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Emphasis on Adolescents and Young Adults

IDENTIFICATION AND INTERVENTION PROCEDURES
FOR LEARNING DISABLED CORPSMEMBERS IN THE EARLE C.
CLEMENTS JOB CORPS CENTER: FINAL REPORT

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The University of Kansas Institute for Research in Learning Disabilities is supported by a contract (#300-77-0494) with the Bureau of Education for the Handicapped, Department of Health, Education, and Welfare, U. S. Office of Education, through Title VI-G of Public Law 91-230. The University of Kansas Institute, a joint research effort involving the Department of Special Education and the Bureau of Child Research, has specified the learning disabled adolescent and young adult as the target population. The major responsibility of the Institute is to develop effective means of identifying learning disabled populations at the secondary level and to construct interventions that will have an effect upon school performance and life adjustment. Many areas of research have been designed to study the problems of LD adolescents and young adults in both school and non-school settings (e.g., employment, juvenile justice, military, etc.)

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Cooperating Agencies

Were it not for the cooperation of many agencies in the public and private sector, the research efforts of The University of Kansas Institute for Research in Learning Disabilities could not be conducted. The Institute has maintained an on-going dialogue with participating school districts and agencies to give focus to the research questions and issues that we address as an Institute. We see this dialogue as a means of reducing the gap between research and practice. This communication also allows us to design procedures that: (a) protect the LD adolescent or young adult, (b) disrupt the on-going program as little as possible, and (c) provide appropriate research data.

The majority of our research to this time has been conducted in school settings in both Kansas and Missouri. School districts in Kansas which have participated or currently are participating in various studies include: Unified School District (USD) 437 Auburn-Washburn; USD 384, Blue Valley; USD 204, Bonner Springs; USD 308, Hutchinson; USD 500, Kansas City; USD 469, Lansing; USD 497, Lawrence; USD 453, Leavenworth; USD 480, Liberal; USD 233, Olathe; USD 290, Ottawa; USD 305, Salina; USD 450, Shawnee Heights; USD 512, Shawnee Mission; USD 464, Tonganoxie; USD 202, Turner; and USD 501, Topeka. Interlocal agencies in Kansas which have participated include: the Central Kansas Cooperative in Education, Salina; the East Central Kansas Special Education Cooperative, Paola; and the South Central Kansas Special Education Cooperative, Pratt. Parochial schools involved in our studies include: Bishop Miega High School, Shawnee Mission; Bishop Ward High School, Kansas City, Kansas; and O'Hara High School, Kansas City, Missouri. The Kansas State Department of Education also has been helpful in our research efforts.

Studies are also being conducted in several school districts in Missouri, including Center School District, Kansas City; the New School for Human Education, Kansas City; the Kansas City, Missouri School District; the Lee's Summit School District; the Raytown School District; and the School District of St. Joseph. In addition, school districts in Beaverton, Oregon; Delta County, Colorado; Elkhart, Indiana; Houston, Texas; Jonesboro, Arkansas; Montrose County, Colorado; Omaha, Nebraska; and Ottumwa, Iowa, have also participated in our studies. The Iowa Department of Public Instruction also has been helpful in our research effort.

Agencies currently participating in research in the juvenile justice system are the Overland Park, Kansas Youth Diversion Project; the Douglas, Johnson, Leavenworth, and Sedgwick County, Kansas Juvenile Courts; and the judicial district serving the Pittsburgh-Parsons, Kansas area. Other agencies which have participated in out-of-school studies are: Penn House and Achievement Place of Lawrence, Kansas; Kansas State Industrial Reformatory, Hutchinson, Kansas; the U. S. Military; and Job Corps. Numerous employers in the public and private sector have also aided us with studies in employment.

While the agencies mentioned above allowed us to contact individuals and supported our efforts, the cooperation of those individuals--LD adolescents and young adults; parents; professionals in education, the criminal justice system, the business community, and the military--have provided the valuable data for our research. Our sincere appreciation is expressed to all those who have contributed information to our research effort. This information will assist us in our research endeavors that have the potential of yielding greatest payoff for interventions with the LD adolescent and young adult.

IDENTIFICATION AND INTERVENTION PROCEDURES
FOR LEARNING DISABLED CORPSMEMBERS IN THE
EARLE C. CLEMENTS JOB CORPS CENTER:
FINAL REPORT

This study was carried out under contract with the Singer Corporation at the Earle C. Clements Job Corps Center in Morganfield, Kentucky. Although not conducted under the auspices of the contract between the University of Kansas Institute for Research in Learning Disabilities and Special Education Programs, Department of Special Education, the study is related to other research efforts of the University of Kansas IRLD. Thus, it is being published as part of the series of research reports published by the Kansas University IRLD.

The project was designed to establish identification and intervention procedures for learning disabled adolescents and young adults in a job training setting. The findings suggest that valid learning disabilities identification procedure and effective learning strategies intervention procedures were developed and implemented at the Job Corps Center.

Introduction

The University of Kansas Institute for Research in Learning Disabilities (IRLD) under contract with the Singer Corporation designed a program to identify and intervene with learning disabled corpsmembers at the Earle C. Clements Job Corps Center, Morganfield, Kentucky. Program goals were twofold: (a) to develop and implement a procedure for identifying learning disabled (LD) corpsmembers that could be readily implemented by existing staff, and (b) to implement and evaluate a learning strategies approach to improve the academic performance of LD corpsmembers at the Earle C. Clements Job Corps Center.

The identification and intervention procedures developed were based upon previous work conducted by the IRLD on LD adolescent and young adult populations. While such information provided a solid base on which to make initial decisions, it was necessary to modify the procedures to account for the characteristics both of the Job Corps setting and the corpsmembers.

The findings indicate that both project goals were reached: A valid learning disabilities identification procedure was developed and implemented, and a modified learning strategies intervention procedure has been implemented that can markedly enhance the academic performance of identified learning disabled corpsmembers.

Data related to the impact of the learning strategies program on length of stay in the Job Corps indicated that the presence of learning disabilities is not the primary factor behind the high dropout rate at the Job Corps program. The learning strategies procedure was only successfully applied with low-achieving, non-learning disabled corpsmembers when students appeared motivated to learn the strategies. A very high level of consumer satisfaction was reported both by participating instructional staff and corpsmembers.

Design of the Study

To address the major goals of this project data were collected on five groups of corpsmembers. Learning disabled (LD) and non-learning disabled (NLD) corpsmembers were randomly assigned to two experimental and two control groups. At the request of the instructional staff at the Earle C. Clements Job Corps Center, 40 additional students were assigned by the remedial reading teachers as a fifth group (NLD_{rr}). A total of 169 learning disabled corpsmembers were assigned to the experimental group; 180 non-learning disabled corpsmembers constituted the experimental group. A total of 389 subjects,

including the 40 non-learning disabled corpsmembers referred by reading teachers, participated over an 18-month period. Pretest and posttest data were collected on all five groups.

The LD and NLD experimental students were not homogeneously grouped as part of an effort to prevent stigmatizing students by classification group. Thus, both NLD and LD corpsmembers were included in each classroom. Furthermore, this assignment procedure prevented classroom teachers, administrative staff, and corpsmembers from gaining access to information about the identity of corpsmembers classified as LD. The only person who had access to the student classification information was the project director. In short, everything possible was done to ensure that the administrative arrangements did not stigmatize individual corpsmembers.

Major Findings

In order to address the two major research goals of the project, a broad array of research and implementation questions were addressed. The first set of questions relate to the design of LD identification procedures for use in the Job Corps Center, whereas the second major set of questions concern the implementation of a learning strategies intervention and its programmatic outcomes.

Identification of Learning Disabled Members of the Job Corps Center

1. What is a feasible LD identification procedure for use in a Job Corps setting?

The major concern was to design an identification procedure for use in the Earle C. Clements Job Corps Center that was responsive to the unique needs of the setting, the corpsmembers, and the training of the instructional staff. As a result the following factors had to be taken into account: (a) large numbers of corpsmembers are screened weekly as they enter the Job Corps; (b)

the majority of corpsmembers are from minority backgrounds, thus, requiring culturally fair instruments; and (c) existing Job Corps staff were to administer the identification procedure. Therefore, measures requiring special psychometric testing certification for administration could not be considered. For example, many assessment instruments traditionally used to identify learning disabled individuals, such as the WAIS-R, require specialized training.

With these considerations in mind, the identification procedure designed and validated for use at the Earle C. Clements Job Corps Center incorporated instrumentation that was (a) culturally fair, (b) easy and economical to administer and score by the instructional staff member, and (c) effective in differentiating corpsmembers with learning disabilities from other low-achieving corpsmembers.

The identification procedure consists of three components that can be administered to groups of corpsmembers by minimally trained staff members: (a) a Self-Rating Checklist, (b) the Raven's Progressive Matrices Test, and (c) the Woodcock-Johnson Psycho-Educational Battery (Written Language cluster). The Self-Rating Checklist, which is based on five years of research by the University of Kansas IRLD, asks corpsmembers, in the form of a checklist, to report specific difficulties they perceive in dealing with academic demands. The self-reported information identifies areas in which a learning disability may be manifested. The Raven's Progressive Matrices Test is a culture-fair test designed to yield an indication of a corpsmember's ability to solve problems. This instrument has been used extensively as a measure of ability and much of its merit has been attributed to its culture-fair construction. Finally, the written language cluster of the Woodcock-Johnson Psycho-Educational Battery was included because previous research conducted by the University of Kansas IRLD had shown it to be one of the best discriminators of adolescent LD

populations. In summary, the identification procedure specifically designed for the Earle C. Clements Job Corps Center was based on previous research with older-aged LD populations and took into account existing administrative and population constraints of the Earle C. Clements Job Corps Center. The procedure is based on a discrepancy between ability to solve problems and academic achievement. As such, it is consistent with the identification criteria for LD described in PL 94-142.

2. How did the instructional staff and students respond to the identification procedure?

Both instructional staff and corpsmembers reported a high degree of satisfaction with the identification procedure described above. In part, this high rating was due to the fact that the staff did not need specialized training to administer and score the procedure. In addition, it could be easily integrated into the orientation testing typically administered to all corpsmembers. Corpsmembers' positive response to the identification procedure may have resulted from the relatively short testing time and the solicitation of their perceptions regarding specific problems they encountered in academic situations. Finally, the positive acceptance may also be attributed to the types of questions and problems to which corpsmembers were asked to respond, that is, test items were novel by not being representative of traditional academic testing. Testing presented in the traditional mode often results in motivation problems due to a long history of failure on similar tasks.

3. What attributes characterize LD young adults in the Earle C. Clements Job Corps Center?

The IRLD procedure for identifying learning disabilities was administered to a total of 479 corpsmembers. Of those tested, 229 were identified as LD and subsequently assigned to either an experimental or a control group. The remaining 250 corpsmembers were assigned to the NLD experimental and control

groups. Members of the LD and NLD groups were similar in age, previous school experience, and reading and written language achievement (see Table 1). On the average, all subjects were 18 years of age, had completed the ninth grade, and were reading at a fourth-grade level.

Results of the procedure yielded significant information about the major characteristics of learning disabled corpsmembers. First, the LD corpsmembers differed from the NLD group in performance on items related to problem-solving ability, as measured by the Raven's Progressive Matrices and their self-reports of "student" or "academic" behaviors on the Self-Rating Checklist. The LD groups scored significantly higher on the Raven's with a mean at the 32nd percentile compared to a mean at the 8th percentile for the NLD groups. As indicated by the Self-Rating Checklist, the LD corpsmembers also showed a higher probability of having a specific learning disability than the NLD group (.856 versus .608). The failure of the third component of the identification procedure to reveal any significant differences between subject groups (the Woodcock-Johnson Written Language cluster) indicates that this measure is not a good discriminator of learning disabilities in Job Corps settings. Second, the performance of the LD and NLD groups on the RJS-1 and the SAT Reading measure are virtually the same.

The RJS-1 is a reading achievement measure developed specifically for use in Job Corps Centers to identify appropriate reading materials for corpsmembers. The SAT is a standardized reading achievement test normed on a general population of secondary-school students.

The above findings provide a profile of the condition of learning disabilities among corpsmembers in Job Corps settings. First, the data indicate that learning disabilities is a condition that consists of more than simple underachievement. That is, although individuals identified as learning disabled

demonstrate a higher problem-solving ability, as indicated by higher Raven's scores, they report experiencing specific academic deficits (as indicated by the higher Self-Rating Checklist scores). Thus, the learning disabled students' performance shows a discrepancy between their ability to solve problems and academic achievement. Previous assumptions that students with learning disabilities are those scoring at or below 8 on the RJSI are not supported by these data. In summary, the best predictors of learning disabilities appeared to be the Raven's Progressive Matrices test and the Self-Rating Checklist. The RJS-1 and the Woodcock-Johnson Psycho-Educational Battery (Written Language cluster), however, were poor discriminators of the condition of learning disabilities in Job Corps settings.

4. Major conclusions regarding the application of the identification procedure.

Four major conclusions can be drawn from the data on application of the University of Kansas IRLD identification procedure.

1. The identification procedure can be used by instructional staff and paraprofessionals without special training in how to administer, score or interpret test findings.

2. The identification procedure can be administered to large groups of students and can be completed within 45 minutes.

3. The attributes that differentiate learning disabled corpsmembers from other underachieving corpsmembers in Job Corps settings are (a) higher ability as measured by the Raven's test and (b) more specific academic deficits as measured by the Self-Rating Checklist.

4. A score of 8 or below on the RJSI is not a good predictor of learning disabilities. Thus, the use of the RJSI measure alone as an indicator of LD is inappropriate.

Learning Strategies: An Intervention Approach for Learning Disabled Corpsmembers in Job Corps Settings

1. What is a learning strategies intervention approach?

The learning strategies intervention approach implemented at the Earle C. Clements Job Corps Center was based on several years of research and development

(Alley & Deshler, 1979). The program is designed to teach students how to cope with the broad array of academic and vocational demands they meet in their daily lives. Rather than being tutored in specific content, students are taught "how to learn" so as to enhance their ability to perform satisfactorily in response to varying setting and job demands. The learning strategies approach was chosen over other intervention models typically used with older individuals because it more realistically reflects the demands with which young adults must cope. A "basic skills" approach, for example, may be successful in improving the ability to decode words; however, improved word-decoding performance may not be sufficient to allow a person to deal with the broad array of demands encountered in other academic and/or job settings, such as problem solving, critical listening, error monitoring, and questioning.

Corpsmembers were exposed to four specific learning strategy packets--three pertaining to reading, the fourth dealing with mathematics. Data were obtained on student performance in three of the reading-related packets including Scanning, Multipass, and Test Taking. Each of these is described below:

Scanning--Scanning is a frequently used, but usually underdeveloped, skill encountered in most job and academic settings. For example, scanning is a prerequisite to finding the correct spark plug number from an auto repair manual or the correct page number in a book or manual. The ability to quickly find specific pieces of information in a variety of written contexts is particularly valuable to those whose word attack and reading comprehension skills are deficient. Corpsmembers were taught how to scan for specific information in different types of glossaries, indexes, and texts. Most sources of practice for scanning are vocationally oriented.

Multipass--Adolescents and young adults are often required to read and recall information from various texts. Multipass is a learning strategy designed to enhance one's ability to sort out needed information from extraneous or irrelevant data imbedded in lengthy written passages. This skill is particularly useful to corpsmembers in job areas requiring reading.

Test Taking--Not only do the academic areas at Earle C. Clements rely heavily on paper-and-pencil tests to assess corpsmembers' competency, but employment agencies and many employers also depend on these types of tests to identify unclassified persons. Poor

test-taking skills may keep an otherwise fully qualified person from obtaining an adequate education or a fulfilling job. The Test-Taking Strategy teaches corpsmembers six proven test-taking skills so that they can avoid the most common test-taking errors.

Each of the learning strategy packets was written in a format conducive to group instruction in a typical classroom situation in the Job Corps. The packets were designed to be self-instructional, and most exercises and activities were related to vocational areas. This design was chosen for motivational reasons as well as to increase the probability of skill generalization to vocational content. The strategies were presented to corpsmembers utilizing an eight-step acquisition methodology previously validated by the IRLD on older populations (Deshler, Alley, Warner, & Schumaker, 1981).

2. What was the impact of the learning strategies intervention on corpsmembers' achievement?

Data were obtained on 389 LD and NLD corpsmembers in the experimental intervention program. Since completion of all four strategy components of the program was not a requirement, the total number of corpsmembers on whom data were obtained from all variables is smaller than the total number of corpsmembers entering the program. Complete data were obtained on 127 corpsmembers.

Table 2 illustrates achievement data obtained on corpsmembers who completed all components of the learning strategies program. Pretest measures of achievement indicated that the three groups were similar with the NLD_{rr}^1 corpsmembers having the highest SAT mean achievement (4.8), and the LD_{exp} the lowest (4.1). The SAT Reading tests were administered approximately two months after corpsmembers completed the program. The LD_{exp} and the NLD_{rr}

¹ NLD_{rr} represent corpsmembers assigned by remedial reading teachers to the experimental classroom for strategy instruction.

showed the largest gains, .7 years and .9 years, respectively. These results represent 7 to 9 months' growth during a three-month period compared to only 2 months of growth for the NLD_{exp} group. Thus, the gain is similar to and substantially greater than that of the NLD_{exp} group (see Figure 1).

The projected growth rate for one full school year (9 months) can be calculated by multiplying the obtained growth rate for 3 months by 3.² This projected rate, in turn, can be compared to growth rates prior to entrance into the experimental program (see Table 3). The projected growth for one school year (of 9 months duration) based on the obtained data is more than 2 years for both the LD_{exp} and the NLD_{rr} groups. This growth is significantly greater than their achievement during prior school experiences. Projected gains for the NLD_{exp} were not significantly different from their calculated growth prior to entrance into the learning strategies program.

3. What was the impact of the learning strategies intervention on length of stay and student/teacher satisfaction?

Length of stay data were obtained for all groups except the NLD_{rr} group. Table 4 provides the percentages of corpsmembers in each group whose average length of stay at the Center was (a) three months or less or (b) more than three months. No significant differences were found in length of stay among the four groups. Furthermore, the IRLD data support Job Corps Center information reporting the average length of stay as being approximately six months. The data indicate that intervention programs addressing learning problems of the LD population in Job Corps is not a primary factor in increasing the average corpsmember's length of stay in the Job Corps program. Apparently,

²A projected growth rate index is sometimes used to estimate increases in achievement over time. However, this index should be interpreted with caution.

factors other than the presence of a learning disability influence corpsmembers' decision to stay in the program.

Both teachers and students reported high satisfaction with the learning strategies intervention. Specifically, students completing the program were asked to rate how well they liked the program and whether or not they felt it helped them improve their academic skills. Both LD and NLD groups considered the program to be beneficial.

Teachers were asked to list the specific student behaviors which had changed as a result of the learning strategies program. Teachers reported improved student behaviors in reading, study skills, test-taking skills, and motivation and attitude. An overwhelming majority of teachers felt the learning strategies program should be continued at the Job Corps Center.

4. Was the achievement growth for corpsmembers who completed the learning strategies program different from that of corpsmembers who were not exposed to the program?

Table 5 presents comparative data for all groups on whom data related to reading achievement were obtained. The corpsmembers identified as LD_c (control group), who were not exposed to the learning strategies curriculum, demonstrated the least growth in reading performance, that is, one month of growth over three months. This represents a decrease in projected rate of growth compared to the LD_{exp} group who were exposed to the curriculum and whose projected growth rate was 2.1 years.

The NLD_{rr} students referred to the learning strategies program by their reading teachers demonstrated the greatest gains--nine months over a three-month period. The NLD_c group who were not exposed to the learning strategies curriculum showed greater reading achievement improvement than the NLD_{exp} group randomly assigned to the learning strategies program, but not as great as that of the NLD_{rr} group referred to the program. The LD_{exp} and NLD_{rr} groups demonstrated

the greatest gains in reading achievement followed by the NLD_c , NLD_{exp} , and LD_c , respectively.

The achievement growth rate for all corpsmembers studied is graphically presented in Figure 2. The existing Job Corps reading program appears to be an appropriate instructional approach for NLD corpsmembers not referred to the learning strategies program. In addition, those NLD_{rr} corpsmembers who have a reason and motivation to be in the learning strategies program do exceedingly well under the learning strategies intervention model. As suspected, these data suggest that no one model is sufficiently powerful to accommodate all corpsmembers and, thus, support other intervention data in the field of special education.

The established Job Corps reading program (Sullivan Reading Program) also appears to be appropriate for NLD low-achieving corpsmembers, that is, individuals obtaining a score of 8 or below on the RJS-1. The success of the Sullivan program with this population stems from the following components: highly controlled vocabulary, repetition, structure, active learner involvement, frequent corrective feedback, progression at learner's own rate, etc.--all of which have been shown to be effective ingredients in instruction of low-achieving students. For low-achieving students with higher ability, such as the LD students in this study, the program of choice clearly seems to be the learning strategies intervention approach plus the existing Job Corps program. In short, the learning strategies program is most effective for LD students in a Job Corps setting when coupled with intervention offerings already part of the existing Job Corps curriculum. Thus, learning strategies is not presented or advocated as a "total" program, but as a powerful link in a successful program for the learning disabled.

5. How is the learning strategies curriculum presented?

The learning strategies are individually packaged and designed to be self-instructional. Corpsmembers move through the materials at their own rate and are responsible for completing the appropriate worksheets, grading their own papers, and recording their own progress. Since the materials are self-instructional, they only require that the teacher serves as a monitor--hence the teacher-student ratio is manageable and reasonable.

6. How many days are required to complete the program?

The total group of participants in the experimental program included: (a) 169 corpsmembers identified at LD_{exp}, (b) 180 corpsmembers identified as NLD_{exp}, and (c) 40 corpsmembers referred by their reading teacher (NLD_{rr}). The average length of stay for all corpsmembers entering the program was 33 days. As illustrated in Table 6, the groups do not differ either in mean length of stay or in the range of days in the program. Corpsmembers spent one hour per day in the intervention program, for an average of 33 hours covering six weeks of class time.

7. What teacher training is required?

Teachers in the learning strategies curriculum must be knowledgeable of: (a) the materials, (b) concepts and rationale behind the learning strategies approach, and (c) principles of classroom organization and management. Teacher training at the Earle C. Clements Job Corps Center consisted of an intensive one-day workshop designed to provide two classroom teachers with the knowledge and skills necessary to manage the learning strategies program, i.e., the specific strategies, materials, slide-tape presentation of the learning strategies being taught in a high-school setting, the nature of the population to be served, as well as the identification procedures to be implemented. Weekly

on-site support during the first six months of the project diminished to bimonthly visits for the last 12 months.

8. Major conclusions drawn from the learning strategies intervention data.

Six major conclusions were gleaned from the University of Kansas IRLD data.

1. The University of Kansas IRLD learning strategies intervention effectively improved the academic achievement of LD corpsmembers.

2. The learning strategies intervention package linked with the existing academic program at the Earle C. Clements Job Corps Center was more effective for improving the academic achievement of NLD corpsmembers than the Center's existing reading program by itself.

3. Both teachers and students reported high satisfaction with the learning strategies program and recommended that it be continued at the Earle C. Clements Job Corps Center.

4. On the average, the learning strategies program can be completed in 33 hours.

5. The learning strategies program is easily administered within the framework of the existing program, using Job Corps-relevant materials.

6. Minimal teacher training is required to successfully implement the learning strategies program.

References

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Table 1
**Pre-Intervention Data on
 Corpsmembers in LD and NLD Groups**
 (Control and Experimental Groups)
 N = 479

	<u>\bar{X}</u>		<u>SD</u>		<u>RANGE</u>	
	LD	NLD	LD	NLD	LD	NLD
Age (in months)	215.4	216.5	17.3	21.0	182-252	182-264
Last Grades Completed	9.9	9.8	1.3	1.4	6-12	1-12
RJSI	9.4	9.6	4.2	3.8	0-23	1-12
<u>Raven's</u> Percentile	32.3	8.3	13.1	11.3	25.-75	0-75
Pre-SAT Reading	4.2	4.1	1.2	1.2	1.9-9.9	1.6-9.9
Estimated <u>Woodcock-Johnson</u> (Written Expression Cluster Score)	492.2	489.4	9.1	9.6	470-505	462-524
Probability of LD*	.856	.608	.178	.380	.53-.99	.0-.99

* Based on Self-Rating Checklist

Table 2

Pre - and Post - SAT Reading Measures
for
Corpsmembers Completing the Learning Strategies Program★

GROUP	Pre-SAT				Post-SAT				Mean Growth
	N	\bar{X}	SD	RANGE	N	\bar{X}	SD	RANGE	
LD _{exp}	36	4.1	.8	1.9-6.7	36	4.8	1.4	3.0-8.6	.7 years
NLD _{exp}	51	4.4	1.5	1.6-8.5	51	4.6	1.3	2.1-7.0	.2 years
NLD _{rr} ★★	40	4.8	1.1	2.0-7.8	40	5.7	1.1	3.3-7.4	.9 years

★ Data reflect those corpsmembers who completed all components of the learning strategies program.

★★ NLD are corpsmembers who were assigned from the remedial reading section to the experimental classroom for learning strategy instruction.

Table 3

Projected Growth in Reading Achievement

GROUP	Last Grade Completed	Pre-SAT Reading	Growth in Months/Year ^a	Post-SAT Reading	Growth in 3 Months	Project Growth for 9 months
LD _{exp}	9.7	4.1	.42	4.8	.7	2.1
NLD _{exp}	9.7	4.4	.45	4.6	.2	.6
NLD _{rr}	9.7	4.8	.49	5.7	.9	2.7

^aAverage growth in months/year based on Pre-SAT Reading divided by last grade completed.

Table 4
Average Percent of Days
in
Job Corps Program

GROUP	3 Months or less	More than 3 Months
LD _{exp}	45%	55%
Non-LD _{exp}	22%	78%
LD (control)	33%	58%
Non-LD (control)	50%	50%

Table 5.

**Pre- and Post- SAT Reading Measures
and
Projected Growth of Corpsmembers**

GROUP	Pre-SAT Reading		Post-SAT Reading		Mean Growth	Project Growth for 9 months
	N	\bar{X}	N	\bar{X}	\bar{X}	\bar{X}
LD _{exp}	36	4.1	36	4.8	.7	2.1
LD _{control}	19	4.2	19	4.3	.1	.3
NLD _{exp}	51	4.4	51	4.6	.2	.6
NLD _{rr}	40	4.8	40	5.7	.9	2.7
NLD _{control}	15	4.5	15	5.0	.5	1.5

Table 6

**Length of Stay (Days)
in Experimental Program**

GROUP	N	\bar{X}	RANGE
LD exp	169	33.9	1-92
Non-LD exp	180	30.7	2-75
Non-LD rr	40	34.5	7-91

Figure 1

Pre/Post SAT Reading Measures
for
 LD_{exp} NLD_{exp} NLD_{rr} Groups

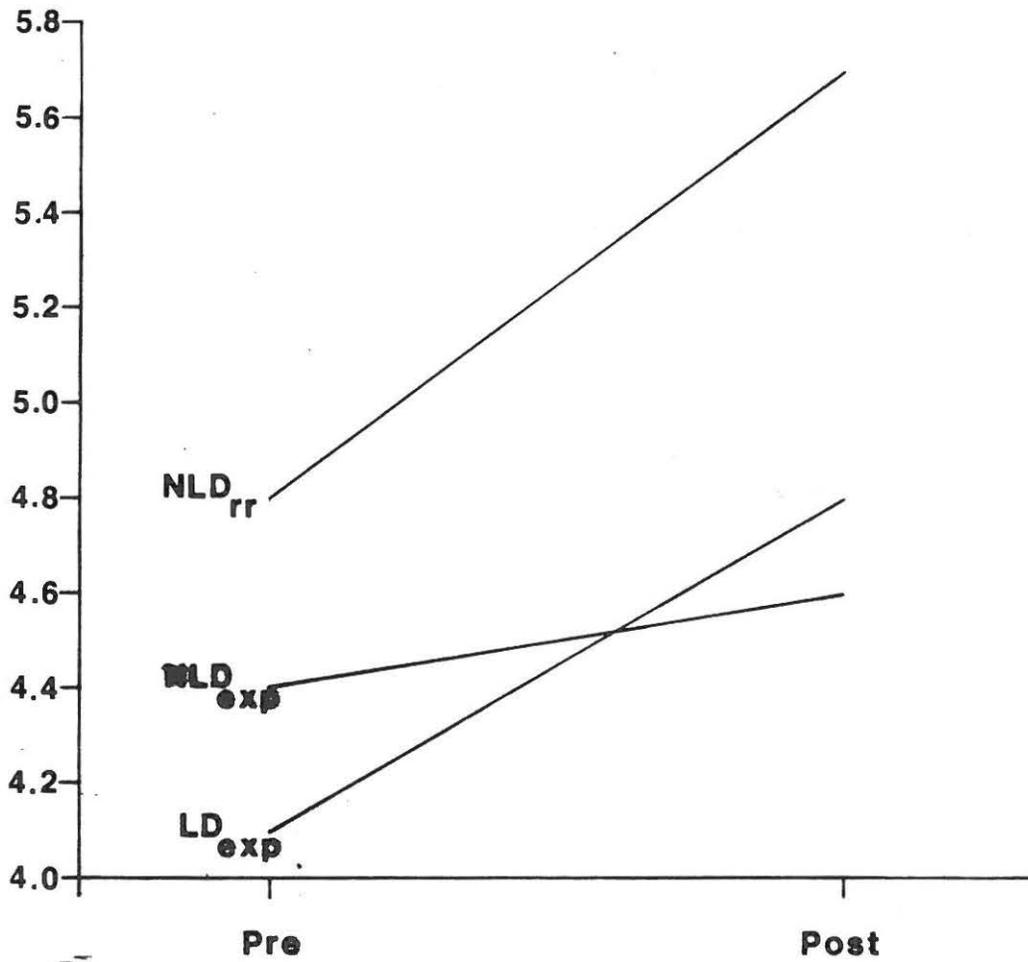


Figure 2

Pre/Post SAT Reading Measures

for

LD and NLD in Experimental and Control Groups

