

# Phase FOUR

an interim final report

EXPERIMENTAL  
MANPOWER  
LABORATORY FOR  
CORRECTIONS

March 1973 - February 1974

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THE  
EXPERIMENTAL  
MANPOWER  
LABORATORY  
FOR  
CORRECTIONS

Rehabilitation Research Foundation

Final Interim Report on Phase IV

March, 1973, through February, 1974

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CONTENTS

	Page
Introduction.....	1
Mount Meigs Project.....	3
Tuscaloosa Project.....	25
Work Release Evaluation.....	31
Utilization.....	41
Summary and Projections.....	57
Appendixes	
Appendix A, Six- and Twelve-Month Follow-up Form for Discharged AIS Students .....	67
Appendix B, Revised AIS Opinion Survey Form .....	73
Appendix C, Selected Materials from the Contingency Contracting Workshops .....	81

## INTRODUCTION

The Experimental Manpower Laboratory for Corrections (EMLC) functions as a vehicle for research and application in correctional programming, using a behavioral approach to the problems of the offender. The previous lab studies were conducted at Draper Correctional Center, a maximum security institution for adult male felons, located in Elmore, Alabama. At Draper the Lab developed an individualized instructional system for delivery of basic education skills, examined the token economy as a more positive means of controlling inmate behavior, and trained correctional officers in the use of behavior modification techniques to enable them to function as change agents. Two longitudinal follow-up studies were also conducted, using a battery of behavioral assessment instruments to measure the effects of institutional treatment on postrelease adjustment. Phase IV saw the expertise gained in the Draper studies applied in the development of three models, each a separate research effort.

The first of these research efforts is the Mount Meigs Project, sited at the Alabama Industrial School (AIS), an institution for delinquent male youths between the ages of 15 and 18. Here the Lab is developing a behavioral management model to provide a more effective treatment program. This model will take the form of a token economy similar to that used at Draper. While the AIS students are somewhat younger, the two populations are alike in many other respects, particularly in their lack of academic and vocational skills. The smaller size of the AIS population (150 students as opposed to 900 inmates at Draper) should facilitate the work of the Lab.

After assessing the treatment program already operating at AIS, the EMLC began intervention in the academic education division of the school, preparing to introduce the student incentive system (token economy) there. The groundwork was also laid for establishing a contingency contracting system in the AIS

Department of Social Services. The details of these activities are found in the section beginning on page 3.

The second model being developed by the Lab moves outside the institution to community treatment of young offenders on probation and parole. This model is the responsibility of the Tuscaloosa Project, sited on the University of Alabama campus at Tuscaloosa. A demographic study of the target population was completed in Phase IV, and the Lab began developing liaison and working communication channels with existent community agencies. The Tuscaloosa Project is described in the section that begins on page 25.

The third component of EMLC work in Phase IV is the Work Release Evaluation Project. While assessing the Alabama work release program, the Lab is developing a model for assessment of correctional work release programs. The evaluation is designed to measure the long-range effects of work release participation on postrelease adjustment. Study design and data trends are described in the section beginning on page 31.

While the Lab's chief commitment is to the design, implementation, and evaluation of these projects, another important effort is that of dissemination for utilization. This dissemination takes many forms, including preparation and distribution of publications and presentations to various groups. The utilization activities for Phase IV are found in the section that begins on page 41.

## MOUNT MEIGS PROJECT

The primary reason for the EMLC's move to the Alabama Industrial School (AIS) at Mount Meigs was the opportunity to develop a behavioral management model at the school. The token economy studies at Draper had demonstrated the feasibility of such a model, and the AIS site provided a considerably smaller and somewhat younger population along with fewer security requirements. Once at AIS, however, the EMLC found that the needs of the students there dictated that the development of the behavioral management model take a somewhat different form from that which had first been planned.

The educational deficit of the AIS students was the most outstanding disadvantage of these youths when compared to their peers in the community. The need for vocational skills is not to be diminished, but few 16-year-olds have marketable skills whether they are in the community or in a juvenile institution. And, when considering the short stay of most of these youths at AIS (usually six months), the best choice seemed to be an emphasis on an efficient delivery of academic education as a means of preparing the students to continue their vocational training after their release.

The EMLC thus chose to work first in the academic education division of the school, expanding the operation of the Individually Prescribed Instructional (IPI) System (developed by the Lab at Draper). And, because many of the students have poor reading skills, the EMLC introduced the Individualized Reading Instructional System (IRIS). These and other changes were part of the Lab's preparation for the introduction of the student incentive system.

### Assessment of AIS Treatment Program

The initial step in establishing a behavioral management model at AIS was to assess the treatment program operating at that time to determine

where and in what form EMLC input could be best utilized. This assessment took a variety of forms: an opinion survey of AIS staff and students, an analysis of the advancement system for students, observation of student performance in the classroom, and a new approach to the school's follow-up of discharged students. The information obtained indicated that the AIS treatment was not maximally effective and that the staff and students were receptive to the idea of a more positively oriented program, thus paving the way for the intervention which followed.

#### Opinion Survey

Because staff resistance to change can have an undermining effect on the success of a new program, the EMLC surveyed both staff and students at AIS to determine their receptivity to a treatment program based on a reinforcement rather than a punishment model. The 70 survey items, based on an instrument developed at the Georgia Training and Development Center and other attitude surveys, contained several items designed to uncover perceived causes of juvenile delinquency and crime and the belief in "internal" as opposed to "external" (environmental) control of behavior. Each survey item was posed as a statement, with five responses to indicate degree of agreement or disagreement with the statement.

The survey was administered to all 68 AIS staff members and to 123 students who had been at the school for at least 30 days. Each person answered the items twice, once as a staff member and once as a student. The results indicated that a large majority of both students and staff favored the idea of positively oriented treatment, viewing rewards for doing work as an acceptable means of behavior control. Several items also indicated the existence of a communication gap between staff and students, with the staff being more optimistic about the students' postrelease success than the students had predicted they would be.

An item analysis was performed to eliminate those items which failed to discriminate, and a 32-item survey emerged. The revised version was administered after several months, as reported later in this section.

#### Analysis of AIS Advancement System

Another component of the treatment program that the EMLC analyzed was the student advancement system in which a student ostensibly gains his release by progressing through various levels. To determine if the advancement system actually worked this way in practice, Lab staff examined the files of 100 recently released students to gather data relating to disciplinary reports (which result from offenses at AIS), length of stay at AIS, and progression through the advancement system levels.

In theory the advancement system represented an attempt to apply behavior modification principles to the students' activities at AIS, but analysis of the data showed that performance-contingent release was actually nonexistent. The majority of the students learned their exact release date the day they entered the school, and the only way they could affect the length of their stay was to prolong it. Thus changes were necessary before the advancement system could provide much incentive to the students.

#### Student Performance in the Classroom

The EMLC began its evaluation of student performance in the academic education classrooms, since the Individually Prescribed Instructional (IPI) System developed by the Lab was being used in some of the classrooms and provided a foundation for the introduction of behavioral management techniques. Then, too, the interest of the academic division teachers and administrators in developing a more efficient education system, coupled with the Lab's considerable experience in basic education, made the

academic classrooms the logical area to measure current performance and devise intervention.

To analyze the classroom activities, the proportion of time spent by nine teachers and their students in the process of communicating academic material was measured by four EMLC observers. Both classrooms employing the traditional lecture method of delivering instruction and those using the IPI System were observed. The schedule was arranged so that each teacher was observed by each of the research staff an equal number of times over a five-week period ending June 1, 1973.

The principal measures being taken in the observation were Teacher On-Task, Student On-Task, and Student Classroom Disturbances. "On-task" behavior was generally defined as any activity pertaining directly to the transmission of or attainment of academic material. This included question-and-answer sessions, lectures, audiovisual presentations, the assignment of academic materials, testing, and providing or receiving academic material.

"Classroom disturbances" were restricted to five common classroom discipline problems. They were:

1. Talking to the teacher without permission
2. Leaving the room without permission
3. Talking to another student without permission
4. Leaving one's assigned seat without permission
5. Failing to obey a teacher's order

A tape-recorded signal, played through earplugs worn by the observers, indicated the end of each 30-second period. The observations covered 30 minutes of each 50-minute class period, and they were sequential so that significant behavioral chains could be detected. An indication was made at the beginning of each 30-second period as to whether each member of the class and the teacher were on task. Classroom disturbances were

recorded only if they occurred at the signal terminating the 30-second interval.

To summarize the results, the observers found the percentage of time the teacher was on task was quite variable, although somewhat less so in the IPI classrooms. In all observations, the teachers were rated as being engaged in active teaching only 51% of the time. The students were found to be on task significantly more than the teachers, but far less than is generally considered to be acceptable. Students were on task more frequently in the IPI classrooms, a finding which concurs with the observation that fewer disturbances occurred in these classrooms than in those in which the traditional teaching methods were used. These results indicated the need for procedures which would promote greater efficiency in the classroom, a need which prompted both the in-service teacher training program in behavior modification and the restructuring of the academic education division, both of which are discussed later in this section.

#### Follow-up of Discharged AIS Students

To assess the postrelease effects of AIS treatment, the EMLC examined the follow-up procedures used by the AIS Department of Social Services to gather information on student releasees. This information was obtained by mailing forms to various county Departments of Pensions and Security or Juvenile/Family Court personnel at regular intervals with a request to complete the form and return it by mail. While the results of the mailings were reported to be generally good (75% to 80% return on the 6- and 12-month postrelease forms), the Lab found that the data being gathered were difficult to quantify. For example, one question relating to social adjustment was forced-choice: excellent, good, or bad.

Since more objective criteria were needed to obtain better quantified data, an EMLC staff member and the Social Services director worked together

to revise the follow-up form. The revised form, color-coded for use at 6 and 12 months postrelease, has eight sections which deal with subjects, ranging from the releasee's social adjustment to his law encounters. (A copy of the revised form may be found in Appendix A.) The mailing procedure remains the same, with some 6- and 12-month forms being sent out each month. EMLC staff tabulate and analyze the information on the returned forms for both staffs to use.

The first revised forms were mailed in April, 1973. Data were tabulated on all forms mailed from April through November, 1973, which had been returned by December 31, 1973--73% of the 6-month and 88% of the 12-month forms. While these data are preliminary and lack statistical reliability, substantial trends are apparent. The percentages given are based on the number responding to the specific items. Academic and vocational training enrollment were low. Only 19% of the 6-month and 38% of the 12-month group had ever been enrolled in an academic program after leaving AIS, while for enrollment in vocational training the 6- and 12-month figures showed 6% and 9%, respectively. About half were unemployed at the time of the report: 50% of the 6-month releasees and 54% of the 12-month group. Thus the data suggest that the AIS treatment program was not effective in terms of entering the labor force, and that the students did not enroll in additional training after release.

#### Teacher Training Program

The observations of student performance in the academic education classes had shown a need for intervention which would promote greater efficiency in the classroom. As a first step in this intervention, the EMLC conducted an in-service training program in behavior modification for the academic division staff. The training was designed to introduce the

terminology and the basic concepts of behavior modification to the teachers, with emphasis on the acquisition of skills to increase the student's rate of learning and to reduce the number of disturbances in the classroom.

Formal classes for the teachers were conducted for four weeks in July and August, 1973, for three hours each week. Additional time was spent in each teacher's classroom to observe and chart behavior. The training program had the added benefit of familiarizing the teachers with the EMLC's approach to institutional management--the systematic application of behavior modification techniques.

#### Restructuring the Academic Education Division

The assessment of the AIS treatment program indicated that the program which was operating was not as efficient as could be desired. The incentive system proposed by the EMLC thus presented an opportunity to improve the treatment offered by the school. Preparation for the introduction of the incentive system began with the teacher training program and continued with the restructuring of the academic education division of the school. This restructuring was designed to facilitate the identification and recording of quantifiable classroom behaviors and included the physical plant, the academic curriculum, student schedules, and the roles of the faculty.

#### Remodeling the Physical Plant

One of the first changes made involved the remodeling of the classroom building to separate the study and recreation areas. Previously the IPI classrooms and the testing room were separated by several traditional classrooms and the gymnasium/auditorium, resulting in distractions in the corridor as students going to the testing room passed the classrooms or wandered into the gymnasium. The classrooms were remodeled to form an

IPI complex, with an assignment/testing room located between two study rooms (one for language arts and one for mathematics). Doors connect the rooms so that students can move within the IPI complex without going into the main corridor. Across the corridor are two reading labs, similarly connected. One classroom has been set aside for teaching electives, and the library is presently being used for the administration of the Tests of Adult Basic Education (TABE), used in assigning initial placement in the IPI System and evaluating overall grade gain. At the opposite end of the corridor from the IPI and reading rooms are a teacher's lounge and a student recreation room, which will be used as a reinforcing event room when the incentive system goes into effect.

#### Curriculum and Scheduling Changes

The remodeling of the physical plant reflects the new academic curriculum. In view of the tremendous deficit demonstrated by AIS students in basic education skills, the academic core curriculum was pared to individualized programmed instruction in language arts and math (provided by the IPI System) and in reading (using the EMLC's newly developed Individualized Reading Instructional System [IRIS]). Traditional teaching methods and a programmed reading system were discontinued to place full emphasis on the more individualized delivery techniques of IPI and IRIS. The science and cultural enrichment courses were placed on an elective basis, while the physical education classes remained unchanged.

The changes made in the curriculum necessitated corresponding changes in student scheduling. Previously students had been grouped according to TABE locator scores and attended fifteen 50-minute classes each week in their respective groups. The new scheduling is much more individualized. Each student was tested with the TABE to determine his achievement level at that point and to arrive at a learning contract keyed to his academic

profile. Those whose locator tests indicated a need for reading instruction did not receive the full TABE but were assigned directly to the IRIS program. The students who took the full battery of the TABE were given individualized prescriptions for work in the IPI System. Students now daily attend a two-hour IPI or IRIS class, according to their learning contracts, and a 55-minute free period in the gymnasium. Access to the gymnasium will become contingent upon academic performance when the incentive system is operating.

#### New Faculty Roles

The expansion of the use of IPI and the introduction of IRIS required extensive revision of the functions performed by the academic division staff. To orient the faculty members to their new roles and responsibilities, the EMLC conducted a week-long intensive workshop for all members of the academic division staff, including teachers' aides. The workshop included a full orientation to IPI and IRIS, as well as a detailed discussion of a new data collection procedure designed to evaluate student performance and any program modifications. The proposed incentive system was also outlined. All the teachers, with the exception of the physical education teacher, are now involved in some phase of the IPI System or the IRIS reading program. The physical education teacher is responsible for the students in the gymnasium and, when the incentive system is operating, will control the access to performance-contingent recreation facilities (e.g., the gymnasium, the reinforcing event room and the pool).

Before the student incentive system can be implemented, the restructured academic program must be working to its full potential, particularly the IPI System. Behavioral job descriptions were developed for the five teachers working in IPI, both to aid the teachers by defining their roles and to provide a criterion for EMLC evaluation of the teachers' effectiveness. These were distributed to the teachers in late October, 1973. The EMLC

then began videotaping the IPI teachers to compare their actual performance in the classroom to that defined in the job descriptions. Technical perfection in operating the IPI System (e.g., making fewer errors when scoring tests, prescribing modules, and recording data) was also emphasized in discussions about the role of the IPI teachers. The Lab's procedures for checking technical perfection are discussed later in this section.

#### Student Classroom Performance

Measures of student performance were again taken to determine whether the teacher training program and the restructuring of the academic division had affected performance levels. These data, along with those collected prior to EMLC intervention, constitute the baseline for evaluating the effectiveness of the incentive system. As before, observers in the classrooms recorded and analyzed the amount of time spent by students and teachers in communicating academic material. Observations were made for five days (July 17-July 23) in the classrooms of the six teachers who were participating in the teacher training at that time. After the restructuring of the academic division, the two IPI classrooms (language arts and mathematics) were observed for four class periods each morning that classes were held in the two-week period between September 24 and October 5, 1973. Rater-rater reliability was consistently over 85%.

Teacher On-Task. One of the principal measures used in observing the IPI classrooms was Teacher On-Task. Prior to the intervention, the teachers were rated as being engaged in active teaching 38% of the time. On-task behavior of the teachers decreased slightly during the teacher training program to 36%, with practically no change after the restructuring of the academic program.

Student On-Task. In observing the behavior of the students in the IPI classrooms, the EMLC found that the students were on task only 58% of

the time during the teacher training period, increasing to a significant 75% after the restructuring.

Student Classroom Disturbances. The third principal measure taken in the assessment of the AIS treatment program was Student Classroom Disturbances. One or more disruptions were observed in 15% of the observation periods in the IPI classrooms during the baseline phase. In the later observations, these disturbances were found to have decreased significantly to an average of 3% during teacher training, remaining at that level after the academic program was restructured.

#### IPI Measures of Academic Performance

Several measures specific to performance in the IPI System were added to the measures of academic performance discussed previously. These measures are not computed from observations made in the classroom but are taken from data collected each day in operating the IPI System. In a cooperative effort, the master programmer, a member of the AIS academic division staff, records the raw data and the EMLC calculates the IPI measures. The individual measures are discussed in the following paragraphs.

Efficiency Quotient (EQ). The EQ represents the percentage of module tests taken over module tests passed and reveals two very important things: how well the student has studied and, indirectly, how well the learning manager has monitored the student's progress. The raw data necessary to determine the EQ were available over a long baseline period and were used to retrieve the EQ for each class day from January through June, 1973. Starting in July, an EMLC staff member calculated and plotted the EQ on a daily basis. The mean EQ prior to intervention was approximately 51%, with no significant differences occurring during the teacher training program and after the restructuring of the academic division.

Mean Module Posttest Score. To pass the module posttest and go on to the next module, the student must answer a minimum of 84% of the questions correctly. The mean module posttest score, then, is another measure of how well the student has prepared for the posttest. In attempting to retrieve the mean module posttest score, however, it was found that the classroom records did not always indicate which module tests were pretests and which were posttests. Moreover, a large number of modules were scored on a pass/fail basis. An EMLC staff member began systematically recording these data in July. The mean module posttest score for the baseline period (prior to intervention) was 75%, with a slight and insignificant decrease to 72% for the teacher training phase. There was, however, a significant increase to 79% after the restructuring of the academic program.

Learning Rate. After the academic program was restructured, a third, and somewhat more sensitive, measure was added. This is learning rate, computed by dividing the time it is estimated that a student would take to complete a particular module of work by the actual time he took. (Actual time does not include module pre- and posttests.) The estimated times being used are derived empirically, being based upon data taken from IPI classes conducted by the EMLC in studies at Draper Correctional Center. The learning rate data being collected will determine whether different norms for estimated time are required for different populations and will be used to revise the estimated times if necessary.

#### Second Opinion Survey

In September, 1973, the EMLC began administering a second opinion survey to AIS staff and students, using the revised form which contained 32 items rather than the previous 70. (See Appendix B for the revised form.) The survey of the 53 staff members was completed in October, approximately

six months after the earlier survey. The results measure only indirectly the effect of EMLC intervention in the academic education division, since the entire staff of the school was included in the survey.

Perhaps the most interesting aspect of the survey results is the conflict of opinion which emerges. For example, while slightly more staff members agreed that students should be rewarded for behaving well and staying out of trouble (96% as compared to the earlier 93%), nearly one-fifth still responded that students would lose respect for authority if given rewards for doing what they are supposed to do. Another surprising finding was that only 68% of the staff (compared to 86% earlier) agreed that the academic training given to the students helps them become rehabilitated. This significant decrease may have resulted from complaints of the academic teachers to other staff members that the more individualized approach to teaching would result in less need for the teachers and the loss of their jobs. Such fears have been discussed in meetings between the EMLC and academic division staff but may persist in the other divisions of the school which have less direct contact with the Lab.

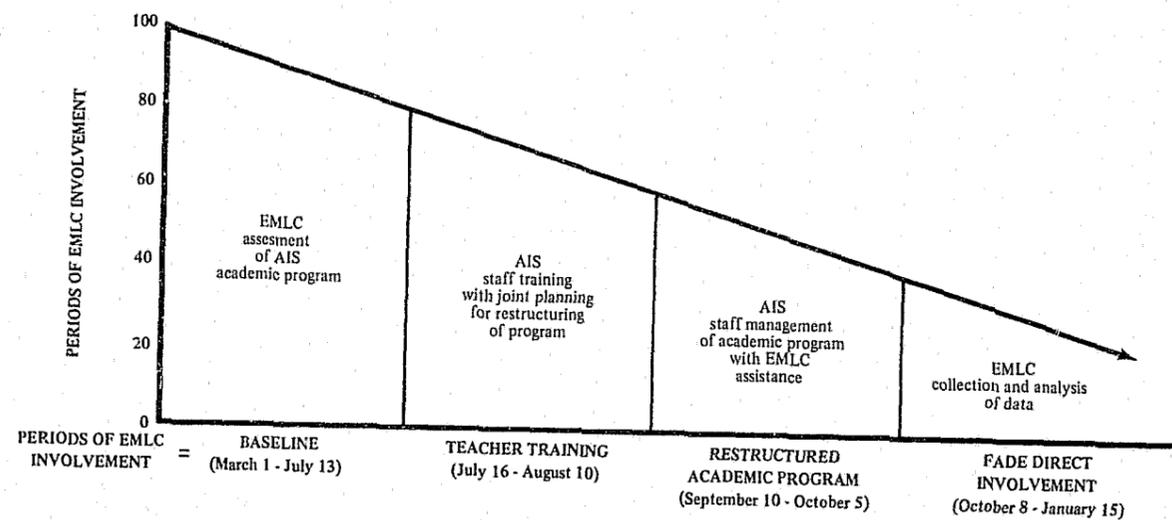
The second survey found that AIS staff members continue to see need for change, but that their perception of their own interest in helping the students to rehabilitate themselves has changed. Previously 89% had agreed that the staff was truly interested, while the later survey found only 77% in agreement with the statement. Even if the latter figure is more accurate, the majority of the staff indicated by their responses an openness to suggestions for change in the treatment program. They may thus be willing to accept such innovations as contingency contracting, discussed later in this section, and the proposed student incentive system.

The second opinion survey is also being administered to all students who have been at AIS for 30 days. Considering the many commitments of the

Lab staff, it is anticipated that the student portion of the survey will be completed in January, 1974.

#### Fading Direct Involvement in IPI Classrooms

The direct involvement of the EMLC in the daily administration of the IPI System began with the restructuring of the academic division and was intended to last only as long as was necessary to insure that the IPI System was operating at optimum efficiency. Graphically represented in Figure 1, the Lab's participation and degree of involvement can be seen as an angular progression, with less involvement in each step. When all direct involvement has ended, the incentive system will be introduced to accelerate student performance.



NOTE.—The dates for the periods of EMLC involvement have been flexible. Termination and initiation dates are dependent upon experimental variables which are often unpredictable.

Fig. 1. Decreasing degree of EMLC involvement in the AIS academic program operation (March 1, 1973-January 15, 1974)

The EMLC began to fade direct involvement in October, 1973. The administration and daily operation of the IPI System then became the responsibility of the AIS academic division staff. Simultaneously, the Lab

instituted an accountability system to monitor and maintain the teachers' high level of performance. In this accountability system, the EMLC collects three kinds of information each day:

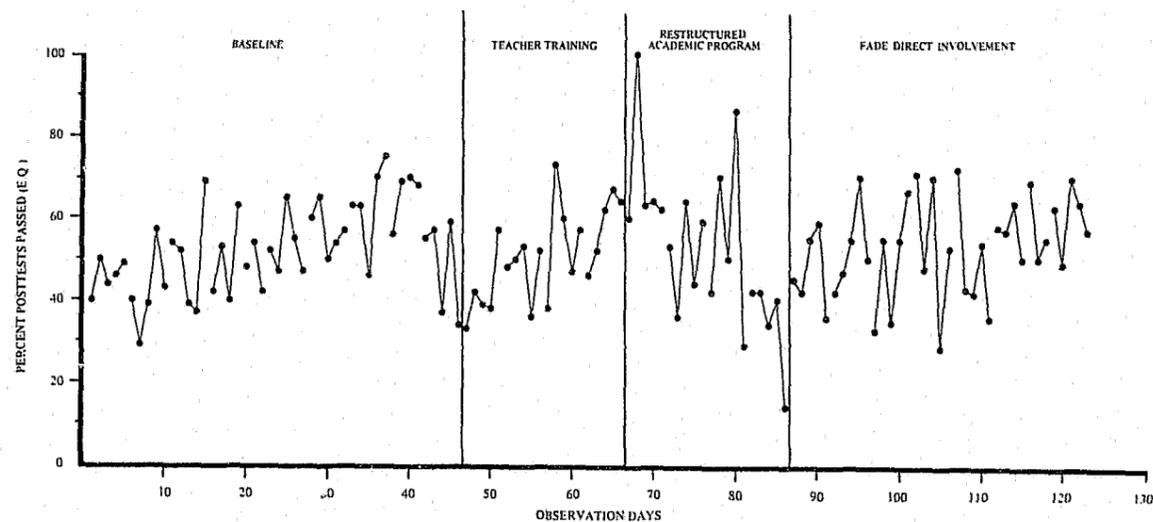
1. All module progress forms for students who have passed module posttests
2. The completed pre- and posttest answer sheets from the previous day, passed or failed, for all students
3. A spot check of the study times entered by the learning managers on the module progress forms

This information is then analyzed to determine the error rate, which is the number of errors divided by the number of module progress forms received and/or checked each day. The module progress forms provide a means of checking the performance of all staff, for the completion of various steps along the way to completing the module are initialed by the staff member responsible for that portion of the operation. For example, if the master programmer did not initial the permit for the student to take a module pretest, the testing room manager is not to honor the permit. If, however, he does and the student takes the pretest, both staff members have made an error. Lab staff also check the pre- and posttest answer sheets to find errors made in scoring. It is important, too, that study times are entered on each student's module progress form at the time he is assigned and begins study on a module, rather than basing this time on the learning manager's best guess at the end of the class period. To check on the entry of study times, Lab staff members made spot checks of the module progress forms during class periods.

The data collected between October 8 and November 30, 1973, indicate that the IPI System was operating almost error-free. The error rate for the learning managers was less than .06 per day, while that for the programming and testing units was less than .03 per day.

### IPI Measures of Student Performance

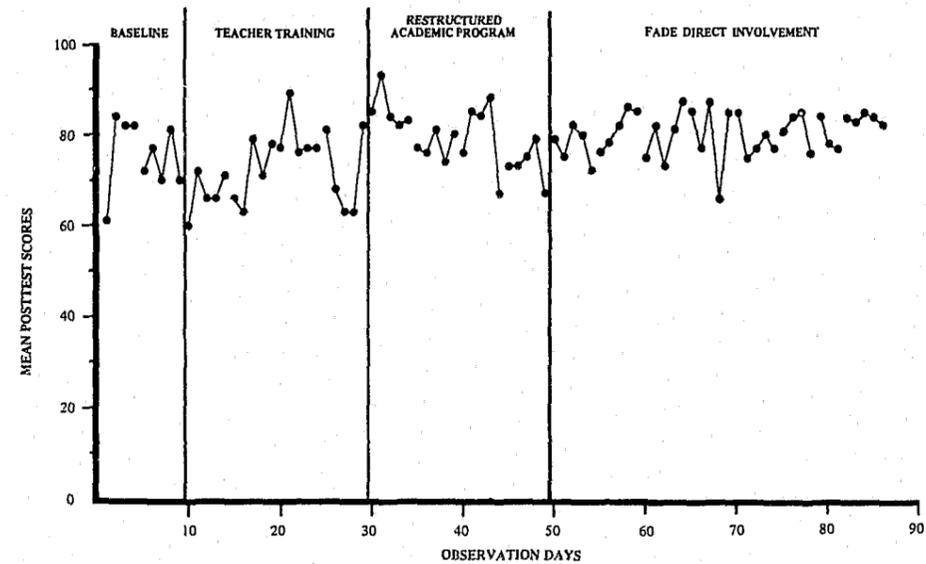
The three measures of student performance computed during the restructuring of the academic division--efficiency quotient (EQ), mean module posttest score, and learning rate--were also determined as the EMLC was fading its direct involvement in the operation of the IPI System. Figure 2 presents the EQ over the various phases of the operation of the IPI System: the baseline phase (prior to intervention), the teacher training program, the restructuring of the academic division, and the fading of the Lab's involvement. The EQ for the "fade" period was .53, which means that the students were, on the average, passing one of every two posttests. This does not represent a significant change from the previous periods.



NOTE.--Those points representing consecutive days of data collection are connected.

Fig. 2. Percentage of posttests taken that were passed prior to, during, and after intervention.

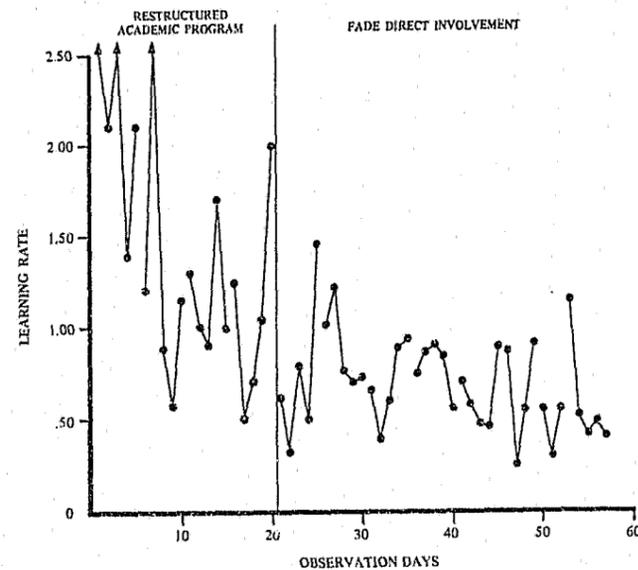
Figure 3 shows the mean module posttest scores, which increased significantly to 79% in the restructuring phase. During the EMLC's fading of direct involvement, this measure increased to 80%, four points below the score necessary to pass the module posttest.



NOTE.--Those points representing consecutive days of data collection are connected.

Fig. 3. Percentage of correct answers on IPI module posttests prior to, during, and after intervention.

The third IPI measure, learning rate, is presented in Figure 4. The learning rate during the fading of EMLC involvement was .65. These data cannot be considered conclusive, since they are being collected to revise the estimated times for the modules. An improved learning rate, however, represents an acceleration in learning even when computed with the present estimated times. The introduction of incentives for accelerating the study pace and passing module posttests should result in an improvement in learning rate.



NOTE.—Those points representing consecutive days of data collection are connected.

Fig. 4. Learning rate during and after intervention. (Learning rate equals estimated study time divided by actual study time per module.)

#### Maintaining Staff Contact

With the fading of the Lab's involvement in the operation of the IPI System, it became increasingly important to maintain contact with the AIS academic division staff members. To fill this need, weekly meetings are held in which findings and problems are discussed. The AIS staff members have also used these meetings to voice their concern that the data collected by the EMLC would be used to determine their ability to teach and, as such, could affect their employment. Once this concern had been openly expressed, the purpose and intentions of the Lab's data gathering could be reiterated with special emphasis on perfection of the IPI System rather than on the teachers' competence. Such open interchange is crucial to maintaining rapport.

#### IRIS Progress

The restructuring of the academic education division included the introduction of the EMLC's individualized reading program, IRIS.

Approximately five weeks were spent preparing the physical facilities and ordering instructional material and equipment. During this time workshops were also conducted for all the academic division staff, followed by special training for the teachers who were to operate the reading labs. This training centered on management of the learning situation and familiarization with the IRIS materials and equipment.

In view of the critical need for reading instruction, two IRIS labs were prepared. Each has one teacher and an aide. The reading classes began on October 16, 1973, with 21 students enrolled. Open-ended enrollment has since increased this number to 41. The mean reading grade placement score of these 41 students is 2.4.

The EMLC is monitoring student progress in the IRIS labs and collecting data. Thus far the students are successfully completing the reading modules and tracks: the efficiency quotient has averaged 97% daily for the first seven weeks of classes. Two students have been posttested after 30 hours of instruction. The grade gains were 1.3 and .5, considerable gains in view of the low entry levels of the students.

The Lab will continue its involvement in the IRIS labs until sufficient data have been collected to determine the efficiency with which the system is operating. Some problems inhibiting the effectiveness of the reading program have been noted (e.g., the students do not attend class as frequently as would be desirable), and steps are being taken to resolve these difficulties.

#### Observation of Classroom Interactions

The Phase IV efforts in the AIS academic education division have been designed to provide a fully individualized academic program as the foundation for the student incentive system. The incentive system will take the form of a structured token economy keyed to the learning measures used in the

IPI System. A primary concern will be the determination of the relationship between social reinforcers--the personal interactions accompanying the administration of the token economy--and the more tangible reinforcers which are part of the structure of the token economy. The EMLC will evaluate the contribution of each of these components to the effectiveness of the token economy by analyzing the effect of each separately and then the two combined.

To evaluate the effect of social reinforcers, however, a new method of observation was needed. Previous classroom observations had focused on the on-task behavior of students and teachers and on classroom disturbances. The new observation method looks at the activity of the teacher in terms of how often she interacts with the student and how much verbal praise and admonishment she uses in her interactions. The student's response to the teacher's behavior is also recorded.

Observation of classroom interactions began in December, 1973. Twice each day, a team of two observers makes an unannounced visit to the AIS classrooms to observe each staff member working in the IPI classrooms and those in the IRIS labs. Each observation consists of 50 six-second intervals, using a taped signal. The data are recorded on a coded form. Reliability has been consistently above 85%.

The data will be summarized in terms of the frequency of occurrence of each listed behavior, as well as significant interaction sequences. This will provide a baseline rate of teacher-student interactions. The incentive system will be introduced in late January, 1974, and will be alternately in effect and then removed to measure the impact of the token economy and the effect of social reinforcers operating alone. Performance and interaction measures will continue to be collected.

#### Contingency Contracting

Not all of the EMLC work at AIS was conducted within the academic division of the school. Intervention was also begun in the Department of Social Services in the form of contingency contracting workshops for the staff, particularly the social workers. The social workers are primarily responsible for improving the institutional adjustment of each student, which includes such specific tasks as counseling, transporting students to hospitals or to the dentist, and reviewing student records. In interviews with social services staff members, the EMLC found that counseling was generally considered to be a key ingredient in institutional adjustment. There were, however, no quantifiable means for the social workers to evaluate the effectiveness of their counseling.

The Lab's experience with contingency contracting suggested that this would be a method that the social workers could use to measure their impact. Additionally, the introduction of contingency contracting could facilitate the development of a more positively oriented approach to resolving disciplinary problems. EMLC staff had some familiarity with the type of behavior problems encountered, having examined the disciplinary records of student releasees when assessing the operation of the student advancement system. To collect further information on prevalent and persistent types of behavior problems, a Lab staff member attended the weekly meetings of the AIS Disciplinary Committee. The EMLC also examined the records of 189 students who had entered AIS in the first 11 months of 1973.

The information obtained indicated not only problem behaviors but the individuals exhibiting these behaviors as well. These students, then, could be the initial subjects for whom contracts would be negotiated by the social workers. Both the social worker and the EMLC researchers would monitor the student's progress. The Lab would also collect reliability data on contract agreements.

Before these plans could be implemented, however, the social workers needed an introduction to the principles and techniques of contract writing. Three workshops were conducted in November, 1973, to provide this introduction for selected AIS staff, primarily those in the Department of Social Services. Booklet Eight of the Correctional Officer Training package was used with other materials to present the principles of contracting, while case studies assembled from student files gave participants an opportunity to practice writing contracts. (See Appendix C for a sample of the materials used in these workshops.) An additional series of workshops was conducted during December, 1973, and January, 1974, for the remaining AIS staff members, since vocational and academic teachers and cottage counselors will be directly involved in contract negotiations.

Contingency contracting will begin on a small scale with only a few student subjects. A more extensive use of contracting should follow, promoting a wider use of behavior management techniques and perhaps linking to the incentive system planned for the academic education division.

## TUSCALOOSA PROJECT

A system of behavior management within the confines of an institution approaches only a portion of the problem of youth crime. The ultimate measure of the individual's success occurs not within the controlled atmosphere of the institution but in the complex environment of the "free world." By extending the concept and practice of behaviorally oriented treatment to the community, the young offender on parole from an industrial school or prison can continue to receive the guidance and training he needs to hold a job and maintain socially acceptable behavior. For the offender who is on probation, community treatment is even more vital to prevent his return to criminal activities.

The overall objective of the EMLC's Tuscaloosa Project is to develop and demonstrate a feasible and effective community manpower model for the control and prevention of crime and delinquency, a model which is specifically directed toward filling the needs of the young offender on probation or parole. As part of this model, a complete methodology is being developed for diagnostic assessment, intervention and retraining, and follow-up evaluation and validation. This methodology is based, in large part, on findings from studies conducted by the EMLC with releasees from Draper Correctional Center. The subjects for the Draper studies were found to need training in vocational, academic, and social skills areas. Additionally, instruments were developed at Draper which provide the basis for diagnostic assessment and a comprehensive follow-up procedure. The EMLC is now applying what was learned in these studies to a community approach in the Tuscaloosa Project.

### Primary Objectives

The major objectives to be met in developing and demonstrating the community manpower model are as follows:

1. To identify young offenders on probation in the community or released or paroled from industrial schools or prisons and to establish a behavioral demography of this target population
2. To develop assessment and diagnostic procedures that will pinpoint behavioral deficits and excesses, particularly in the employment area, and lead to behavioral prescriptions for treatment
3. To develop and implement methods of intervention and retraining in employability skills and other areas of behavioral deficiency to enable the subjects to locate employment and maintain themselves upon their wages
4. To conduct follow-up evaluation and validation of training programs, both ours and others in which the subjects have been involved, in order to provide a basis for developing more effective intervention
5. To establish a cooperative liaison with the University of Alabama by forming an advisory panel made up of those university components which deal with the problems of crime and delinquency (the Department of Psychology, School of Social Work, Law School, Center for Justice and the Behavioral Sciences, etc.)
6. To develop channels for communication, coordination, and cooperation with community agencies, business, and industry through an advisory panel, which will be formed to implement and facilitate job placement, contingency contracting, and other aspects of employment

The net result of attaining these objectives will be a long-range preventive program that obviates the problems of crime and delinquency at their source, ultimately leading to crime reduction and control within the community.

#### Demographic Study

The EMLC began its work on some of the more immediate objectives listed with the demographic study of the young offender population of

Tuscaloosa County, finding that there are presently approximately 400 youthful offenders in the community who are involved with the criminal justice system. Over three-fourths of these are on some sort of probationary status; the remainder are parolees of the state correctional system. Over half are between 16 and 21 years old; three-fourths are 25 or under.

Lab researchers were given access to the pre-trial investigation files assembled by the Parole and Probation Board, using these files to collect data on representative samples of young offenders on probation and parole. The files contain information on such things as physical and psychological stability, criminal record, and interaction patterns with family and associates. The EMLC selected the files of one-half (44) of the parolees, one-fourth (56) of the probationers, and all the young offenders (60) who had been granted a Youthful Offender Motion (YOM) and placed on probation. (The YOM, based on the 1971 Federal Youthful Offender Act and the Alabama Youthful Offender Act, allows special treatment for offenders between the ages of 16 and 21 because of their age.) Table 1 presents the demographic characteristics taken from the files of the three groups of young offenders.

TABLE 1  
Demographic Characteristics of Three Samples of Young Offenders:  
Youthful Offender Motion (YOM) Cases, Probationers, and Parolees

Characteristic	Groups			
	YOM N = 60	Probationers N = 56	Parolees N = 44	All Groups Combined N = 160
Percent female	4	23	6	12
Percent black	23	37	48	43
Percent single	97	54	44	67
Median age	18.0	22.5	27.3	20.8
Median school grade completed	11.5	10.8	8.4	10.3
Percent living with one or both parents	100	84	44	80
Median number of siblings	3.1	4.5	4.6	3.2
Median number of dependents	0.0	1.0	1.4	1.0
Percent reporting full-time work	33	71	85	60
Percent low socioeconomic status	34	77	84	63

To summarize the information presented in Table 1, the frequency of females is low in all samples, totaling only 12% of the 160 cases studied. Blacks constitute less than one-fourth of the YOM group, nearly half of the parolees, and 37% of the probationers. About half the probationer and parolee groups are single, as are most of the YOM group. The YOM and probationer groups are considerably younger than the parolee sample and are much more likely to be living with one or both parents.

The YOM and probationer groups also have a higher educational level than the parolee group. In all, 44% of the YOM and 33% of the probationer groups are high school graduates, while only 9% of the parolees graduated. The parolee group is only slightly higher in educational level than the overall prison population of the state. The YOM group has the smallest number of siblings and the highest socioeconomic status. Only one-third of this group are classed "lower" as compared with about four-fifths of the other two groups.

The employment data, while incomplete, indicate that about two-thirds of the probationer sample and 85% of the parolees are working full-time, while only one-third of the YOM group are employed full-time and 51% are attending school. Nearly three-fifths of the probationers and parolees reporting full-time work are employed at unskilled labor at or below minimum wage.

To complete the demographic characteristics of the three groups, Table 2 presents their criminal history and status.

TABLE 2  
Criminal History and Status of Three Samples of Young Offenders:  
Youthful Offender Motion (YOM) Cases, Probationers, and Parolees

Characteristics	Groups			
	YOM N = 60	Probationers N = 56	Parolees N = 44	All Groups Combined N = 160
Median number of offenses	1.1	1.7	2.3	1.6
Percent property crimes	60	65	71	66
Percent crimes against persons	8	16	20	15
Median number of previous charges	1.4	1.4	3.5	2.2
Percent previous felony charges	16	18	40	28
Percent previous misdemeanor charges	6	30	33	27

Table 2 shows a higher incidence of offenses in the parolee group than in the other two samples. About two-thirds of the current offenses were against property and less than one-sixth against persons. Nearly one-third of the YOM group were charged with possession of marijuana compared to only about 8% in the other two groups.

The median number of previous charges fell between one and two for the YOM and probationer group and between three and four in the parolee sample. Previous charges for felonies and misdemeanors were high in the parolee group, low in the YOM sample, and intermediate for the probationers.

Overall, the data suggest that the YOM group and the probationer sample differ appreciably from the parolee group in a number of demographic characteristics. There are also indications that white offenders are more likely to achieve YOM status and to be placed on probation and on parole. They are also less likely to be sent to prison.

#### Developing University and Community Links

An important part of the Tuscaloosa Project is the channel for communication and cooperation which must be established between the Lab and the University of Alabama, business and industry in the community, and the various state and local agencies dealing with the problems of the young offender. Much has been accomplished toward developing this channel. At the university, the Psychology Department has provided the EMLC with office space and access to the computer and other departmental facilities. One staff member teaches on a part-time basis as well as acting as an informal advisor to undergraduate and graduate students, and several students have participated in the Lab's College Corps (see also the Utilization section of this report). The Lab also works in close administrative coordination with the university's correctional psychology program.

In the community, a working relationship with the judiciary has been established, permitting the use of the pre-trial investigation files that provided the basis for the demographic study. Contacts have also been made with the administrative and personnel staff of the three largest industries in the Tuscaloosa community. Tentative agreements have been reached with two of these industries to arrange contractual hiring of subjects recommended by the EMLC, thus creating the potential for the use of behavioral management techniques in the employment area.

The EMLC has also been contacting the numerous state and local agencies involved with the young offender's problems, and six of these agencies have requested Lab assistance on a consulting basis. For example, the Parole and Probation Board and the Youth Services Bureau refer problem cases, at the Lab's discretion, for diagnosis and prescription. The client who has been referred is behaviorally interviewed, and a prescription for treatment is prepared for the agency. The treatment usually involves referral to such employment-related agencies as Pensions and Security, Vocational Rehabilitation, and Employment Service. At present the EMLC merely recommends the necessary treatment, but plans for more intensive interpersonal treatment are being made.

The links being developed by the Lab with the community and the university should be viewed as initial but quite important. The next phase of the Tuscaloosa Project should see an increase in cooperation and communication as efforts in these areas continue.

#### WORK RELEASE EVALUATION

The EMLC's involvement in the Alabama work release program began with the assistance Lab staff provided the Board of Corrections in drafting the legislation and planning the program. The Lab then welcomed the opportunity to apply its long experience in follow-up of the ex-offender in conducting the evaluation of the work release program. Assessments of work release to that time provided little information about the effect of such programs on postrelease adjustment, other than in terms of dollars earned by participants while in the programs, rates of parole abscondance, rates of recidivism, rates of failure to complete programs, and staff and inmate "perceptions" of work release. While this is useful information, the methods used to gather these data were often open to question. Then, too, such assessment focused on what happened during a man's work release participation rather than after, the point at which program effectiveness should ultimately be measured.

The Lab proposed to approach work release evaluation differently. The boundary of the study area selected was a 25-mile radius of Montgomery, one of the major urban areas in which released offenders settle and which employs many work releasees. An additional advantage was the close physical proximity of the Lab's Mount Meigs site to Montgomery and to two of the work release centers. The study design incorporated the use of a battery of behavioral assessment instruments developed by the EMLC that encompass the most significant aspects of postrelease adjustment, thus adding an important dimension to previous knowledge about work release effectiveness.

Most importantly, the Lab's evaluation provides a definitive, objective, and systematic method of data collection and analysis for utilization in an ongoing correctional program. The long-range outcome will be twofold. First,

the data from the evaluation can be fed back into the Alabama work release program to improve its operation by indicating needed intervention, e.g., counseling and vocational training and changes in selection criteria, and by providing an overall assessment of the effectiveness of the program as a treatment regimen. Secondly, the model for assessment developed by the EMLC will be available for adoption by other work release programs at the local, state, and federal level in other parts of the nation.

The primary advantage of adopting the Lab's model is that it will provide more objective, quantifiable data for program assessment and planning. The EMLC study goes further than merely accounting for the amount of money earned by the releasee. It will determine the long-range persisting effects of the work release program on the postrelease behavior patterns of its participants. Once the evaluation model has been established, the EMLC will eventually phase out its active involvement, with the ongoing program perhaps being continued by the Alabama Board of Corrections.

Phase I of the evaluation will cover a 12-month period. The first two months (March-April, 1973) were devoted to revision of instruments for follow-up and to fortifying the methodology. The next eight months were used to collect data on the subjects, with the following two months being set aside for data analysis and report preparation.

#### Study Subjects and Instruments

The major groups in the evaluation study are being compared in terms of the longitudinal postrelease performance. By the time Phase I of the study is completed, there will be between 55 and 65 subjects in each of the following groups:

Group A This group is composed of subjects who have met the selection criteria for work release, who have participated in the work

release program for 60 days or longer, and who have located within a 25-mile radius of Montgomery when released or paroled.

Group B The subjects in this group have also met the selection criteria of the program, but they have not participated. They are subjects upon whom the data necessary for the work release evaluation were collected as part of the EMLC's '71 Follow-Up Study.

Group C These subjects did not meet the selection criteria for participation in the work release program. As in Group B, they were also subjects in the '71 Follow-Up Study, so the necessary data have already been collected.

Group D This is actually an intragroup comparison of those subjects in Groups A, B, and C who received some form of institutional training and those who did not.

Because the Alabama work release program is also extended to women, some subjects in Group A will be women. However, since the proportion of women to men in the correctional system and the program is small, data analysis based on sex is not warranted. A number of case studies are being prepared instead.

All subjects in Group A are being located or accounted for (absconded, returned to prison, moved from study area, etc.). Those subjects who are free and have remained in the study area receive a prerelease interview, either before release or retroactively. A revised form of the Prerelease Interview Guide used in the EMLC follow-up studies is being used to collect this primarily demographic data. Because this group is composed of work releasees, subjects are also asked about the number of jobs they have had while on work release, what postrelease jobs have been arranged for them, etc. Basic prerelease information has already been collected on the subjects in Groups B and C.

The postrelease interviews of Group A subjects are being conducted at three to six months postrelease; some of these are also retroactive. Four instruments from the EMLC follow-up studies are being used: the Postrelease Interview Guide (IG), the Environmental Deprivation Scale (EDS), the Maladaptive Behavior Record (MBR), and the Weekly Activity Record (WAR). The IG structures data collection for details of occupation, social and antisocial behavior, law violations, and other aspects of daily activity. It has been slightly revised from the form used in the EMLC's '69 and '71 follow-up studies. The EDS examines environmental input in such areas as employment, residence, club activities, hobbies, and interpersonal activities. Maladaptive (socially unacceptable) behaviors, such as use of drugs or fighting, are recorded by the MBR. The WAR obtains information about the way the subject spends his time, e.g., items on sleeping, grooming, working, and eating. The IG, EDS, MBR, and WAR data have already been collected for Groups B and C.

#### Preliminary Evaluation Data Analysis

The previously projected cut-off date (November 30, 1973) for collection of data and interviewing of available subjects has been extended to increase the study N. Thus data collection is not complete at this time, and all information regarding findings and trends reported here should be considered preliminary. A full report covering the influence of such variables as selection requirements, age, and race will be prepared in February, 1974.

#### Postrelease Relocation of Subjects

During the first 14 months, a total of 18 women and 111 men had been involved in the work release program. An additional 8 women and approximately 85 men were still involved in the program at the end of the fourteenth month.

Fourteen of the 18 women successfully completed the program and were released or paroled; the remaining 4 had been removed from the program as a result of disciplinary action, escape, or at their request. Seven (50%) of the women settled within the study area--a 25-mile radius of Montgomery. The average length of their participation in the program was 2.6 months. The postrelease relocation for female and male participants is shown in Table 1.

TABLE 1  
Postrelease Relocation of Work Release Participants

Days in Program	Location			No Data <sup>a</sup>
	Within 25-Mile Radius of Montgomery	25-100 Miles from Montgomery	Over 100 Miles from Montgomery	
Females: N = 14				
60 days or more	5	5	2	0
Less than 60 days	2	0	0	0
Males: N = 86				
60 days or more	46	11	14	2
Less than 60 days	10	2	0	1

<sup>a</sup>The state work release records had no information on these work releasees other than their names and occasionally a release date.

Of the 111 men who had been involved in the work release program, 86 (77%) were either released or paroled. The remaining 25 were dropped from the program for a variety of reasons (e.g., escape, disciplinary or administrative action, and the opportunity to attend the prison trade school). Over half (65%) of the men who were released or paroled settled within a 25-mile radius of Montgomery (see Table 1).

The remaining 35% of the male participants had, immediately upon release, left their work release jobs to go to a different community, usually their home. Half the women had also done so. This movement has obvious implications for the work release program. Employers are understandably unwilling to train a man for a job he will leave when released, and the jobs

which require no training are generally not the type which will help a releasee to adjust well in the free world.

#### Findings and Data Trends

As of December 10, 1973, 37 men had been accounted for within the study area (a 25-mile radius of Montgomery), and 27 of them had been given the three-month postrelease interview. Of the remaining 10, 6 had moved out of the study area, 1 had absconded, 2 had had their parole revoked, and 1 had been charged with a new felony. However, only 1 (or approximately 3%) of the male work releasees had returned to prison or had been involved in other undesirable law encounters within their first three months in the free world. This figure is much lower than the corresponding three-month figure for the prison releasees (both experimentals and controls in the '71 Follow-Up Study, 10% of whom returned to prison or experienced other undesirable law encounters.

The following data were obtained in face-to-face behavioral interviews with the 27 male work releasees in the study area. The average age of these men was 34 years, and their average reported educational level was 10.8 years. Nearly one-third (30%) had served sentences for an earlier felony. Crimes against persons accounted for the convictions of over one-half of the men. The average time served on the current offense was 5.2 years, and three of the men had been serving life sentences. The large majority (93%) had been paroled. Only 19% of the men were black. These descriptive data are compared in Table 2 to the other groups in the evaluation study and to the prison population at Draper Correctional Center.

TABLE 2  
Descriptive Data for Male Work Releasees  
and Comparison Groups

Indices	Groups			
	Met Selection Criteria; Over 59 Days in Program N = 27	Met Selection Criteria; No Time in Program N = 62	Did Not Meet Selection Criteria; No Time in Program N = 70	Random Sample of Draper Prison Population N = 107
Age	34.37	25.8	24.7	23
Reported educational level	10.8	9.7	9.2	9.0
Percent black	19	76	46	56
Percent recidivist	30	40	44	No data
Percent paroled	93	77	70	No data

Note: The average age of the Alabama prison population is 23.8, and the reported educational level about 8.6 years (N = 3,660).

Those men who were interviewed had spent an average of 5.8 months in the work-release program, during which they earned an average weekly salary of \$115.89 for a total of \$2,717.67. Each had saved an average of \$487.22 at the time of their parole or release. These data obviously lend support to the work release program based on its potential for reducing the overall cost of incarceration. Participation also appeared to have another payoff for the work releasee: visits from family jumped from 7.6 to 9.2 per quarter (three months).

Because employment has been found to be an important variable in postrelease adjustment, considerable data on employment were gathered in the three-month postrelease interview. All of the 27 work releasees had jobs awaiting them when released from the institution. Over 80% remained on their work release jobs when released or paroled, and the others had their new jobs prior to terminating their work release jobs. Table 3 compares the work releasees to the other groups in the evaluation study. All of the work releasees were employed at the time of the interview, while

75% of the other groups were. The work releasees had worked more since their release, earned more, and earned larger salaries.

**TABLE 3**  
Postrelease Performance of Male Work Releasees and Comparison Groups

Indices	Groups		
	Met Selection Criteria; Over 59 Days in Program N = 27	Met Selection Criteria; No Time in Program N = 55	Did Not Meet Selection Criteria; No Time in Program N = 65
Percent with job waiting upon release	100	84	69
Percent of time employed since release	98	77	74
Percent presently employed	100	75	75
Percent with bank account	78	18	8
Average number of jobs held and left	.11	.76	.83
Average savings	\$83.61	\$69.87	\$29.38
Average indebtedness	\$5,209.22	\$731.25	\$287.83
Average weekly salary for those employed	\$148.44	\$92.90 <sup>a</sup>	\$105.80 <sup>b</sup>

<sup>a</sup>The number employed in this group was 41.

<sup>b</sup>The number employed in this group was 49.

The number of men having bank accounts was also strikingly higher among those who had participated in the program. Earlier studies have shown that ex-offenders who have bank accounts are less likely to recidivate. Similarly, indebtedness provides an index to postrelease stability. Men who have large debts but are not delinquent in their payments do not generally return to prison. Three of the work releasees interviewed had purchased homes and had mortgages ranging from \$8,000 to \$20,000, but were not delinquent on payments.

Perhaps the most diagnostic data on postrelease adjustment is contained in Table 4, which presents the scores on the MBR and EDS. High scores on

these instruments are indicative of maladaptive or inappropriate interactions in a poor environmental situation. Such scores correlate highly with recidivism. The lower scores of the work releasees indicate much more successful postrelease adjustment in comparison to the other groups.

**TABLE 4**  
A Summary of the Postrelease Adjustment of Work Releasees and Comparison Groups: MBR and EDS Scores

Diagnostic Measures	Groups		
	Met Selection Criteria; Over 59 Days in Program	Met Selection Criteria; No Time in Program	Did Not Meet Selection Criteria; No Time in Program
MBR (Behavioral)	1.21 (N = 27)	3.83 (N = 42)	4.73 (N = 56)
EDS (Environmental)	5.32 (N = 27)	8.41 (N = 54)	8.68 (N = 63)

#### Other Major Influences

A complete evaluation of the effectiveness of the work release program must determine the influence of the selection criteria alone upon postrelease adjustment. This will be accomplished through the comparison of the three major groups outlined on pages 32-33: work releasees, men who met the selection criteria but did not participate, and men who did not meet the selection criteria and did not participate. A preliminary comparison is shown in Tables 2, 3, and 4, in which those men who met the selection criteria are seen to have adjusted somewhat better than those who did not meet the criteria. A more complete analysis will be performed in the final report on Phase I of the work release evaluation. Other variables (e.g., age, race, and parole status) are also known to be operating, but the full extent of their influence cannot be determined until the data analysis is completed.

### Comments from Participants

In addition to the data relating to postrelease adjustment, participants who were interviewed were asked their opinion of the program. Most comments were quite positive, noting such advantages as having a chance to earn money to send home to their families and to help them get started when released, greater privacy and responsibility, and the opportunity for closer contact with their families. The disadvantages noted concerned inadequate transportation, little freedom during leisure times, and the policy prohibiting visitors after working hours. The participants also made suggestions for improving the program. This information was summarized for the work release program director for use in planning any changes in the program.

### UTILIZATION

Because utilization is one of the major responsibilities of the Lab, considerable effort is expended to disseminate study findings and techniques in a variety of forms which would encourage utilization by correctional and manpower-oriented programs. The Lab's research orientation has resulted in increasingly sophisticated data collection, analysis, and presentation, illustrated by the technical reports describing the token economy and follow-up studies. At the same time, practical application has remained a major concern, as reflected by such products as the Correctional Officer Training package. The Individualized Reading Instructional System (IRIS) and the Behavioral Interview Guide (BIG) are also representative of the products designed for immediate usage which have resulted from EMLC research.

Emphasis in Phase IV has been upon completing the reports and products resulting from research done in Phase III, while progress reports and articles in Pacesetter, the EMLC's bimonthly newsletter, have kept abreast of current studies. Presentations at professional meetings and conferences have also been important in the dissemination process during this period.

#### Products Completed

The Lab has found a need for short descriptive pieces on products that are being prepared and will soon be available for dissemination. Pacesetter articles often provide this information and generate considerable interest. Another means of disseminating such information is through RRF Publications Announcements, a series of one-page information sheets. Three announcements were prepared in Phase IV describing the Individualized Reading Instructional System (IRIS), the battery of behavioral assessment instruments used in the EMLC follow-up studies, and the Correctional Officer Training package. The announcements are particularly useful as conference

handouts and replies to inquiries about the publications. Other products completed in Phase IV are described below.

#### Behavioral Modification Book Chapter

A book chapter describing the EMLC's token economy and correctional officer training projects at Draper Correctional Center was completed by Drs. John McKee and Michael Milan. Entitled "Principles of Behavior Modification Applied to Corrections," it is to be included in Handbook of Criminology, edited by Dr. Daniel Glaser and scheduled for publication by Rand McNally and Company.

#### Behavioral Interview Guide (BIG)

A short guide to the behavioral interview used by the EMLC in its longitudinal follow-up studies has been prepared. The BIG, designed for use in training interviewers, contains practical suggestions and interview excerpts.

#### Correctional Officer Training Final Report

This report, entitled Correctional Officer Training in Behavior Modification: Final Report (1970-72), presents the findings from the EMLC's three-year project in training correctional officers to function as behavior change agents. The methodology, assessment procedures, and results are described. Two major findings emerged: (1) correctional officers can employ behavior modification techniques and principles learned in training to on-the-job situations and (2) training can be conducted by means of self-instructional booklets. The appendix material includes supplementary data, forms used in training, and a sample of the practicum exercises which the officers completed.

#### Correctional Officer Training Package

The revised training package, 17 booklets and an instructor's guide, was completed in this phase of the Lab. The self-instructional, illustrated booklets furnish an introduction to behavior modification and its application to corrections, including such things as reinforcement, shaping, and contracting for behavior. The first booklet in the series summarizes the history of corrections. The instructor's guide contains the answers to the booklet pre- and posttests, suggestions for discussion, and a listing of recommended supplementary material.

#### Individualized Reading Instructional System (IRIS)

IRIS is a graduated system of six self-paced tracks designed to teach reading to students who have varying degrees of reading proficiency. The grade level range covered is from 0.0 (total illiteracy) to 7.0 and above. IRIS was revised on the basis of a tryout conducted at Draper Correctional Center, and the revised Guide to the system was printed during this reporting period.

The Guide contains the six color-coded reading tracks, with modules arranged sequentially within the tracks. The reading manager's general duties are specified, as well as the particular tasks he must perform in assigning modules and evaluating student performance. A purchasing guide for materials and equipment is provided. An outline of the requirements for the physical facilities is also included.

#### Law Encounter Severity Scale (LESS)

The LESS is the criterion used by the EMLC to define the degree of an ex-offender's success or failure in the "free world." This paper, entitled "The Law Encounter Severity Scale (LESS): A Criterion for Criminal Behavior and Recidivism," describes the development and content of the criterion.

The LESS is a scale, a series of 38 points, or categories, distributed according to order of severity along the law encounter continuum. The severity continuum ranges from no law encounters, at the least severe end, to searches, to being picked up by the police, to actual arrests, and to felony conviction(s) with life sentencing, at the most severe end. The points on the continuum were derived from analysis of EMLC follow-up data.

The LESS is particularly useful in that it provides a way to measure postrelease adjustment and to communicate project results in more precise terms than merely "recidivist" or "non-recidivist." Also, because it defines criminal behavior in terms of actual involvement with the criminal justice system, the LESS relates directly to most correctional program and project goals--the reduction of crime.

#### Token Economy Technical (Final) Report

This report, entitled Applied Behavior Analysis and the Imprisoned Adult Felon, covers the first cycle of the EMLC's Ecological Experiment in Corrections, in which a token economy was established in one cellblock of Draper Correctional Center, the first use of the token economy in adult corrections. Subject selection, target behaviors, and behavior management procedures are described in detail. The major finding was that the token economy proved a successful alternative to the use of aversive control procedures to manage a correctional institution. This finding implies that greater effort should be made to integrate custody and treatment functions in the institution by adopting the behavioral model.

#### 1971 Follow-up Report

The EMLC's 1971 longitudinal follow-up study findings are presented in The Post-Prison Analysis of Criminal Behavior and Longitudinal Follow-up Evaluation of Institutional Treatment. No large, highly significant, or

consistent differences emerged among the several institutional treatment procedures. Detailed analysis did yield some significant differences, e.g., MDT trainees worked longer and made more money than did other releaseses in the first six months postrelease.

#### Products in Progress

Work has continued on other Lab products which were not completed in Phase III. Additionally, several previous products are being revised, among them the EMLC summary/history, the RRF Publications List, and the Individually Prescribed Instructional (IPI) System. The IPI revisions will replace modules from texts no longer available, add material for alternate study modules, and replace ineffective modules. The buying guides for IPI instructional materials will also be brought up to date. Such revisions are necessary for the continuing usefulness of Lab products. Other products being prepared are described in the following paragraphs.

#### Behavioral Observation Index (BOI) Technical Report

This paper, entitled A Method of Measuring Officer Behavior toward Prison Inmates, describes the development and use of an instrument designed to objectively measure the kinds of interaction correctional officers have with inmates. The BOI is one of the instruments used to evaluate the EMLC's Correctional Officer Training Project. It considers such things as whether the officer initiated the interaction, the number of inmates involved, and whether the communication was of a personal or business nature. The report presents the BOI as a possible model to be used in evaluating the effectiveness of staff training programs similar to the EMLC's project. A draft has been prepared.

#### Journal Article

An article dealing with the employment of ex-offenders in corrections is being written for submission to a professional journal. It presents the results of a survey conducted by the authors, Mr. Robert Smith and Dr. Michael Milan.

#### Manual for Coding Classroom Observation Form (Teacher-Student Interaction)

This manual trains observers to use the classroom observation form which records teacher-student interaction in the AIS academic classrooms. It consists of six preparation modules, each accompanied by a progress check. Most of the modules require some outside preparation, preferably repetitive drilling. After completion of all six modules and progress checks, the trainee is ready to begin actual classroom observations. The training provided a means to insure reliability in the observations.

#### 1971 Follow-up Study Monographs

A series of monographs is being prepared to accompany the report on the 1971 longitudinal follow-up study described earlier. These monographs will detail the data obtained with the EMLC's behavioral assessment instruments--the Environmental Deprivation Scale, the Maladaptive Behavior Record, and the Weekly Activity Record.

#### Product Distribution

To further stimulate awareness of and interest in the EMLC's work announcements of the availability of the annotated RRF Publications List were sent to approximately 30 magazines and professional journals, with a request that this announcement be included in a future issue if the publication policy permitted. A sample publications list was also sent, with certain entries noted as being particularly pertinent to the journal's

audience. Over 300 requests for RRF publications lists have been traced to the announcements which have been published, and this figure is expected to rise. Additionally, the LEAA newsletter regularly announces EMLC products when they specifically relate to the news articles covered.

These, plus other dissemination methods and Pacesetter articles, have resulted in numerous orders for publications and information on EMLC programs. During this reporting period, the manual for the use of the Environmental Deprivation Scale and a report describing the Behavioral Observation Index were often requested, reflecting an interest in systematic behavioral assessment. A concern with inmate educational programs was demonstrated by the large number of requests for a paper entitled Imprisoned Resources--Innovative Techniques in Educating Prison Inmates. Interest in community programs was also shown by frequent orders for a study called A Survey of Community Services for the Ex-offender in Montgomery, Alabama. Orders for the Correctional Officer Training package and the Individualized Reading Instructional System have also increased as announcements of their availability have been carried in Pacesetter and information brochures mailed.

Dissemination of EMLC publications is accomplished both by mail and by handouts on site and at professional meetings. Between February 15 and December 31, 1973, the total number distributed was 3,419. Of these 2,967 were mailed and 452 were given out as handouts. These figures do not include the Pacesetter, which was mailed regularly to its audience of nearly 2,100, or the many publications lists which were mailed in response to an increasing volume of requests.

Those who received publications were largely represented by the following areas: corrections (adult), criminal justice planning, research, and education. Requests from community services (mental health), business and

industry, and professional libraries continued to be frequent, as were requests of a more general nature.

#### Visitors

The EMLC received fewer visitors in Phase IV than in previous phases, primarily because the programs operating at the Mount Meigs and Tuscaloosa sites were new and major emphasis was placed on working out the details of their operation. Those who did come were given a tour of the respective site and an orientation to the work of the EMLC. Out-of-state visitors came from Georgia, Pennsylvania, Tennessee, and Washington, D. C.; two foreign visitors came from Australia.

Many of the visitors were correctional administrators and planners, community agency representatives, and educators. Areas of EMLC work which attracted particular interest were behavior modification, evaluation techniques, the Correctional Officer Training package, the IPI System and IRIS, and the College Corps program.

#### Presentations and Attendance at Professional Meetings

Participation of Lab staff in professional meetings is an important aspect of EMLC visibility. Some of the major professional meetings attended by Lab staff are listed below.

19th Annual Meeting of the Southeastern Psychological Association (SEPA)  
New Orleans, April 5-7.

Several Lab staff members made presentations dealing with aspects of EMLC work. Dr. Michael Milan presented a paper entitled An Experimental Analysis of a Token Economy Fiasco: Is Behavior Modification Programmed to Self-destruct within this Decade? This paper examined an unsuccessful token economy procedure designed by the Draper Correctional Center staff to increase production on the institution farm. Coauthors of the paper were: M. Murphy, F. Simkins, R. Williams and L. Wood.

A three-part presentation concerning the assessment of criminal behavior and the prediction of recidivism was based on the longitudinal follow-up studies conducted by the Lab. Mr. A. D. Witherspoon presented the methodology; Mr. Michael DeVine, the results; and Dr. W. O. Jenkins, the theory. This presentation is available from the EMLC under the title Mensuration and Maladaptation; The Analysis and Prediction of Deviant (Criminal) Behavior: A Synopsis. Coauthors are: E. K. deValera, J. B. Muller, and J. M. McKee.

Dr. John McKee was also present at the meeting.

Alabama Psychological Association (aPA), Destin, Florida, April 26-27.

Drs. W. O. Jenkins and John McKee attended this meeting, which is held primarily for the purpose of student paper presentation.

20th National Institute on Crime and Delinquency (NICD), New Orleans, June 17-20.

Dr. John McKee and Mr. Robert Smith were exhibitors at an information booth shared with the Alabama Board of Corrections. Various EMLC products were exhibited, along with the newly revised RRF publications list and the RRF publication announcements.

25th Annual Study Conference of the Alabama Council on Crime and Delinquency, Huntsville, Alabama, September 12-14.

Lab staff played a large role in this meeting. Mr. Robert Smith served as program chairman for the conference and assembled many of the national leaders in corrections to speak on community-based corrections. Dr. W. O. Jenkins presented a speech entitled "Prolegomena to the Analysis and Alteration of Human Behavior: A Systematic Research Approach to Deviant Action," which included much of the Lab's research methodology.

Dr. John McKee served on a panel at the conference, and Dr. Michael Milan introduced the speakers. Staff members from both the Mount Meigs and Tuscaloosa projects attended.

Seventh Annual Meeting of the Association for Advancement of Behavior Therapy, Miami Beach, December 7-9.

Drs. John McKee and Michael Milan attended this meeting.

#### Conferences, Seminars, and Workshops

In addition to professional meetings, EMLC staff members both present and participate in conferences, seminars, and workshops, particularly those in the fields of corrections, psychology, and education. These meetings provide an opportunity to inform large groups of people about the Lab's work and, in the case of workshops, to instruct them in the use of specific procedures and instruments developed by the Lab.

One of the highlights of this type of dissemination in Phase IV was the series of four workshops held in August at the EMLC's Mount Meigs site to introduce the Individualized Reading Instructional System (IRIS). Each session presented the background and development of IRIS, followed by sessions on establishing and operating a reading laboratory. Special emphasis was placed on the implementation of the reading system in particular settings. The 29 persons who attended included administrators, teachers, supervisors, researchers, and university professors from Alabama, Florida, Georgia, Massachusetts, South Carolina, Tennessee, Texas, and Washington, D. C. The workshop participants represented mental health institutions, adult and juvenile corrections, new careers programs, rehabilitation agencies, and manpower development and training projects. Others represented adult education centers, an educational materials clearinghouse, and technical education centers operated by public education systems and private industry.

Other examples of the Lab's participation in conferences, seminars, and workshops follow.

- The EMLC has continued its participation in the Department of Labor's efforts to set up a Regional Utilization Network (RUN). The Lab's utilization coordinator, Mr. Charles Petko, attended a RUN conference in Atlanta on

March 13. This was a planning meeting to consider more effective ways to develop linkage between R&D projects and the regional agencies.

- Dr. John McKee spoke on "Rehabilitating the Public Offender" at the Jefferson County (Alabama) Vocational Evaluation and Work Adjustment Association Forum on March 28 in Birmingham.

- The Sixth Annual Behavior Modification Institute was held April 16-18 in Tuscaloosa, Alabama. Drs. John McKee and Michael Milan were the discussion leaders in a workshop entitled "Behavior Modification and Contingency Contracting." Four members of the EMLC's Tuscaloosa staff also attended.

- Mr. John Phillips, EMLC administrative assistant, attended a conference on behavioral counseling presented by the Huntsville Mental Health Center in Huntsville, Alabama, on May 1-2.

- Dr. John McKee was the speaker at the Fayette (Alabama) Mental Health Association meeting in Fayette on May 10. His topic was "New Directions in Corrections."

- Drs. John McKee and Michael Milan attended the Delinquency Prevention Workshop presented by the Montgomery Area Mental Health Authority on May 17, 18, and 31. The workshop, held at Huntingdon College, focused on delinquency prevention as a community concern. Dr. Milan was a recorder at the workshop.

- Dr. John McKee spoke on "Basic Issues and Problems of Corrections" shared by state departments of Vocational Rehabilitation and correctional programs. The workshop, sponsored by the Rehabilitation Institute of Southern Illinois University, was held in Chicago June 5-7. His talk included the medical model of establishing eligibility due to behavior disorder, the need for objective criteria and measurable objectives, the importance of vocational rehabilitation staff training, and the necessity for cooperation between treatment and custody staff.

- Dr. Michael Milan presented selected Lab findings at the Fifth Annual Midwestern Behavior Modification Workshop held in Chicago, October 1-3. The token economy, evaluative research, and correctional officer training were major topics.
- Dr. John McKee and Mr. Robert Williams participated in the Prison Workshop presented in Montgomery, Alabama, on November 17, 1973. The workshop was sponsored jointly by six civic organizations. Dr. McKee spoke on educational opportunities and Mr. Williams, on political prisoners in the special interest sessions, and both participated in a panel discussion on alternatives to incarceration.
- A two-day IPI/IRIS training workshop was conducted by Dr. John McKee, Ms. Norma Brewer, and Mr. John Phillips for the Pennsylvania Bureau of Corrections at Camp Hill. The workshop dates were January 14 and 15, 1974. The Bureau of Corrections is planning to establish self-instructional labs in three institutions.
- Mr. Robert Smith participated in a symposium sponsored by Auburn University and Troy State University to present the Alabama Training and Education Master Plan for Criminal Justice Personnel which had been prepared for LEPA. The symposium was held in Montgomery on January 18, 1974. Mr. Smith presented the educational and training standards for personnel in juvenile and adult corrections, including staffing requirements in terms of actual numbers needed for efficient operation of state correctional programs. His presentation was based on a review of literature and the Lab's experience in institutionally-based corrections.
- Dr. John McKee and Mr. Paul Cayton presented information on the Lab's individualized instructional systems at the February 20, 1974, conference in Washington, D. C., sponsored by the American Bar Association's Clearinghouse for Offender Literacy Programs. Dr. McKee spoke on the IPI System and prison

education programs, while Mr. Cayton explained the IRIS reading program.

#### Technical Consultation

The technical consultation provided by the EMLC is as diverse as are the groups which request this special assistance. Such assistance in applying Lab findings and experiences to particular programs and problem areas is an important part of the utilization effort. Some specific examples of the Lab's consultation activities involved the following groups:

- ... Ridgecrest Children's Center, Tuscaloosa, Alabama, to evaluate the center's juvenile rehabilitation program.
- ... Federal Bureau of Prisons' Special Treatment and Rehabilitation Training (START) program at the Medical Center in Springfield, Missouri, to evaluate the program.
- ... Alabama Department of Mental Health, with regard to the planning and design of group homes for dependent, delinquent children in the Montgomery area.
- ... Eufaula (Alabama) Adjustment Center, concerning the Individualized Reading Instructional System.
- ... Birmingham (Alabama) Skill Center, in regard to materials for a social skills program.
- ... Auburn University corrections project (the LEPA In-service Training and Higher Education Project), concerning the staffing and staff training needs of Alabama criminal and juvenile justice personnel.
- ... Correctional Psychology Program of the University of Alabama in regard to staff selection, evaluation of current status, and project projection.
- ... Chalkville (Alabama) State Training School for Girls, to establish a research program.
- ... Miami (Florida) Skills Center, concerning their use of the IPI System and the data they had collected.

## Other Utilization Efforts and Directions

### Professional Papers Published

The May, 1973, issue of Criminology contains an article entitled "The Home Furlough Policies of American Correctional Agencies," written by Mr. Robert Smith and Dr. Michael Milan. The article presents the results of a survey conducted by these EMLC staff members.

A paper coauthored by Dr. John McKee has recently been published in Instructional Technology in Medical Education, the proceedings of the Fifth Rochester Conference on Self-Instruction in Medical Education, which was held April 1-3, 1971. The title of the paper is "The Use of Individualized Instruction for Academically Deficient Freshman Nursing Students." The proceedings are published by the Rochester Clearinghouse. Ms. Merrian Douglass is the other coauthor.

### Television Appearances

Dr. John McKee has made two appearances on local television shows to discuss the work of the EMLC in corrections, juvenile delinquency, and the Lab's program at AIS. These appearances are important in bringing the Lab's work to the public eye and creating an awareness of nationwide problems on the local level.

### University Teaching and Invited Lectures

In previous phases of the EMLC, dissemination of the Lab's findings through the channel of the university classroom proved a useful tool to generate interest in corrections and the Lab's approach to rehabilitation. In Phase IV, several members of the professional staff continued to teach on a part-time basis at the Montgomery campus of Auburn University (AUM) and at the University of Alabama at Tuscaloosa. The courses taught have been in the areas of psychology, sociology, penology, and criminology. Additionally, Lab staff members are often asked to lecture to classes at the universities.

Experiences and findings of the EMLC are used to illustrate many of the lectures.

### College Corps Program

The close relationship maintained by EMLC with AUM and the University of Alabama, together with the physical proximity of the project sites to the university campuses, has resulted in a considerable increase in the number of students participating in College Corps research. This participation not only provides the students with course credit and on-the-job experience, but also supplements the EMLC's staff. Table 1 indicates the number of students participating during Phase IV.

TABLE 1  
EMLC College Corps Program Participation in Phase IV

Quarter/Semester Participated	Educational Status and Number Participating		
	School	Number of Students	Academic Major
Spring, 1973	AUM	3	Corrections (2), Psychology (1)
	UA	2	Correctional Psychology
Summer, 1973	AUM	1	Corrections
	UA	4	Correctional Psychology
Fall, 1973	AUM	4	Corrections (2), Sociology (1), Psychology (1)
	UA	7	Correctional Psychology (5), Psychology (2)
Winter, 1974	AUM	10	Corrections (4), Sociology (2), Psychology (4)

The work of the College Corps at AIS consists of data tabulation and summary, classroom observations, workshop attendance, and administration of the opinion surveys. Each student is assigned a required reading list that supplements his area of EMLC involvement. College Corps participants at the Tuscaloosa site assist in data analysis and are trained to conduct behavioral interviews.

In a related effort, 15 University of Alabama undergraduates were trained in behavioral interviewing and conducted interviews with a non-criminal population to provide comparison data for the Weekly Activity Record (WAR). The Tuscaloosa Project staff members have also provided College Corps participants with data for use in writing theses and dissertations.

#### Assistance in Preparing Dissertation

A doctoral candidate at the Massachusetts Institute of Technology has contacted the EMLC to request data on the economic factors related to criminal behavior of the disadvantaged. The Lab is providing demographic information and data obtained with behavioral assessment instruments from the longitudinal follow-up studies.

#### Civic Presentations and Involvement

Staff members are often asked to speak at meetings of various civic groups, including church groups, Junior League, and men's clubs. They are also frequently asked to serve on advisory committees and planning councils (e.g., the Advisory Committee to the City and County [Montgomery] Correctional Systems and a study committee of the Alabama State Bar Association). These presentations and opportunities to participate in civic groups are a valuable means of building state and local awareness of the EMLC's studies. Such involvement also provides a chance to put Lab findings into action in program planning.

#### Appointment to Journal Editorial Board

Dr. Michael Milan was appointed to the editorial board of Criminal Justice and Behavior, the official journal of the American Association of Correctional Psychologists. The journal is published quarterly by Sage Publications.

## SUMMARY AND PROJECTIONS

The three major studies of the EMLC--the Mount Meigs Project, the Tuscaloosa Project, and the Work Release Evaluation--were all begun in Phase IV. Much has been accomplished in the initial months of operation, but much remains to be done before the objectives of the studies are accomplished. The following paragraphs highlight the progress made in the Phase IV studies and utilization effort. The proposed future directions for each are also presented.

#### Mount Meigs Project

The first task of the EMLC in developing a behavioral management model at AIS was to assess the treatment program then operating at the school. The data collected in this assessment revealed that the advancement system, while an incentive system in theory, was not operating as such in practice; that student performance in the academic classrooms was far lower than could be desired, even in the IPI classrooms; and that few students participated in formal academic or vocational training after release, as indicated by the returns on the revised follow-up forms. Only about half of the released students were employed, a figure which in itself assesses the effectiveness of the treatment program. An opinion survey found that both staff and students were receptive to a more positively oriented treatment program, however.

Lab intervention began in the academic education division of the school with a teacher training program that introduced the principles and techniques of behavior modification. The restructuring of the academic program then followed, with the use of IPI being expanded for the delivery of math and language instruction and IRIS being introduced to develop reading skills. Once the restructured program was operating efficiently, the EMLC faded its direct involvement in the classrooms. An accountability

procedure was instituted to maintain the teachers' high level of effectiveness.

In another division of AIS, Lab staff worked with the Department of Social Services, conducting a series of workshops to train the department's social workers in contingency contracting. Workshops were also held to familiarize the other AIS staff members with the principles and procedures involved in contracting for behavior.

The Mount Meigs Project will continue in Phase V as the major EMLC effort. The research at AIS will have three main components:

1. An incentive system operating in the academic program. Of particular concern will be the comparison of the effect of the token reinforcement provided by the token economy and the social reinforcement arising from teacher-student interaction.
2. An individualized contingency contracting system directed at correcting disciplinary problems. The primary thrust will be demonstration of the feasibility of the use of contracts at AIS, contracting with a small number of students. The contracting system can then be expanded to include the entire student population.
3. The development of a transitional model to maintain the gains made at AIS after the student is released to the community and to deal with problems which cannot be solved within the institution. Emphasis will be placed on determining the feasibility of gradually transferring environmental control from school administrators to the parents and outside agencies, utilizing parents and, eventually, other significant persons as mediators of contingency contracts with the released students.

## Tuscaloosa Project

In developing the EMLC's community manpower model for the young offender on probation or parole, it was first necessary to establish the behavioral demography of the target population. Using confidential pre-trial investigation folders, the Lab collected data on samples of parolees and probationers and on young offenders who had been granted a Youthful Offender Motion (YOM). Appreciable differences emerged between the groups in such areas as education, socioeconomic status, employment, and criminal history, indicating that an individualized approach to treatment may be most effective. Additionally, the initial steps were made in establishing a channel for communication and cooperation between the EMLC and the University of Alabama, business and industry in the community, and the various state and local agencies dealing with the problems of the young offender.

The next stage of the study will include the selection of a sample of young offenders for intervention. An intensive behavioral interview will determine their employability and interpersonal skills, leading to an individualized training and treatment program for each client. Contingency contracts will be prepared, and the clients will be continuously monitored on the job and in avocational areas interfering with occupational performance. Funding through the University of Alabama and LEPA is anticipated for this phase of the Tuscaloosa Project.

## Work Release Evaluation

The EMLC's evaluation of the Alabama work release program is designed to provide a model for determining the long-range persisting effects of the program on the postrelease behavior patterns of its participants. Phase I of the evaluation covered a 12-month period, during which data on

male work release participants was collected in behavioral interviews at three to six months after release. These data were compared to the equivalent data on two other groups: (1) men who met the selection criteria for work release but did not participate in the program and (2) men who did not meet the selection criteria for participation.

Preliminary data analysis indicates that the work release participants have adjusted more successfully in the free world than have the subjects in the comparison groups. The work releasees have worked more, earned more, and, at three months postrelease, have been involved in fewer undesirable law encounters. A number of case studies on the female work release participants were prepared, since too few female subjects were available to warrant data analysis based on sex.

The proposed second and third phases of the work release evaluation are contingent upon funding through the University of Alabama and LEPA. The second phase will increase the size of the earlier Phase I geographical study area from a 25-mile radius of Montgomery to a 50-mile radius of Montgomery and Birmingham, another major urban area in which releasees settle. The increased area will also increase the number of subjects in the study. Consequently, the follow-up period will be extended to include a 12-15 month postrelease interview for all subjects in both Phases I and II. The projected third phase would be a follow-up of work releasees over the entire state, providing additional and more comprehensive feedback to the work release program.

#### Utilization

The utilization and dissemination efforts of the EMLC took a variety of forms in Phase IV. In terms of major products, technical reports on the first cycle of the token economy and on the 1971 follow-up study were prepared, the

Correctional Officer Training package was revised, and IRIS was made available for dissemination. The Behavioral Interview Guide was completed, a paper describing the Law Encounter Severity Scale was written, and a book chapter on the Lab's use of behavior modification in corrections was prepared. Other activities included participation and attendance at professional meetings, conferences, and workshops; technical consultation; and civic involvement. Distribution of publications and orientation of visitors continued. Phase IV also saw a significant increase in the number of College Corps participants at both the Mount Meigs and Tuscaloosa sites.

During the next phase of the Lab, emphasis will continue to be placed on the preparation of products which present the methodology and findings of the various studies in forms which will encourage utilization by the Lab's increasingly broad audience. The revisions of IPI and IRIS will be completed, as will a number of other products currently in progress.





APPENDIX A

Six- and Twelve-Month Follow-Up Form  
for Discharged AIS Students

ALABAMA INDUSTRIAL SCHOOL (AIS)  
Mount Meigs, Alabama

FOLLOW-UP FORM FOR DISCHARGED AIS STUDENTS\*

Date \_\_\_\_\_  
Month Day Year

Youth's name \_\_\_\_\_ Race \_\_\_\_\_ DOB \_\_\_\_\_  
Month Day Year

County Department of Pensions and Security or Juvenile/Court reporting \_\_\_\_\_

Name and title of person completing this form \_\_\_\_\_

Date committed \_\_\_\_\_ Date released \_\_\_\_\_  
Month Day Year Month Day Year

Youth's current address \_\_\_\_\_  
Street City State Zip

I. Social Adjustment

A. Is the youth married? Yes ( ) No ( )

B. Present living arrangements:

( ) Wife

( ) Mother and father

( ) Mother only

( ) Mother and step-father

( ) Father only

( ) Father and step-mother

( ) Relatives (please specify) \_\_\_\_\_

( ) Foster home

( ) Job Corps

( ) Armed services

( ) Other (please specify) \_\_\_\_\_

C. If youth is currently living with relations, what is the combined yearly income of the family unit?

\$ \_\_\_\_\_ How many are being supported by this income? \_\_\_\_\_

D. Does the youth attend church? Yes ( ) No ( )

E. If he attends church, his approximate percentage of attendance is \_\_\_\_\_%.

II. Academic Progress

A. Is the youth currently enrolled in an academic program? Yes ( ) No ( )

Or has he been enrolled since his return from our school? Yes ( ) No ( )

\*The same form is used at six- and twelve-month intervals.

B. If the response to either of the above is "Yes," please report his academic school history:

	Dates	Type of School	Public or Private	Hours/Week	Percent of Classes Missed
1.	From _____ to _____	_____	_____	_____	_____
2.	From _____ to _____	_____	_____	_____	_____
3.	From _____ to _____	_____	_____	_____	_____

C. Has the youth earned his G.E.D. since release? Yes ( ) No ( )

III. Vocational School History

A. Is the youth currently enrolled in a vocational school? Yes ( ) No ( )

Or has he been enrolled since his return from our school? Yes ( ) No ( )

B. If the response to either of the above is "Yes," please report his vocational school history:

	Dates	Type of Course	Hours/Week	Related to AIS?		Percent of Days Missed
				Yes	No	
1.	From _____ to _____	_____	_____	_____	_____	_____
2.	From _____ to _____	_____	_____	_____	_____	_____
3.	From _____ to _____	_____	_____	_____	_____	_____

IV. Work Progress

A. Is the youth currently employed? Yes ( ) No ( )

Or has he held any employment since his return from our school? Yes ( ) No ( )

B. If the response to either of the above is "Yes," please give the following information for each position held in the listed order:

1. Current or most current position \_\_\_\_\_ From \_\_\_\_\_ to \_\_\_\_\_

a. Full-time employment ( ) Part-time employment ( )

b. Employer \_\_\_\_\_

c. Type of work \_\_\_\_\_

d. Hours per week \_\_\_\_\_

e. Wages per hour \$ \_\_\_\_\_

f. Is the job related to the MDTA's vocational training at AIS? Yes ( ) No ( )

g. Was the vocational training at AIS helpful in the youth's obtaining this employment? Yes ( ) No ( )

h. Was the job obtained through the Employment Service? Yes ( ) No ( )

Or through another agency? Yes ( ) No ( )

Please specify \_\_\_\_\_

i. Percent of days missed from job \_\_\_\_\_%

2. Previous position \_\_\_\_\_ From \_\_\_\_\_ to \_\_\_\_\_

a. Full-time employment ( ) Part-time employment ( )

b. Employer \_\_\_\_\_

c. Type of work \_\_\_\_\_

d. Hours per week \_\_\_\_\_

e. Wages per hour \$ \_\_\_\_\_

f. Is the job related to the MDTA's vocational training at AIS? Yes ( ) No ( )

g. Was the vocational training at AIS helpful in the youth's obtaining this employment? Yes ( ) No ( )

h. Was the job obtained through the Employment Service? Yes ( ) No ( )

Or through another agency? Yes ( ) No ( )

Please specify \_\_\_\_\_

i. Percent of days missed from job \_\_\_\_\_%

3. Previous position \_\_\_\_\_ From \_\_\_\_\_ to \_\_\_\_\_

a. Full-time employment ( ) Part-time employment ( )

b. Employer \_\_\_\_\_

c. Type of work \_\_\_\_\_

d. Hours per week \_\_\_\_\_

e. Wages per hour \$ \_\_\_\_\_

f. Is the job related to the MDTA's vocational training at AIS? Yes ( ) No ( )

g. Was the vocational training at AIS helpful in the youth's obtaining this employment? Yes ( ) No ( )

Please specify \_\_\_\_\_

i. Percent of days missed from job \_\_\_\_\_%

V. Law Enforcement Encounters

A. Has the youth been arrested, detained, or referred to juvenile court since his release from AIS?

Yes ( ) No ( )

B. If the answer to the above is "Yes," please report the reason for and results of his encounters:

	Date	Delinquent Act and/or Type of Crime	Convicted or Rejudicated		Disposition
			Yes	No	
1.	_____	_____	_____	_____	_____
2.	_____	_____	_____	_____	_____
3.	_____	_____	_____	_____	_____
4.	_____	_____	_____	_____	_____
5.	_____	_____	_____	_____	_____

C. To your knowledge, is this youth presently making abusive use of drugs and/or alcohol?

Yes ( ) No ( )

D. If "Yes," please check the applicable substance(s). Drugs ( ) Alcohol ( )

E. If the youth abuses alcohol, how frequently and in what amounts? \_\_\_\_\_

F. If drugs, which type (marihuana, amphetamines, barbiturates, hallucinogens, opiates, etc.)? \_\_\_\_\_

VI. General Health

A. What is the current general health condition of the youth?

Excellent ( ) Good ( ) Poor ( ) Extremely poor ( )

B. Does the youth have any special handicaps? Yes ( ) No ( )

C. If "Yes," please specify whether they are physical, mental, addictive, etc.: \_\_\_\_\_

VII. Youth's Evaluation of AIS

A. Was academic training helpful? Please explain \_\_\_\_\_

B. Was vocational training helpful? Please explain \_\_\_\_\_

C. Was the total AIS program helpful in improving the youth's adjustment upon return to the community? Please explain \_\_\_\_\_

D. Youth's criticism or positive comments concerning the AIS \_\_\_\_\_

VIII. We are unable to complete the questionnaire because:

A. The youth cannot be located ( )

B. The youth is incarcerated and cannot be contacted ( )

C. The youth is out of the county or the state. Please indicate address if known: \_\_\_\_\_

D. Other (please specify) \_\_\_\_\_

If there is anything concerning this youth, his family, his adjustment, and his health that you consider important and which we have not asked, please indicate: \_\_\_\_\_

Signature of person completing this form \_\_\_\_\_

APPENDIX B

Revised AIS Opinion Survey Form

AIS STAFF-STUDENT OPINIONS SURVEY

Date: \_\_\_\_\_  
 Interviewer: \_\_\_\_\_  
 Staff \_\_\_\_\_ Student \_\_\_\_\_

- \_\_\_\_\_ Student
- \_\_\_\_\_ Administrative Personnel
- \_\_\_\_\_ Academic (Principal, teacher, etc.)
- \_\_\_\_\_ Shop Instructor
- \_\_\_\_\_ Counselor
- \_\_\_\_\_ Social Worker
- \_\_\_\_\_ Service Personnel
- \_\_\_\_\_ Security Personnel

DIRECTIONS: Read each statement carefully and indicate by checking the appropriate space whether you disagree, slightly disagree, are not sure, slightly agree, or agree.

1. I think students should be rewarded when they behave well and keep out of trouble.

\_\_\_\_\_ disagree      \_\_\_\_\_ slightly disagree      \_\_\_\_\_ not sure      \_\_\_\_\_ slightly agree      \_\_\_\_\_ agree

2. I think students will lose respect for authority if they get rewards for doing what they are supposed to do.

\_\_\_\_\_ disagree      \_\_\_\_\_ slightly disagree      \_\_\_\_\_ not sure      \_\_\_\_\_ slightly agree      \_\_\_\_\_ agree

3. Once a student completes his vocational and academic training he should be released immediately since that is what he is at AIS for.

\_\_\_\_\_ disagree      \_\_\_\_\_ slightly disagree      \_\_\_\_\_ not sure      \_\_\_\_\_ slightly agree      \_\_\_\_\_ agree

4. The best way to rehabilitate a person is to punish him severely each time he commits a crime in the "free world."

\_\_\_\_\_ disagree      \_\_\_\_\_ slightly disagree      \_\_\_\_\_ not sure      \_\_\_\_\_ slightly agree      \_\_\_\_\_ agree

5. We still have trouble with students in AIS because they get off too easy when caught breaking the rules.

\_\_\_\_\_ disagree      \_\_\_\_\_ slightly disagree      \_\_\_\_\_ not sure      \_\_\_\_\_ slightly agree      \_\_\_\_\_ agree

6. The academic training presently being given to students helps them become rehabilitated.

\_\_\_\_\_ disagree      \_\_\_\_\_ slightly disagree      \_\_\_\_\_ not sure      \_\_\_\_\_ slightly agree      \_\_\_\_\_ agree

7. The vocational training presently being given to students helps them become rehabilitated.

disagree      slightly disagree      not sure      slightly agree      agree

8. Most students would like to use their trade to earn a living after leaving AIS.

disagree      slightly disagree      not sure      slightly agree      agree

9. Most students do not really want school or trade training.

disagree      slightly disagree      not sure      slightly agree      agree

10. Most students will return to illegal activities again once they are released.

disagree      slightly disagree      not sure      slightly agree      agree

11. Students at AIS are basically nice people and get along well with each other.

disagree      slightly disagree      not sure      slightly agree      agree

12. Students respect only brute force.

disagree      slightly disagree      not sure      slightly agree      agree

13. I cannot trust a student to tell the truth.

disagree      slightly disagree      not sure      slightly agree      agree

14. Very few students take pride in the work they do.

disagree      slightly disagree      not sure      slightly agree      agree

15. Most of the AIS staff is truly interested in helping students rehabilitate themselves.

disagree      slightly disagree      not sure      slightly agree      agree

16. Some of the AIS staff enjoy punishing students.

disagree      slightly disagree      not sure      slightly agree      agree

17. I believe the AIS staff are always fair in their dealings with students.

disagree      slightly disagree      not sure      slightly agree      agree

18. The Superintendent almost always know as much about what is happening in the training as anyone else.

disagree      slightly disagree      not sure      slightly agree      agree

19. The Superintendent makes all the rules for the training school.

disagree      slightly disagree      not sure      slightly agree      agree

20. The school instructors favor students from some trades over students from others.

disagree      slightly disagree      not sure      slightly agree      agree

21. The school instructors try to know each student's academic abilities so that they can help him learn more.

disagree      slightly disagree      not sure      slightly agree      agree

22. It is easy for most students to "con" the school instructors into thinking that they (the students) are working very hard, when they really are not.

disagree      slightly disagree      not sure      slightly agree      agree

23. The vocational instructors keep up with each students progress.

disagree      slightly disagree      not sure      slightly agree      agree

24. Most vocational instructors cannot tell if their students are working hard or loafing.

disagree      slightly disagree      not sure      slightly agree      agree

25. Some vocational instructors go easier on favored students than students they do not like as well.

disagree      slightly disagree      not sure      slightly agree      agree

26. The counselors can help a student with most any kind of problem.

disagree      slightly disagree      not sure      slightly agree      agree

27. The counselors are often too busy to talk to students.

disagree      slightly disagree      not sure      slightly agree      agree

28. The counselors do not respect the student as they should.

disagree      slightly disagree      not sure      slightly agree      agree

29. The counselors play an important part in rehabilitation because they can change student's attitudes.

disagree      slightly disagree      not sure      slightly agree      agree

30. Obedience and respect for authority are the most important virtues children should learn.

disagree      slightly disagree      not sure      slightly agree      agree

31. Delinquency is caused by unhappy childhood experiences, since most delinquents had extremely unhappy childhoods.

disagree      slightly disagree      not sure      slightly agree      agree

32. I answered each question honestly, that is, as I really think.

disagree      slightly disagree      not sure      slightly agree      agree



APPENDIX C

Selected Materials from  
the Contingency Contracting Workshops

GUIDELINES FOR EFFECTIVE CONTINGENCY CONTRACTING

prepared by

Michael A. Milan, Ph.D.

Rehabilitation Research Foundation

A. PREPARING FOR CONTINGENCY CONTRACTING:

1. Contracting should be explained.
2. Expectations should be clarified.
3. The objectives of all parties should be determined.
4. Short, Intermediate, and long range goals should be specified.
5. Potential reinforcers should be identified.

B. DEVELOPING THE CONTRACT:

1. The objectives of contracts should stress achievement rather than obedience.
2. Initial contracts should ask for small approximations.
3. Initial contracts should provide plentiful reinforcement.
4. Later contracts should teach responsibility and foster independence.
5. Contracts should be negotiated, understood, agreed to, and signed by all parties.

C. CHARACTERISTICS OF A GOOD CONTRACT:

1. Short, intermediate, and long range reinforcers are included.
2. Bonuses are provided for high levels of performance.
3. Significant others in the natural environment participate as mediators.
4. The terms of the contract are promptly fulfilled.
5. The contract is reviewed daily and renegotiated weekly.

D. NOTES ON THE USE OF REINFORCERS:

1. The defining characteristic of a reinforcer is that it reinforces.
2. Reinforcement should be delivered frequently, contingently, and in small amounts.
3. Reinforcers should be selected from those available in the natural environment.
4. Unauthorized access to reinforcement should be prevented.
5. Mediators should be placed on their own contracts and reinforced contingently.

E. THE SPECIFICATION OF TARGET BEHAVIORS:

1. The target behaviors should be in the best interests of all parties.
2. Target behaviors should be stated in measurable (observable and countable) terms.
3. Baserates should be determined.
4. Each successive target behavior should be based on the previous performance level.
5. Each successive target behavior should be a closer approximation of a final goal.

F. THE USE OF PENALTIES:

1. Penalties (fines) should be avoided whenever possible.
2. Penalties should be used only when reinforcement of incompatible opposits fails.
3. Penalties should be restricted to one critical target behavior at a time.
4. Contracts with penalties should continue the reinforcement of incompatibles.
5. Penalties should be discontinued as soon as possible.

G. WHEN A CONTRACT FAILS:

1. Ask all parties "Why?"
2. Check the consistency of all parties.
3. Check the appropriateness of reinforcers.
4. Decrease requirements and increase reinforcement.
5. Discontinue the old contract and negotiate a new one.

SUGGESTED TEXTS

Guerney, B.G. Psychotherapeutic Agents: New Roles for Nonprofessionals, Parents and Teachers. New York: Holt, Rinehart and Winston, 1969.

Homme, L. How to use Contingency Contracting in the Classroom. Champaign, Illinois: Research Press, 1969.

Tharp, R.G. and Wetzel, R.J. Behavior Modification in the Natural Environment. New York: Academic Press, 1969.

Whaley, D.L. and Malott, R.W. Elementary Principles of Behavior. New York: Appleton-Century-Croft, 1971.

A CONTRACTUAL AGREEMENT

BETWEEN

Algee McKay  
(The First Party)

Officer O.W. Green  
(The Second Party)

OBLIGATION(S) OF THE FIRST PARTY	1	2	3	4	5	6	7	8	9	10
	WED	THURS	FRI	SAT	SUN	MON	TUES			
Be in shop by 7:25 am	✓	✓		✓	✓	✓	✓	✓		
Leave only when given permission (am)		✓	✓	✓	✓	✓	✓	✓		
Leave only when given permission (pm)		✓	✓	✓	✓	✓	✓	✓		
Have tools clean for inspection between 3:30 and 4	✓		✓	✓	✓	✓	✓	✓		
Have tools put away by 4:15 pm	✓	✓	✓	✓	✓	✓	✓	✓		
CONTRACT PREVIOUS (see notes)	3	4	4	4	4	5	5	5		
DAILY CUMULATIVE	3	7	11	15	19	24	29			

OBLIGATION(S) OF THE SECOND PARTY	1	2	3	4	5	6	7	8	9	10
EXCHANGE SCHEDULE										
15 min. work break (can be accumulated)		✓	✓	✓	✓	✓	✓	✓		
Phone slip						✓	✓			
Afternoon off of choice										
BONUS: 2 hours extra visiting time on Sunday										

Afternoon off Saturday

CONTRACT NUMBER 23, AGREED TO FOR THE PERIOD August 9 THROUGH August 15

NOTES

Four checks toward phone slip and afternoon off only carried forward from last contract.

Checks are cumulative.

Algee McKay  
(The First Party)  
O.W. Green  
(The Second Party)

# A CONTRACTUAL AGREEMENT

Bobby McKay

BETWEEN

Mrs. Hazel McKay

AND

(The First Party)

(The Second Party)

OBLIGATION(S) OF THE FIRST PARTY			1 MON	2 TUES	3 WED	4 THURS	5 FRI	6 SAT	7 SUN	8	9	10
Complete homework assignment and have it checked			✓		✓	✓	✓					
Attend school all morning (8:15 to 11:45 am)			✓		✓	✓						
Attend school all afternoon (1:00 to 3:15 pm)			✓	✓	✓	✓	✓					
Honor curfew (8 pm; 9:30 pm Friday and Saturday)			✓	✓	✓		✓	✓	✓			
<b>CONTRACT TOTALS</b>	PREVIOUS	N/A	4	2	4	3	3	1	1			
	CURRENT		DAILY	4	2	4	3	3	1	1		
			CUMULATIVE	4	6	10	13	16	17	18		

OBLIGATION(S) OF THE SECOND PARTY	EXCHANGE SCHEDULE	1	2	3	4	5	6	7	8	9	10
Allowance (1 dollar maximum)	1 check = 25 cents	/	/	/		/					
Friend stay overnight	3 checks				✓						
Driving lesson (30 minutes)	5 checks			✓							
Extend curfew 1 hour	5 checks										
BONUS: Weekend trip to Birmingham	18 checks total	trip next weekend									

CONTRACT NUMBER 11, AGREED TO FOR THE PERIOD March 19 THROUGH March 25.

**NOTES**

Checks are not cumulative with exception of bonus.

RRF/1973

*Bobby McKay*  
(The First Party)

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*Hazel McKay*  
(The Second Party)

**END**