematic procedure in designing each teaching unit

(f) To provide precise guidelines in page layout, in evaluation, and in revision of the program
LESSON COMPARISON

The end product of the mathetical process is the completed lesson and is the only part of the job that counts so far as the student is concerned. Accordingly, this discussion begins with that end product and compares it with typical products of the linear and branching schools of programming.

Insert A shows a typical linear page. Note that the frames are short, each containing a single nugget of information.

Insert B shows a branching page. This unit contains considerably more information than the equivalent linear frame.

Upon thumbing through both the branching and linear booklets, the observer will find that most of the pages of each type look very much alike.

Inserts C and D are from mathetical lessons. In them note the following:

1. The relatively large amount of information contained in each "exercise." Exercise size varies from one page or less to several pages.

2. The variety of layout styles and variety of responses called for. Sometimes the student is told to fill in a blank, other times to pick up an instrument and simulate behavior with it. Occasionally he is told to skip to another page.

3. The extensive use of pictures to illustrate points to be made.

Mathetics borrows techniques from the other programming methods. Filling in blanks is a typical linear-type response, but may be used in mathetical lessons; mathetical lessons frequently contain branching provisions to take advantage of, or to correct for, individual differences among students.
Since the matheticist is "free" from layout and response bondage, he takes advantage of this freedom to shape the format of his lesson around the actual behavior involved. In order to determine what is really involved in the expert performance of this behavior, the matheticist submits the expert and his activity to vigorous and minute scrutiny.

THE PART OF THE ICEBERG THAT THE STUDENT DOESN'T SEE

An examination of the mathetical system of task analysis and lesson preparation follows. It must be borne in mind that the analysis is not an end in itself; it is intended solely as preparation for the writing of the lessons. The function of the charts and papers described below is to force the matheticist to look at his material more closely and with greater detachment. Ultimately, the purpose of the analysis is to aid him in estimating how much material a student can absorb in one bite (or, to be technical, one "exercise").

Here are each of the major steps in the process:

1. **Overview of the entire field** to find the specific areas in which programmed material is most needed, and which in turn are most suited to being taught by programming. This is done by general readings and by interviews with experts.

2. **Analysis of expected student population** to find their level of present knowledge in the field, their reading ability, general education, and manual as well as intellectual aptitudes. This is done by observation, interviews, and the administering of tests.
(3) **Preparation of detailed objectives.** The use of vague words such as "understanding," "appreciate," etc., is avoided in the preparation of detailed objectives. Instead, the actual behaviors are specified by using concrete terms such as "Indicate by numbering in correct order," "Answer questions of which the following are typical," "Identify, by labeling, the following symbols."

The task of preparing the objectives forces the programmer to take a close look at the behavior. Also, with objectives written and signed, he will have less temptation to stray off the point of the lesson or to omit essential steps or material.

(4) **Job Analysis.** During this phase, the programmer works in the field with the subject-matter specialist, interviewing him to find exactly how he does a certain job. The matheticist then actually performs the work demonstrated to him, if at all possible. Emphasis is on finding those hidden steps which the expert may overlook because he is so familiar with his subject. The eye of the matheticist, fresh to the field and trained to question and probe, spots these and other problem areas during this phase. The findings are written up in steps of performance and in explanatory notes.
Safety practices and passing tolerances of behavior are also noted.

(5) **Prescription.** The steps of behavior are transshaped into a "prescription" (which is basically a notation of the behaviors in terms of stimulus and response.)

A typical prescription might look like this:

```
SR SR SR
S-R * S--R * S
S-R * S
```

As with each of the other processes in the analysis, the primary value of the prescription is that of forcing the programmer to look more closely at the details of the activity.

The physical shape of the prescription that results may be decisive in the form of the final lesson. For example, this prescription

```
S-R
S-R
S-R
S-R
```

would indicate that the activity involves primarily choice and decision, while this one

```
S-R * S-R * S-R * S-R * S
```

reveals that the major problem will be that of teaching the student the sequence of doing things.
(6) The remainder of the process of analysis centers on the prescription. The matheticist examines each S–R link in turn to find any similarities it may have to other links or to tasks which are not involved in the lesson, in order to locate the points at which the student may become confused or at which he may be aided by a simple analogy or reference to something he already knows. The mathetical ideal is to have each "exercise" contain exactly the amount of material the student can handle at one time. While rewriting the prescription, the matheticist determines how much he can expect his students to absorb in one exercise. He then refers to his findings about the students' abilities and to the notes and charts on the complexity of the material made earlier.

(7) Teaching strategy decisions are made. Decisions are also made as to whether branching exercises are necessary to overcome special deficiencies of some of the students.

1 Contrast this with the linear ideal which is to break the information into the smallest steps possible.
(8) The mathematician writes and perfects the lesson. This draft is submitted to the chief programmer and the copy editor for editing. It then goes back for revision to improve any weak spots. When a draft is written that is satisfactory to all, it enters the tryout stage.

(9) The lesson goes through a series of one-man tryouts and improvements. When perfected by carefully observed individual tryouts, the lesson is field-tested one or more times, and if it proves successful, is then published.
In adding fractions with their denominators alike, simply add the values of the numerators together and the sum is the numerator of the answer. Because the denominators were alike originally, the denominator in the answer will remain the same. For example:

\[ \frac{1}{4} + \frac{2}{4} = \frac{3}{4}; \quad \frac{3}{8} + \frac{2}{8} = \frac{5}{8} \]

Solve the following problems:

\[ \frac{6}{9} + \frac{1}{9} = \quad \frac{3}{16} + \frac{12}{16} = \quad \frac{1}{20} + \frac{11}{20} + \frac{7}{20} = \]

\[ 7/9; \quad 15/16; \quad 19/20 \]

Adding fractions with denominators of different values requires special treatment. Let us follow, step by step, how to solve a problem of this type.

\[ \frac{1}{4} + \frac{3}{16} = ? \]

(excerpt from materials produced by the U. S. Air Force)
EXCELLENT! You understood the distinction between the state government and the federal government.

Now let's go a little more deeply into the make-up of the federal government.

The federal government is composed of three branches: the executive, the judicial, and the legislative.

Do you think that a judge is a member of the legislative branch or the judicial branch?

Legislative . . . . . . . . . . . Turn to page 7
Judicial . . . . . . . . . . . . . . . Turn to page 15
ADMINISTERING THE INJECTION

The schematic on these two pages shows you how to ADMINISTER INJECTION (Step II). Study the schematic carefully, then say aloud the steps summarized in the middle of the page until you know them. Before leaving these pages you should pick up the injector and actually follow the steps with the machine turned off. Use your own lower arm to see the nozzle imprint (be sure to take off the red protective cap first). Do it several times.

START here and follow the arrows counterclockwise:

1. see that the COCKING LEVER is at “FILL,” then

2. turn COCKING LEVER to “INJ”

3. nozzle against arm at 90° angle to the bone

4. support arm, squeeze trigger for 3 seconds

5. COCKING LEVER immediately back to “FILL”

NOTE: Finger on trigger only after the nozzle is firmly seated and the arm is “bunched” or stretched toward the back.

4. squeeze trigger for full THREE SECONDS (count: “One thousand one, one thousand two, one thousand three”)

3. press nozzle FIRMLY at ½-inch-depth site at 90° angle with the bone toward back of arm; support arm (“bunch” or stretch). Seat the nozzle firmly (not on a muscle) so that all points of the nozzle are partially buried. Remember, correct pressure will leave a strong nozzle imprint.

5. turn COCKING LEVER back to “FILL” immediately after injection. Leaving on “INJ” too long puts a strain on the machine. NEVER turn on OR off with the lever on “INJ.”

Remember to actually follow the steps with the injector several times before leaving these pages.

(adapted from "...Jet Injector Operation, Model K3," a Self-Instructional Lesson. U.S. Department of Health, Education, and Welfare/Public Health Service, Communicable Disease Center, Atlanta, Georgia.)
Insert D

Unit 2

MIXING THE INGREDIENTS

Having gone through the first three steps, you will know these factors:

(STEP I) the kind of insecticide to use, the dosage rate, the diluent
(STEP II) the amount of the final preparation ("A")
(STEP III) the quantity of concentrate to use ("Q")

To complete the formulation of the insecticide you must MIX THE INGREDIENTS (STEP IV):

1. First, put the concentrate ("Q") in the container

2. Then, add diluent until the mixture equals the amount of final preparation needed ("A")

For example...

Assume that you already know these things:

(STEP I) 1% DDT solution (kind), 2 lbs/acre (dosage rate), kerosene (diluent)
(STEP II) 100 gal of final preparation needed ("A")
(STEP III) use 6.6 lbs of technical grade DDT ("Q")

Now, to show how you MIX THE INGREDIENTS,

1. On the picture of the container WRITE the quantity of DDT to use

2. DRAW a circle around the level-mark to which the diluent (kerosene) should be added

A REMINDER:

To find out how much diluent to add, DO NOT subtract the quantity of concentrate to be used from the amount of final preparation needed; very often the nature of the two ingredients is such that one plus one will not equal two, for example:

- quart of anti-freeze PLUS quart of water EQUALS less than two quarts of mixture
FIELD TESTING PROGRAMMED MATERIALS

Programmed instructional materials are individualized lessons designed to teach students specific jobs or subject matter. These lessons are written for students of a given reading level and knowledge of the particular subject matter; therefore, they are designed for use at strategic points in a course of study.

Field testing of these programmed lessons is necessary to find out if they meet the objectives set out for them and to collect data on their effectiveness. Field tests may also indicate the need for revisions that escaped the writer's notice when he tested the lessons in individual student tryouts. In order to conduct field testing of programmed materials, the following cooperative services are requested:

1) Provision by the host facility of 25 to 50 students who closely fit the description of the "Design Group" as defined in the attached LESSON DESCRIPTION.

2) Provision by the host facility of ample working space for the test students. (Refer to "Special Conditions" in LESSON DESCRIPTION.)

3) Provision by host facility of all necessary tools and equipment. (Refer to "Tools & Equipment" in LESSON DESCRIPTION.)

4) Preparation of tryout students by host instructor by emphasizing that the tryouts are not tests but training materials being tested. Each student should be requested to do his best.
A staff member of the Rehabilitation Research Foundation of Alabama will administer the field tests at the host facility according to the following procedure:

1) Introduction of the Foundation staff member to the students by the host instructor

2) Initiation of field tests by Foundation staff member which will include the following steps:
   a) Explanation to the students of field testing procedures
   b) Administration of student data questionnaire
   c) Administration of the pretest of the programmed lesson
   d) Administration of the programmed lesson
   e) Break
   f) Administration of the posttest of the programmed lesson

Inasmuch as some of the programmed materials may require more than one day for field testing (refer to "Lesson Time" in LESSON DESCRIPTION), the cooperating host facility should be careful to allot ample time for all data to be gathered. In some cases, several different lessons may be appropriate for the same group of students in which case one group of students may serve as tryout students for more than one lesson.

Questions concerning field tryouts of programmed lessons should be directed to J. H. Hatless, Chief Programmer, Rehabilitation Research Foundation of Alabama, P. O. Box 1107, Elmore, Alabama.
Newspaper Article

Appendix H
By WAYNE GREENHAW

THREE YEARS AGO Joe Harless of Northport, one of the up and coming young educators in the United States, had an important decision to make. In the spring of 1962 he graduated from the University of Alabama as a pre-med student in psychology and English.

Also that spring Harless was accepted to the Medical School of the University of Miami.

On one hand he had the glory of med school and a scholarship awaiting him in sunny Miami, but at the same time Harless had an idea concerning a mixture of behavioral psychology and education. This idea grew from classes under liberal thinking educators at the University.

Harless made his decision. Like in Robert Frost’s poem, “Two Roads Diverge in a Yellow Wood,” Harless took the path least traveled, and it has made all the difference. He went to New York where he worked under two of his former professors at Alabama, and there he began his three-year climb to the position he holds today.

Now the chief programmer of the Materials Development Unit in the new experimental project at Draper Correctional Center in Elmore, Harless was one of the major speakers at the national convention of the National Society for Programmed Instructors in Philadelphia in May.

Before a crowd of several hundred professionals in his field, Harless gave his original paper, “Making Sow’s Ear Writers Into Silken Programmers,” and was among the most popular of the speakers. He told how he is teaching technical writing and programming to inmates at the correctional center. He told of the Materials Development Unit of which he is the head, an organized group of two programmers, a programmer-editor, and a chief. From this nucleus comes programs developed, written, and published at Draper, behavioral lessons written in the fields of study in the Vocational Experimental-Demonstration Project. This is a new project under the Manpower Development Training Act to teach otherwise untrained inmates skilled occupations through self-instructional methods.

THIS AMAZING YOUNG man who seems to have an endless capacity for work of mental or manual nature is 34 years old. He is the grandson of Mr. and Mrs. S. E. Harless of Northport and the son of former Northport Police Chief S. E. Harless Jr., who now lives in Florida.

In New York he worked with Dr. Thomas Gilbert, whom...
be met at the University of Alabama when Dr. Gilbert was a professor in psychology there. Gilbert introduced the young man to a new and revolutionary method of teaching analysis called Mathetics, in which the behavior of any given subject to teach is broken down into its smallest steps, analyzed, written into self-instructional lessons using graphics and strong reinforcements in a positive manner.

Harless responded to the challenge: He became immediately interested in this new discovery of Gilbert’s, becoming the doctor’s protégé.

The following two years became history in the educational world. Harless wrote programs and filled contracts for Harvard University, United Hospitals of New York and other organizations. He conducted training courses in programming and Mathetics for the Air Force, the Department of Health, Education and Welfare, and for private industry.

In 1964, while working as a Mathetical programmer for the Communicable Disease Center in Atlanta, Harless was nominated for the Outstanding Young Professional in Atlanta Award.

EARLY THIS YEAR Programmed Instruction magazine bestowed honors on Harless’s lesson in “Amebiasis: Laboratory Diagnosis” as “a program of the highest quality.”

Actually, Harless says, Mathetics takes the best of what good educators have been using for centuries. “We are making teaching a technology,” he says. “Where other sciences have progressed, education has stood still. Programmed instruction, particularly Mathetics, is the first breakthrough since the Socratic method.”
Follow-up Information on Trainees Recently Placed

Appendix I
Although our staff has formulated a thorough follow-up program to furnish supportive services to our graduates now working in free society, the institution of the program has been hindered by the present staff's lack of time to carry out those plans. The counselors have necessarily had most of their time consumed in assimilating 50 new trainees into the project. The placement officer, involved in concluding placement for the remainder of our graduates and developing job opportunities for the new trainees, has time to accomplish only incidental phases of the follow-up program. Fortunately, our instructors have been able to telephone, visit, and correspond with many of their former students.

The results of these limited contacts are reported as follows:

**Electrical Appliance Repair Instructor**

"I have maintained contact with my students wherever their location made it possible for me to do so.

"On one occasion, I took one of my former students to the lake, and I have taken several of them to church on other occasions.

"At this time, I feel those students with whom I am in contact are holding their own in their job situations. One was tardy to work several times, but the employer was successful in correcting his tardiness, and the trainee is now doing very well."

**Barbering Instructor**

"I receive letters from Student A weekly. He is working as a barber in a small town near his home. In his last letter, he mentioned going to night school and taking a beauty course. However, he assured me that he was not going to drop his barbering career.

"Student B was placed on a job near the project; therefore, I see him at least once a week. He is quite happy with his work. His employer is pleased with his performance.

"In a large nearby city, I learned that Student C's employer is very well pleased with this graduate's work.

"Student D is working in the same city as Student C. Although he works in a different shop, the two students have the same employer who is well satisfied with their job performance.

"Through no fault of his own, Student E has been refused by two barber boards and is still at Draper. These two boards refused even to consider him because he is an ex-prisoner. (Refer to Justification Statement, Appendix D - page 3.) The Placement Officer and I have been able to secure a job for Student E in another county, and he will be on the job soon.

"Student F will go to work in the same town as Student E as soon as he is released. This is his hometown, and I feel he should make the grade in the town where his family resides."

**Welding Instructor**

"I am delighted to report that our only student who had not been placed in a job was recently hired to work for Brown Engineering Company in Huntsville."