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ABSTRACT

The report of the Individualized Learning for Adults (ILA) project reviews the history and development of the instructional system and focuses on the procedures, accomplishments, and results of the field testing conducted during 1971-72. Stressing mathematics and communication skills, the ILA system leads the adult learner to approximately ninth grade literacy. The mathematics curriculum begins with numeration-place value and ends with geometry-measurement. The communication skills program covers decoding or phonic analysis, handwriting, and reading skills. The following procedures are described: site selection, materials production and distribution, the experimental population, teacher training, and dissemination techniques. Using the Adult Basic Learning Examination (ABLE), evaluation results indicated that mathematics instruction was adequate and that communication skills instruction was suitable in six of the eight areas. Based on field testing data, the ILA curriculum has been redeveloped, teacher training materials successfully developed, and materials production improvement initiated. Student and teacher questionnaires, sample forms and an abstract of the final report are appended. (HW)

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FINAL REPORT

INDIVIDUALIZED LEARNING FOR ADULTS (ILA)

submitted by

RESEARCH FOR BETTER SCHOOLS, INC.
1700 MARKET STREET
PHILADELPHIA, PENNSYLVANIA 19103
(215) 561-4100

U.S. DEPARTMENT OF HEALTH,
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Robert G. Scanlon, Executive Director, RBS
Louis M. Maguire, Program Director, Career Education
Donald Deep, Project Director, ILA
Ethel Schmidt, Research Assistant, ILA
C. Van Youngman, Research Assistant, ILA

to the

BUSINESS MANAGEMENT UNIT
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TABLE OF CONTENTS

	PAGE
HISTORY OF PROJECT	1
PROJECT OBJECTIVES FOR FY 72	5
ILA: AN INSTRUCTIONAL SYSTEM	6
Description of ILA	6
ILA Mathematics	8
ILA Communication Skills	9
ILA Revision	10
PROCEDURES	12
Site Selection and Description	12
Materials Production and Distribution	14
The Experimental Population	16
Other ILA Sites	22
Teacher Training	23
Dissemination Techniques	24
EVALUATION	26
Results	27
Summary	52
RECOMMENDATIONS	53
CONCLUSION	56
APPENDICES	

HISTORY OF PROJECT

Underlying basic education is the assumption that only the literate adult can participate fully in present day American life. Literacy implies the ability to deal successfully with a variety of situations such as completing applications (e.g., for jobs, insurance, loans, driver's licenses, etc.), locating a specific office or department in a large building, recognizing the difference between a news article and an editorial in the local newspaper, reacting appropriately to letters relating to employment and to the school performance of one's child; the list could go on and on. Broaden the concept of literacy to include computational ability sufficient for simple tasks such as developing a budget, performing household carpentry, adjusting recipes, etc., and the number of such situations is greatly increased.

A survey of functional reading ability among adults in the United States, revealed that 4% of the U.S. population 16 years of age and older (approximately 4,649,000 adults) suffer from serious deficiencies in functional reading ability. Another 11% (approximately 15,535,000 adults) failed on more than 10% of the items; extreme effort would be required of this group to respond to the printed word in real life situations.¹

As educators have known for some time, the need for Adult Basic Education in the United States is so great that only extensive effort and massive funding can erase the problem.

¹The 1971 National Difficulty Index: A Study of Functional Reading Ability in the U.S. Study done by Louis Harris and Associates for the National Reading Center, Washington, D.C. ERIC Document Reproduction Serial #ED057312.

The problem is further complicated by the fact that although pre-literate or semi-literate adults may share approximately the same literacy level, differences in chronological age, aptitude, level of motivation, state of health (physical and mental), and life experience all combine to make each student unique.

Another variable that must be recognized is the teaching/learning situation itself. Students may attend adult education classes of their own volition or as a condition of receiving public assistance or parole. Classes may be held in the community or as part of a program for institutionalized adults. Student-teacher ratio and the level of teacher competence differ widely from one situation to another.

An instructional program capable of responding to the range of differences suggested above must be individualized. To make the best use of time and to maintain student interest, it is also necessary that each adult be taught only that which he does not already know.

In response to the conditions outlined above, Individualized Learning for Adults (ILA) has been designed by Research for Better Schools, Inc. (RBS) and is now completing its third year of field testing.

During fiscal year 1970, the Nevada State Department of Education was funded for the purpose of evaluating Individually Prescribed Instruction (IPI) in Reading and Mathematics for use in Adult Basic Education. IPI is an instructional system designed for use in elementary schools. Four major goals were achieved:

1. IPI reading and mathematics programs (more than 8,000 pages) evaluated for use in Adult Basic Education classes.

2. Minor revision of vocabulary and illustrations completed.
3. Revised material tested in two ABE classes.
4. Evaluation completed and reported.

During the following year, 1971, RBS was funded to adapt the IPI system for use in ABE classes. A total revision was completed, and the following goals were achieved:

1. Curriculum materials given wider field test with adults. Twenty-five sites used with 1,500 students: disadvantaged; rural, urban, migrant; male, female; young to old; black, white, Mexican-American, Oriental, Indian; employed, unemployed; voluntary, involuntary attendance.
2. Instructional materials refined and reduced in quantity. New decoding segment written for reading and an audio component added.
3. Manual for teachers written.
4. Evaluation completed and reported.

The first two years (70-71) did bring into focus definite advantages of utilizing an individualized instructional system such as ILA within an ABE setting. These advantages were:

1. A student can start in the program at any time and not have to wait for the beginning of a "session."
2. A student can attend class at his convenience and never have to worry about falling behind.
3. A student can master any particular skills without wasting time on materials for which he had neither need nor interest.
4. The student could transfer from one ILA center to another and still maintain continuity in moving smoothly toward his goal.
5. At any time it is possible to determine the exact amount of progress made by an ILA student from the time of his entrance into the program.
6. The direct interaction between student and teacher results in a more personalized learning situation.

- 4
7. Maximum student self-reliance is encouraged. After a short time in the program, most students can proceed on their own and thereby enable the teacher to work with more students than the traditional ABE class would allow.

PROJECT OBJECTIVES FOR FY 72

The objectives for fiscal year 1971-72 were:

1. Conduct a stringent field test of the revised ILA Mathematics and Communication Skills program in a maximum of five ABE sites.
2. Develop ILA teacher training materials and strategies. In this effort, use will be made of RBS' considerable experience in the area of teacher training.
3. Establish a dissemination model for the ILA system so that wider distribution will be assured. ILA teacher training institutes will be planned for and a viable system for distribution of ILA materials will be devised.

Procedures used to meet the foregoing objectives with the accomplishments and results are described on the following pages. As this third year is assessed, the conclusion has to be that Individualized Learning for Adults is making a contribution to the goal of literacy for adults.

ILA: AN INSTRUCTIONAL SYSTEM

Description of ILA

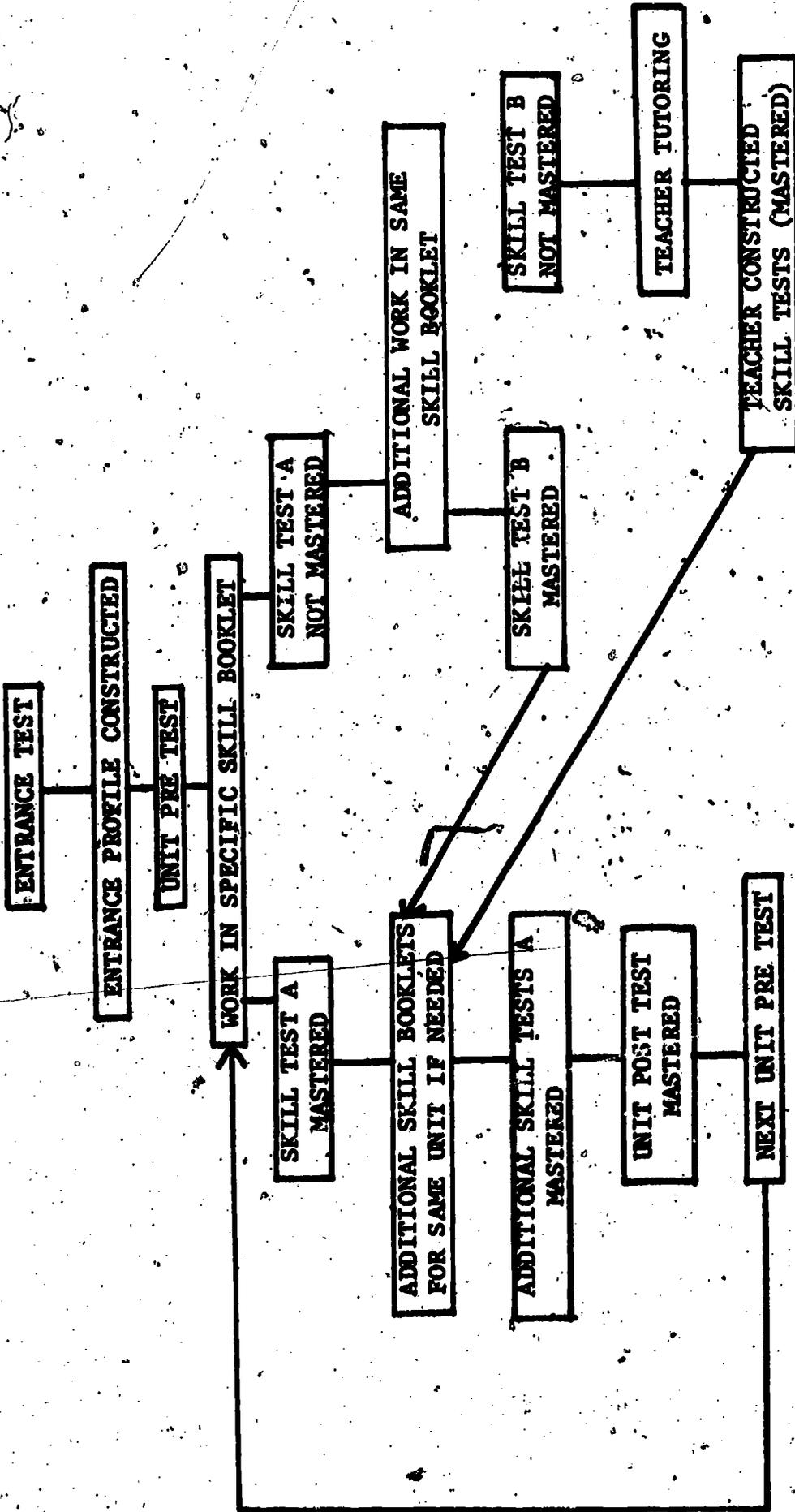
ILA is comprised of a Mathematics program and a Communication Skills program. Both sets of instructional materials are designed to lead a student to approximately ninth grade literacy. The curriculum consists of two carefully constructed continuums sequenced along two dimensions: area and level. Both programs contain criterion referenced tests and validated procedures for locating an individual in the continuums of each discipline. Once appropriately located, the ILA system permits the student to progress through the continuum at his own best pace. By means of a series of criterion referenced tests, he continues to demonstrate mastery of each performance objective until he successfully completes the continuum.

As a system for providing individualized instruction for adults, ILA includes:

1. Entrance Tests and a prescription technology designed to place learners in individually tailored instructional content.
2. Pre-Tests to determine what the learner already knows about the content being taught.
3. Instructional materials built around specified objectives for the content being taught.
4. Checkpoints in the curriculum to guide the learner in measuring his individual progress.
5. Post-Tests to measure the overall mastery of a unit of instruction.
6. A management system for teachers.
7. Training Manual in the use of the instructional and management system for teachers.

A flow of the operation of ILA may be found on page 7.

A FLOW OF THE I L A SYSTEM



IIA Mathematics

The areas of the mathematics continuum form a hierarchy that begins with Numeration-Place Value and ends with Geometry-Measurement. Within each area the learning sequence is specified by performance objectives. Objectives are divided into eight segments or levels, and arranged in ascending order of difficulty from A through H.

The chart below displays the organizational pattern. The intersection of area and level is known as a Unit and the numeral appearing there indicates the number of behavioral objectives specified for that segment.

AREAS	LEVELS								TOTALS
	A	B	C	D	E	F	G	H	
Numeration-Place Value	12	10	6	10	9	8	4	4	63
Addition-Subtraction	3	9	8	14	16	8	5	2	65
Multiplication-Division	0	0	11	11	10	13	4	2	51
Geometry-Measurement	0	5	7	12	10	12	7	6	59
TOTALS	15	24	32	47	45	41	20	14	238

Criterion referenced tests include Entrance Tests, Unit Pre-Tests, Unit Post-Tests and Skill Tests. Four Entrance Tests are designed to make a gross evaluation of each student's achievement in each area. Each test contains items ranging in difficulty from A through H. Twenty-nine Unit Pre-Tests and twenty-nine Unit Post-Tests are available to evaluate in greater depth the learner's mastery of specific performance objectives.

Two hundred and thirty-eight instructional booklets, one for each performance objective, make up the instructional component. Students are prescribed learning activities until mastery is achieved. In each booklet are two evaluative instruments, Skill Test A and Skill Test B, which serve to

monitor the learner's progress through each booklet.

ILA Communication Skills

There are three parts to this program:

1. Decoding or phonic analysis,
2. Handwriting, and
3. Reading Skills

The first of these, decoding or phonic analysis, concerns itself largely with the sound symbol relationships of the English language that have relevance to reading. Seventeen criterion referenced tests, eighteen instructional booklets and thirty-seven cassettes containing both testing and teaching tapes take the learner through this segment.

Fourteen handwriting booklets are available for students who wish to improve their handwriting. These booklets provide models in cursive writing. The objective of this section of ILA Communication Skills is serviceable, legible handwriting.

Reading skills are organized into eight areas that form a hierarchy beginning with word recognition, proceeding through comprehension, and ending with study skills. Four levels of difficulty (E through H) have been designated. The chart below displays this organizational pattern.

AREAS	LEVELS				TOTALS
	E	F	G	H	
Structural Analysis	3	4	3	3	13
Vocabulary Development	3	2	2	2	9
Literal Comprehension	3	4	4	3	14
Interpretive Comprehension	4	3	5	4	16
Evaluative Comprehension	2	2	4	3	11
Library Skills	3	2	3	4	12
Organizational Skills	0	3	3	2	8
Reference Skills	5	4	3	2	14
TOTAL	23	24	27	23	97

The numeral at the intersection of each area and level indicates the number of performance objectives specified for that unit.

Diagnostic instruments utilized include:

1. Eight Entrance Tests which sample the learner's performance in each level of the continuum.
2. Thirty-one Unit Pre-Tests and thirty-one Unit Post-Tests which are available for more precise evaluation of the learner's mastery of the performance objectives.

Ninety-seven instructional booklets comprise the instructional component.

In each booklet two monitoring devices, Skill Test A and Skill Test B, offer evidence for making instructional decisions.

ILA Revision

During FY 72, revisions in the curriculum and procedures were made based on weaknesses discovered in the 1970-71 implementation of ILA.

These included:

1. Applications area of the Mathematics Program.
2. Levels, I, J and K of the Communication Skills Program.

3. Tapes in the Communication Skills Program.
4. Number of forms needed to track student progress.

The Applications area of the Math program was withheld from the 1971-72 field test until it could be revised. Although this revision was not completed until May, 1972 due to limited staff size, it is now ready to be added to ILA Math. In this area there now are one Entrance Test, seven Unit Post-Tests, and 44 instructional booklets.

Levels I, J, and K of the Communication Skills program were also withheld pending revision. These objectives were rewritten and all testing and instructional materials at these levels in Structural Analysis, Vocabulary Development, Library Skills, Organizational Skills, and Reference Skills were revised. This revision resulted in three Entrance Tests, ten Unit Pre-Tests, ten Unit Post-Tests, and twenty-five instructional booklets. The three comprehension areas at these levels were not revised for reasons made clear in the section of this report entitled "Recommendations."

Teachers and students reported difficulty in understanding portions of the testing and teaching tapes used in the decoding piece of Communication Skills. Where necessary these tapes were re-recorded.

Teacher feedback from the field-test sites questioning the need for two forms to track student progress resulted in the combination of the Entrance Profile and the Periodic Profile. The resulting profile was then tried in one of the experimental sites and found to be most helpful. It has been included in the revised training manual.

PROCEDURES

The efforts aimed at fulfilling the three major objectives of this project involved:

1. Site selection and description.
2. Teacher training.
3. Dissemination techniques.
4. Evaluation.

The description of the sites, teacher training, and dissemination techniques may be found in this section. Since the evaluation was a major comprehensive undertaking, the objectives, procedures and results may be found in the next section.

Site Selection and Description

To conduct the ILA field test, RBS selected three sites representing diverse populations and physical settings. Each of the sites had a commitment to implement ILA and had used ILA in the past. A brief description of each of the sites is presented below.

Site #1 is an adult learning center in an urban setting in New Jersey. It is located in a center city motor hotel, the basement of which has been converted to classrooms. The rooms are attractive and pleasant, though not large. Classes meet five days a week from 9 AM to 3 PM and three evenings a week from 7 to 10 PM. The educational emphasis is on passing the General Education Development (GED) test and on English as a second language. Students

at this center are economically deprived and have had only limited opportunity for formal education. Many of the students receive public assistance since many are unemployed or have only low-paying, part-time jobs. Because of the limited space at this site, there were some problems with the shelving and retrieval of ILA materials.

Site #2 is in western Pennsylvania, also in a center city setting. It is located in a building that was formerly a vocational high school. Academic, vocational training, and ABE programs are presently housed in this building. The ABE program is conducted on the first floor utilizing space that was formerly a gymnasium. Students tend to be disadvantaged. Since a wide variety of educational opportunities exist at this site, the 400 students in attendance are motivated to attend for many different reasons. Agencies which refer students to this site include the Veterans Administration, Work Incentive Program, Concentrated Employment Program, Neighborhood Youth Corps, Manpower Development Training, and Bureau of Vocational Rehabilitation Classes meet daily from 8:00 AM to 4:30 PM Monday through Friday.

Site #3 is in Clark County, Nevada. ILA was to be implemented in three ABE classes, each located in a different facility, each operating in the evenings. As will be explained later, circumstances prevented the implementation of the 1971 edition of ILA in the ABE classes. These classes, however, did continue to use the 1970 edition.

All three sites (#1,2,3) had used the 1970 edition of ILA last year and were enthusiastic about the prospects of using the 1971 edition.

Materials Production and Distribution.

ILA funding for fiscal year 1971-72 was approximately one-half of that requested in the funding proposal. This funding cut-back created serious problems for the entire ILA workscope, especially in regard to the production and distribution of materials, and this needs to be explained in detail.

A necessary pre-condition for the successful completion of the ILA workscope was that the instructional materials would be produced in sufficient quantity, within cost constraint, and be distributed to the participating sites on time. When the original funding proposal for fiscal year 1971-72 was prepared, it was firmly believed that this pre-condition would be met. Based on its experience with Government Services Administration (GSA), which was to do the printing, RBS had calculated the cost and time of producing massive quantities of materials. When the funding cut-back came, RBS reduced the quantity of materials and prorated the cost of production on the basis of that reduction. RBS then discovered, after much work, that GSA is advantageous in the printing of materials only when huge amounts must be printed. When the bids came back from GSA for the printing of the reduced amount, RBS learned that it did not have sufficient funds to cover the printing costs as projected by GSA. In other words, the budget could not cover the cost of printing the minimum amount of materials desired by RBS to conduct a field test. The net result of this was that a material production problem of great magnitude was created.

In an attempt to accomodate the funding cut-back, each of the three sites agreed to reduce their experimental population to fifty (50) ABE students who would use the 1971 edition of ILA Mathematics and Communication Skills. After exhausting other printing alternatives, RBS made the following arrangements for the printing of the materials:

Site #1 had Communication Skills printed for its own use through a Regional Educational Improvement Center.

Site #2 agreed to print Communication Skills and Mathematics for its own use, and Mathematics for Site #1.

Site #3 agreed to print both Communication Skills and Mathematics for its own use.

All of these arrangements were not satisfied within the cost and time constraints put on by RBS. Estimates of printing capability were overly optimistic, and printing took much longer than had been anticipated. In the course of printing ILA Mathematics, Site #2 found its collating equipment inadequate. When its press broke down just as Mathematics was completed, Site #2 decided that it was best not to tackle Communication Skills. As a result, only Mathematics was implemented in Site #2, and because of delayed Math production, Site #1 was unable to start ILA Math until May.

Printing problems plagued Site #3 also. Its Coordinator of Adult Education had on hand an adequate supply of the 1970 edition of ILA which he continued to use. Four levels (E-H) of the 1971 edition Communication Skills were delivered to him in January, 1972, but he decided to wait for the decoding material (A-D) before implementing Communication Skills. The decoding segment of ILA Communication Skills and the total Math program did not arrive at Site #3 until April. Since its ABE classes close for the summer on May 30, the Coordinator decided not to use the experimental program until the 1972-73 school year.

The Experimental Population

A. Students

As a result of the printing and distribution problems described above, the experimental population was reduced from the expected 150 to 101 ABE students. Of the 101 students, 19 came from Site #1, 70 from Site #2 and 12 from Teachers' College.² Of the total, 64 were male and 47 female; 54 were black, 47 white, one oriental, and nine "other"; and 69 were younger than 31 years, 36 were 31 years old or older, and six declined to report their age. Table I, page 18, displays the population by age, race, and sex.

The amount of formal schooling for the experimental population ranged from grade three to college graduate. The greatest cluster occurred at grade ten, which 28 students reported completing. Table II, page 19 displays the last school grade completed according to race and sex.

Twenty-three students were employed full or part-time. Table III, page 20, gives the titles of the jobs that they held according to race and sex.

B. Teachers

Biographical information obtained from the six male and five female ABE teachers showed seven white, three black, and one not indicating his race.

²Due to the elimination of Site #3, Clark County, Nevada, as an experimental site, the students from Teachers' College, Columbia were added to the experimental population.

Four teachers were less than 30 years old, six between 30 and 39, and only one on the 40-49 year age group. All 11 teachers were college graduates; ten had less than four years experience in adult education and one had less than eight. This information is displayed in Table IV, page 21.

TABLE I

ABLE POPULATION: RACE, SEX, AGE

Age Span	BLACK		WHITE		ORIENTAL		OTHER		Totals
	Male	Female	Male	Female	Male	Female	Male	Female	
17-20	3	5	3	4			2		17
21-30	13	9	20	8			2		52
31-40	9	5	3	3	1		1		22
41- +	3	4	2	2			1	2	14
Age not given	2	1	2				1		6
Totals	30	24	30	17	1		3	6	111



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TABLE II
FORMAL EDUCATION OF ABE POPULATION

Grade Completed	Black		White		OTHER	TOTALS
	Male	Female	Male	Female		
3	1					1
6	1	1		1		3
7	2	1			1	4
8	4	2	3	1		10
9	3	2	7	7		19
10	7	4	11	4	2	28
11	6	9	4	1	1	21
12		2	1	1	1	5
14					1	1
not reported	6	3	4	2	3	18
Totals	30	24	30	17	9	110

(1 Male Oriental Student - College Graduate)

TABLE III
 JOBS HELD BY EMPLOYED ABE STUDENTS

BLACK		WHITE		ORIENTAL		OTHER	
Male	Female	Male	Female	Male	Female	Male	Female
Guard	Nurses' Aide	Steel Furnace Assemble	Pantry Worker	Mechanical Engineer		Information Clerk	Counselor
Equipment Operator		Wheeler Vehicle Mechanic	Community Worker			Counterman	Counselor's Aide
Laborer		Guard					
Mechanic		Postal Clerk					
Construction Worker		Roofing & Construction					
Security Guard		Ladies' Sportwear Pattern Maker					
Butcher							
Mail Handler							
Plumber							



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TABLE IV

**BIOGRAPHICAL INFORMATION FOR 11 ABE TEACHERS
YEARS OF EXPERIENCE IN ADULT EDUCATION**

Degree Held is Given Beside Years of Experience

Chronological Age Span	Race Not Given		Black		White	
	Male	Female	Male	Female	Male	Female
20-29					3-4(BA)	1-2(BA) 0-1(BA) 0-1(MA)
30-39	1-2(BA)		0-1(MA)	3-4(BS)	0-1(BA) 2-3(BA) 0-1(BA)	
40-49				4-8(BA)		

Other ILA Sites

The 1970-71 field test of ILA took place in 25 sites. When funds were reduced for the 1971-72 field test, the number of sites was reduced from 25 to three. However, many of the additional sites did continue to implement ILA at their own expense and provide RBS with evaluation data. The other sites which provided data to RBS were:

1. Three correctional institutions,
2. ABE class at Teachers' College, Columbia University, and
3. Three remedial education programs for secondary students.

Reports from each of the three situations will be presented in the Evaluation section of this report.

Teacher Training

Once the sites had been identified and the individual responsible for the implementation of ILA at each site had indicated a willingness to cooperate with RBS in this effort, the priority was teacher training. Basic training materials prepared were a manual of ILA operational and research procedures and a volume of demonstration materials including some charts and diagrams for use with an overhead projector.

Site #1 had access to a Regional Educational Improvement Center. Through the cooperation of this regional group, the Director of ABE in the State Department of Education, and RBS, it was decided that all of the ABE sites in the southern part of that state would use ILA. However, only Site #1 was to supply the experimental population and receive direct assistance from RBS. To direct the training activities, the Regional Center employed a coordinator who organized training sessions and visited all sites in that state on a regular schedule. This coordinator was a most able man, an elementary school principal whose school was using Individually Prescribed Instruction. All ILA teachers from this area attended training sessions during the first week of November. Staff members from RBS were directly involved in planning and carrying out these training sessions.

The RBS Director of the ILA Project assumed the responsibility for training sessions at Site #2. Two teachers were trained and the RBS Director assisted in the first week of implementation of ILA Math.



The Coordinator in Site #3 had worked with ILA since its inception and therefore wished to train the teachers at that site. Again since Site #3 did not implement the 1971 edition, no estimate of training success can be made. All data received from this site pertained to the 1970 edition of ILA and therefore was discarded.

RBS staff members offered consultative help to Site #1 and Site #2. In both sites teacher comfort seemed high. Teachers were always eager to discuss their work and often offered suggestions for improving ILA. Occasionally each consultant found it necessary to reinforce ILA procedures. The Head Administrator at each site expressed satisfaction with training procedures.

After the training was completed, it was decided to rewrite the ILA manual and to combine the rewritten version with the supplementary volume. The new training volume includes a comprehensive description, operations and objectives of the Mathematics and Communication Skills Programs, directions for administering and examples of diagnostic instruments, and forms for inventory control. Utilizing these materials, teacher training can be completed in two days. A field trial of this new version was conducted in July, 1972, with fifteen ABE instructors. The results were a successful, smooth implementation of the program.

Dissemination Techniques

At the start of the ILA project in 1970, the assistance of all fifty states

was sought to cooperate in the development of ILA. Twelve states responded so positively that a system of nationwide ABE sites was established. The success of these sites was informally communicated and as a consequence, approximately 350 sites inquired about ILA for their own use. It would be relatively easy to fill all these requests and establish a functioning ILA dissemination program once the issue of printing and distribution is resolved. It had been planned to utilize the twelve cooperating states to set-up demonstration sites, but lack of funding made this impossible for fiscal year 1971-72.

Prior to the establishment of a dissemination network, the major problem of printing and distribution had to be solved. With the purpose of finding a publisher to print and distribute ILA materials in Mathematics and Communication Skills, RBS was host at a Publishers' Meeting on January 25, 1972. At this meeting, ILA Mathematics and Communication Skills programs were presented and copies of a Request for Proposals were distributed. A list of publishers' representatives attending the meeting and a copy of the Request for Proposals are included in Appendix A. Although conversations are still in progress, to date nothing decisive has resulted from the meeting.

If a publisher is willing to print and distribute ILA materials, a dissemination plan could be initiated. The first step would be to conduct national teacher training involving two ten day institutes in different parts of the country. Participants would be the decision-making administrators of Adult Basic Education with a maximum of two per state training institute or one hundred participants. The outcomes of the institute could be one hundred demonstration centers in the fifty states. Each administrator would make a commitment to incorporate the ILA programs in a single school or district basis.

EVALUATION

The design of the overall evaluation of the project included the following objectives:

1. To describe experimental sites and population.
2. To determine whether the scope of ILA was broad enough to serve the needs of the experimental population.
3. To determine the date and amount of progress of students working in the two programs.
4. To determine if students using ILA are prepared to pass the General Education Development (GED) Test.
5. To appraise the student's attitude toward ILA materials and procedures.
6. To identify sections of the programs needing revision.
7. To keep abreast of evaluation studies conducted at other sites.

The information needed for the evaluation of ILA was collected in the following manner:

1. At each site the administrator was asked to complete a form describing the site (See Appendix B, page 1).
2. Each teacher was asked to complete the "Teacher Biographical Information" form (See Appendix B, page 2).
3. Students were asked to complete (with teacher assistance when necessary) the "Participant Information" form (See Appendix B, page 3).
4. At the end of 30 hours of work, teachers were asked to send to RBS a copy of the ILA Entrance Profile and a Periodic Profile Record for each student. (See Appendix B, pages 5, 6, and 7). These records were designed to provide information relative to the rate and amount of student progress through the continuums.
5. All users of ILA material were encouraged to use the Error and Problem Report as often as desired (See Appendix B, page 8).

6. Teachers were asked to use the Termination form as needed (See Appendix B, page 9).
7. Teachers were asked to administer the Adult Basic Learning Examination (ABLE) test to ABE students. The letter asking that this test be administered contained the following instruction:

Students working at Levels A-D (inclusive) take Level I.

Students working at Levels E up take Level II.

Please have students complete the information on the small white sheet stapled to the front page of each booklet. Each student should also write his name, date of first sitting for the test, and his teacher's name on the back page of this booklet. Beside Group please have him enter the total number of hours that he has worked in the ILA programs.

Students working only in ILA Communication Skills will take Vocabulary, Spelling and Reading sections only.

Students working in ILA Math will take Computation and Problem Solving only.

Students working in both ILA programs will take the whole test.

Tests will be scored at this office. Please send completed tests back as soon as possible.

8. Teachers were asked to administer a "Student Questionnaire." In order to avoid any reading problem, teachers were asked to read the questions aloud and have each student answer each question by circling "yes" or "no" on a response sheet (See Appendix B, pages 10 and 11).

Results

A. Suitability of ILA to Experimental Population

The first step in evaluating student progress in ILA was to determine whether the scope of ILA was broad enough to serve the needs of the population of this project.

Criterion referenced entrance tests are administered to each student prior to instruction. Entrance tests present the student with items that sample the behaviors designated for each level of four continuums in ILA Math and nine continuums in Communication Skills. A separate score is computed for each unit of each continuum. A student who correctly completes between 20 and 80% of the items in a unit is considered "placed," ready to receive instruction, in that unit. A student who achieves a score of 80% or higher in a unit is said to have achieved mastery of that unit.

Entrance scores were available for 46 students in Communication Skills. Site #1 provided information for 35 of the 46 students. The data for the other 11 students came from Teachers' College, Columbia University, which operated an evening ABE class offering ILA Math and Communication Skills in conjunction with their Life Skills Program. Further description of the Teachers' College site is given in the section Other Evaluative Data.

Of this group of 46 students, 20 (43%) placed in the decoding segment. Students testing into decoding do not take entrance tests in the remaining continuums; so mastery of decoding becomes the prerequisite for each continuum displayed in Figures 1, 2, 3, and 4. Further examination of those Figures shows that one student demonstrated mastery of the entire Vocabulary Development continuum, two of Literal Comprehension, and two of Organizational Skills. In both Structural Analysis and Vocabulary Development a high proportion of students placed at level H (23.3% in SA and 34.9% in VD). There is no adequate room for growth in the comprehensions, Literal, Interpretive, and Evaluative, and in the Study Skills, Library, Organizational, and Reference.

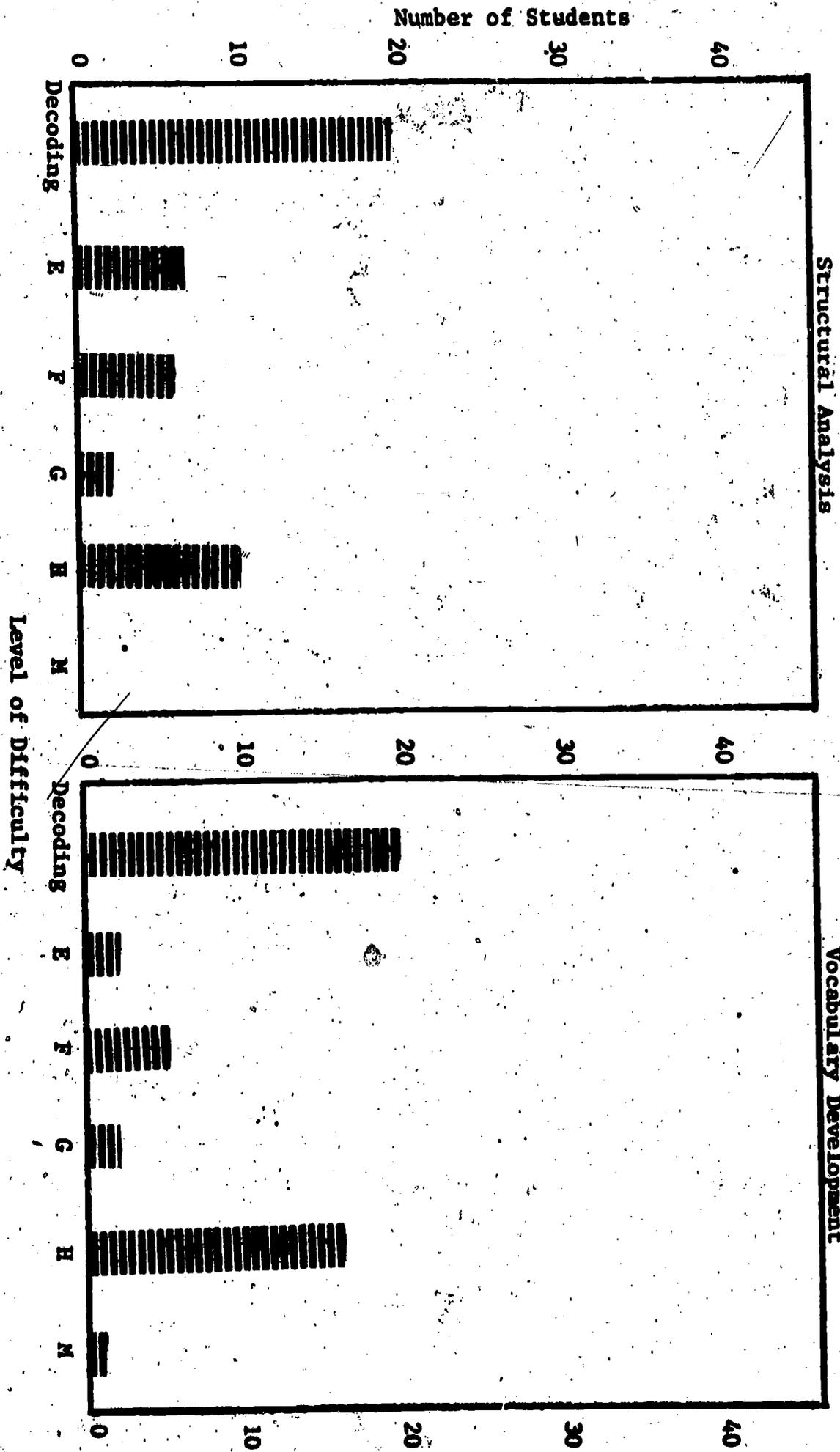
To conclude, in Structural Analysis and Vocabulary Development, some students tested so close to the end of these areas that extension seems desirable. All other Communication Skills areas were shown to be appropriate for this test population.

Entrance scores were available for 76 ABE students in Mathematics. Scores for 65 students came from Site #2 and the Teachers' College, Columbia University, site provided data for 11 students. No student demonstrated mastery of a Math continuum. Students were dispersed throughout the continuum with the greatest numbers clustering as follows: 43.4% at B level of Numeration-Place Value, 26.3% at E level of Addition-Subtraction, 69.8% at C level of Multiplication-Division, and 56.6% at C level of Geometry-Measurement. Figures 5, 6, 7, and 8 display entrance information for all 76 students. It can be readily seen that the range of ILA Math was adequate for these students.

FIGURE 1

IIA COMMUNICATION SKILLS

Entrance Status of 46 ABE Students

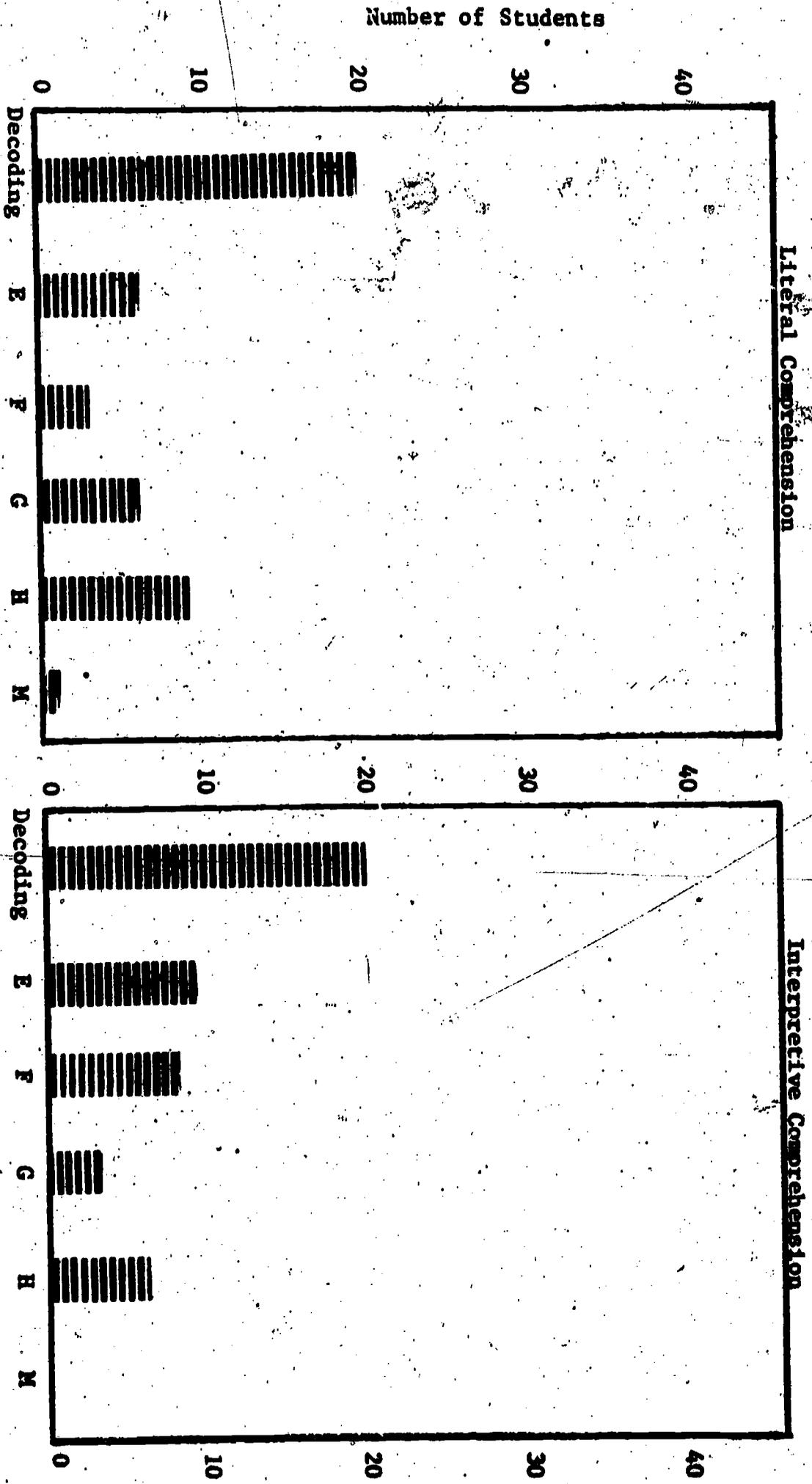


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FIGURE 2

IIA COMMUNICATION SKILLS

Entrance Status of 46 ABE Students

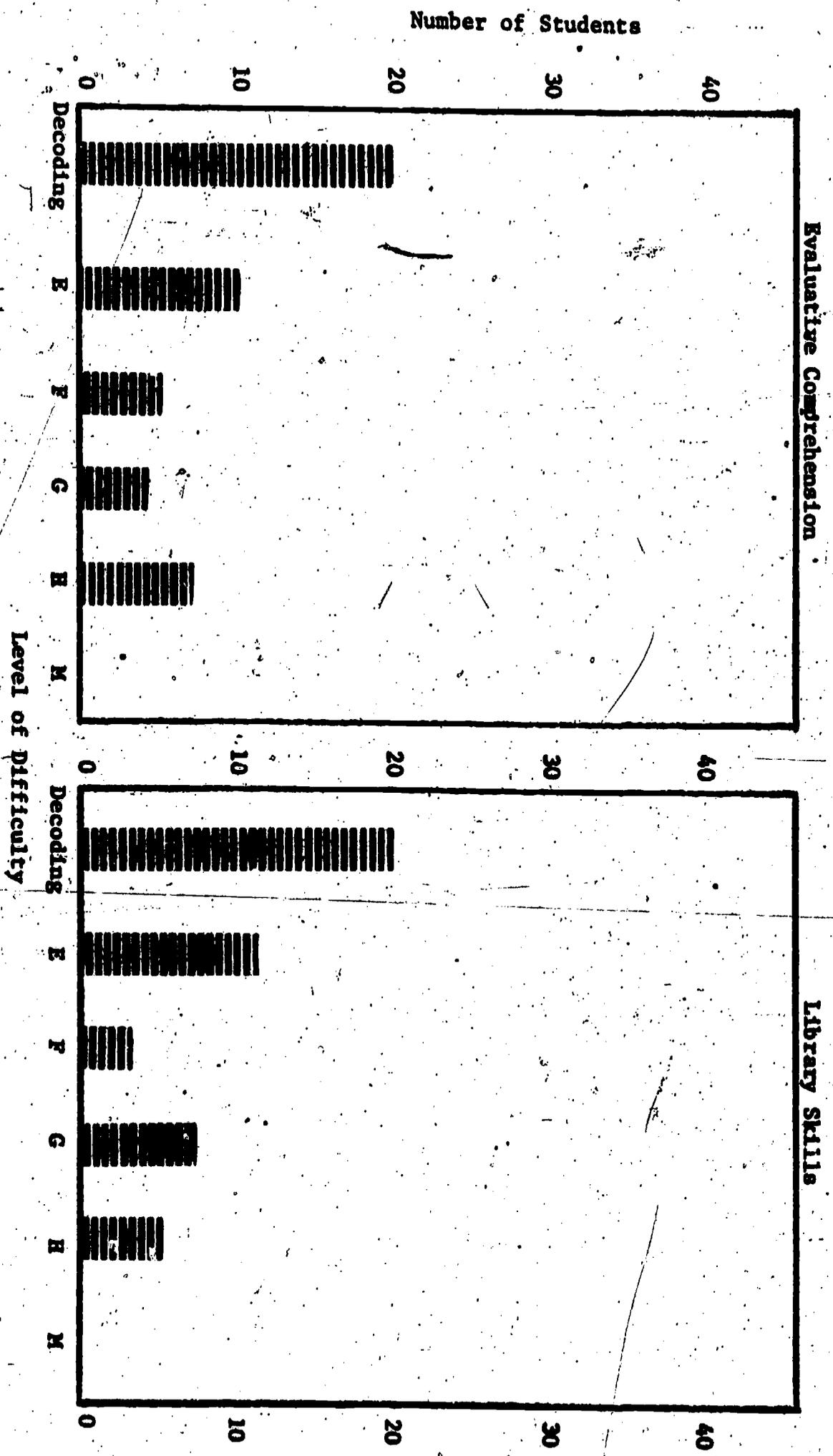


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FIGURE 3

IIA COMMUNICATION SKILLS

Entrance Status of 46 ABE Students BEST COPY AVAILABLE



Number of Students

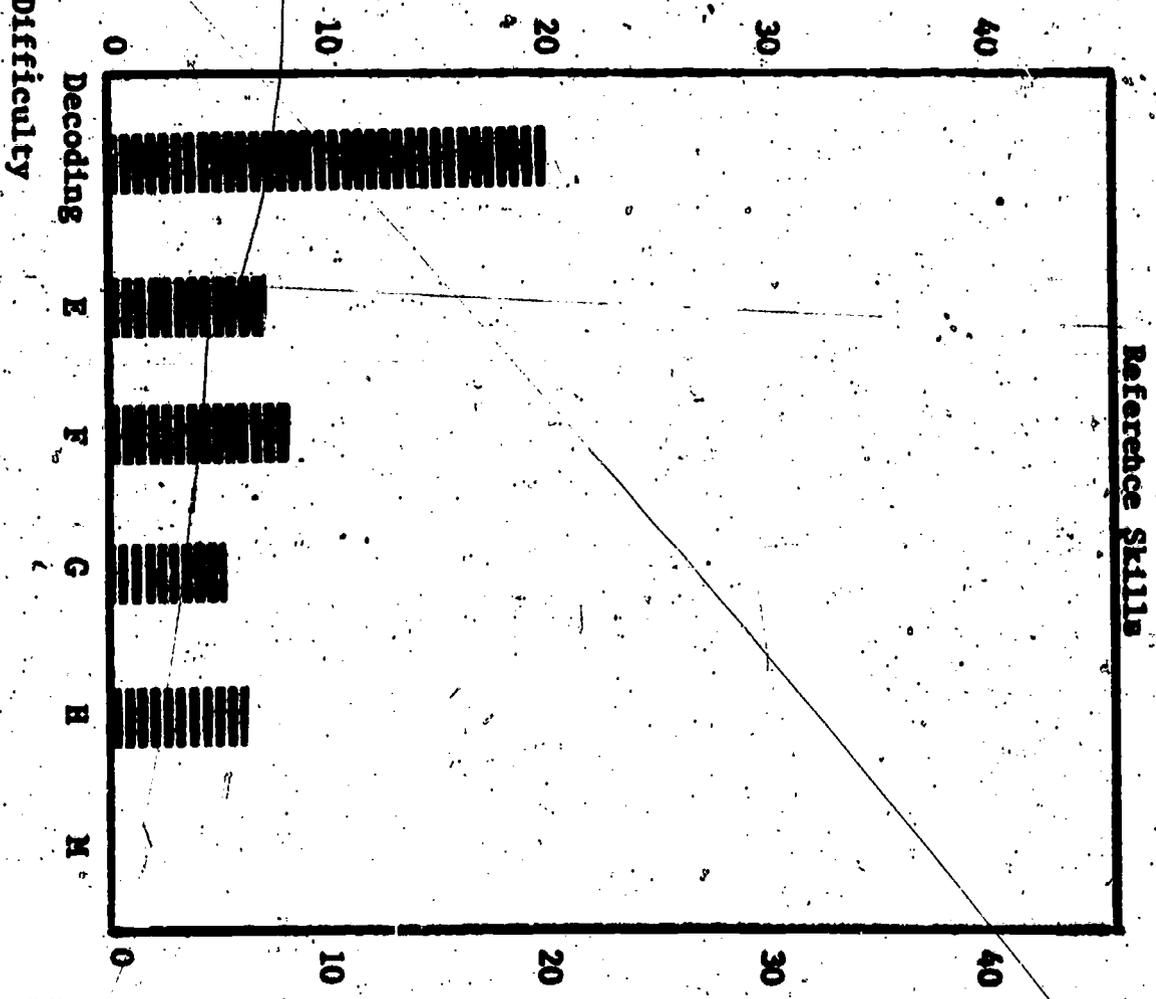
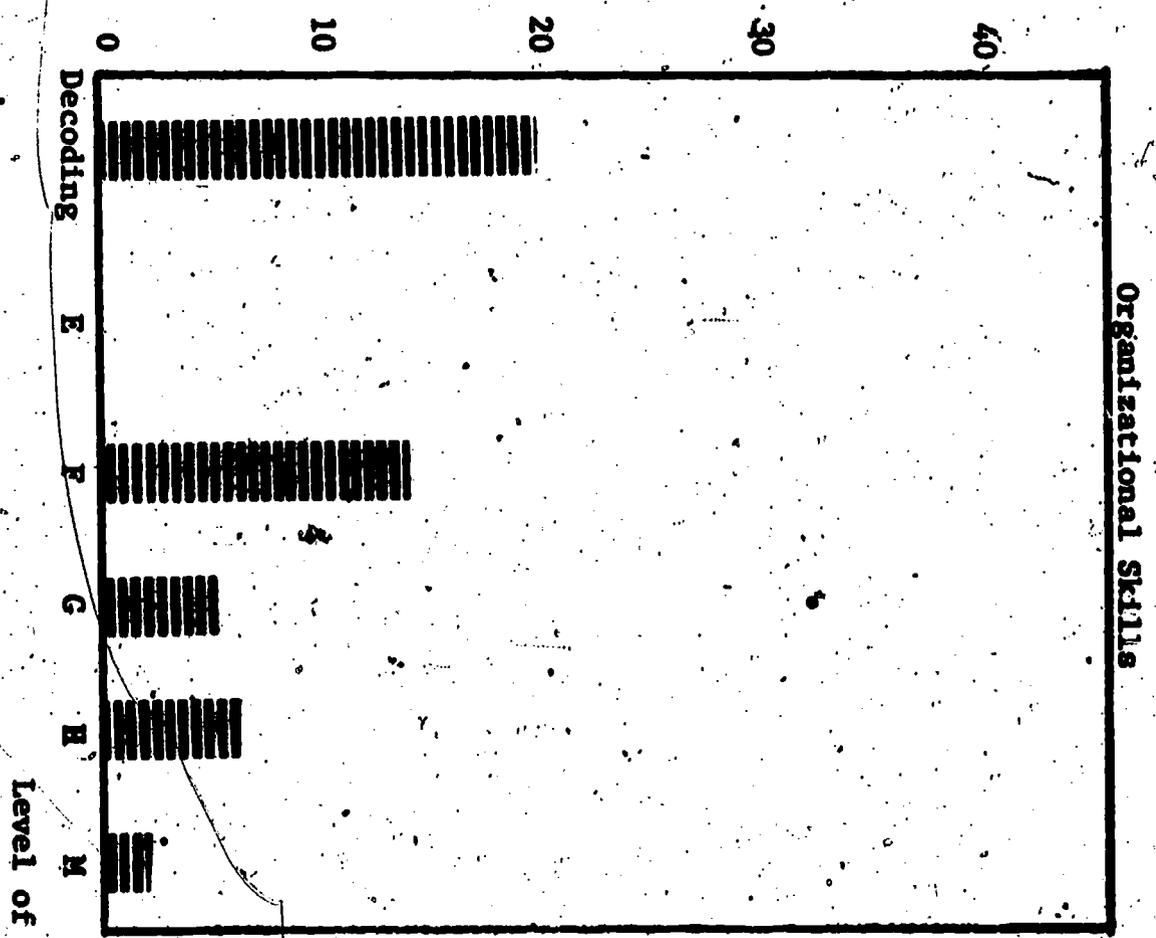


FIGURE 4

IIA COMMUNICATION SKILLS

Entrance Status of 46 ABE Students

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FIGURE 5 ILA MATHEMATICS: ENTRANCE STATUS OF 76 ABE STUDENTS
Numeration-Place Value

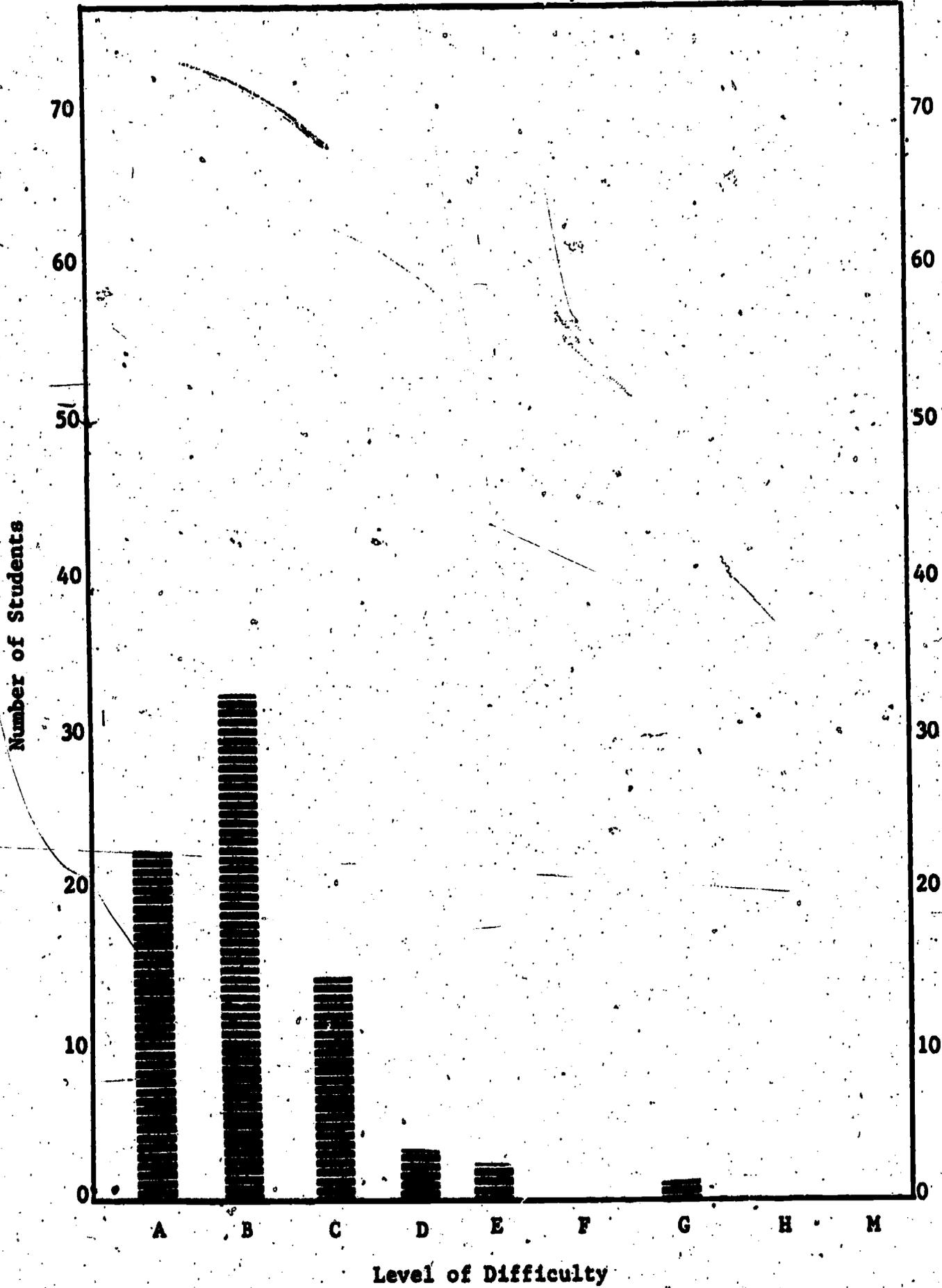
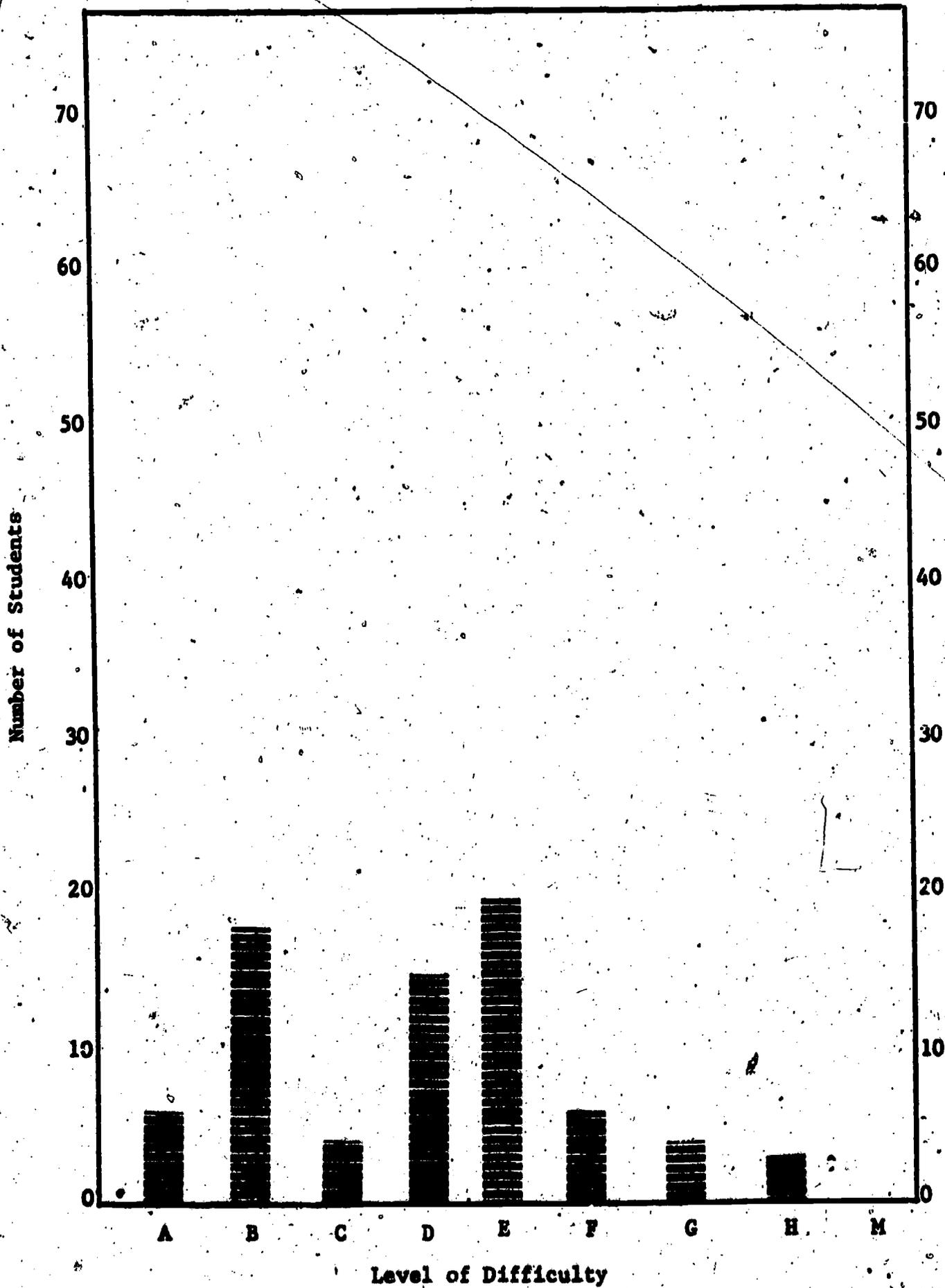


FIGURE 6 ILA MATHEMATICS: ENTRANCE STATUS OF 76 ABE STUDENTS

Addition-Subtraction



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FIGURE 7 ENTRANCE STATUS OF 76 ABE STUDENTS

Multiplication-Division

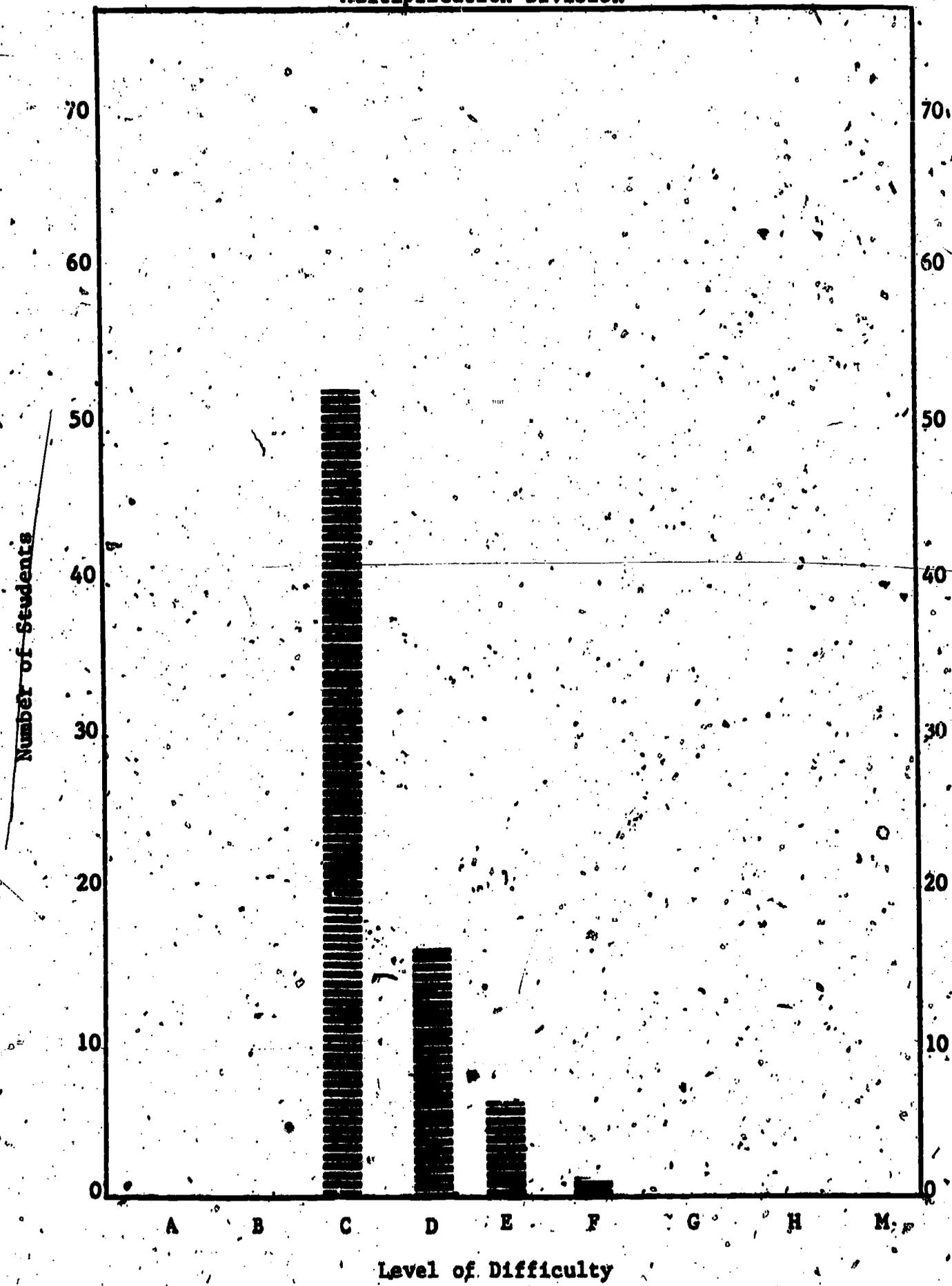
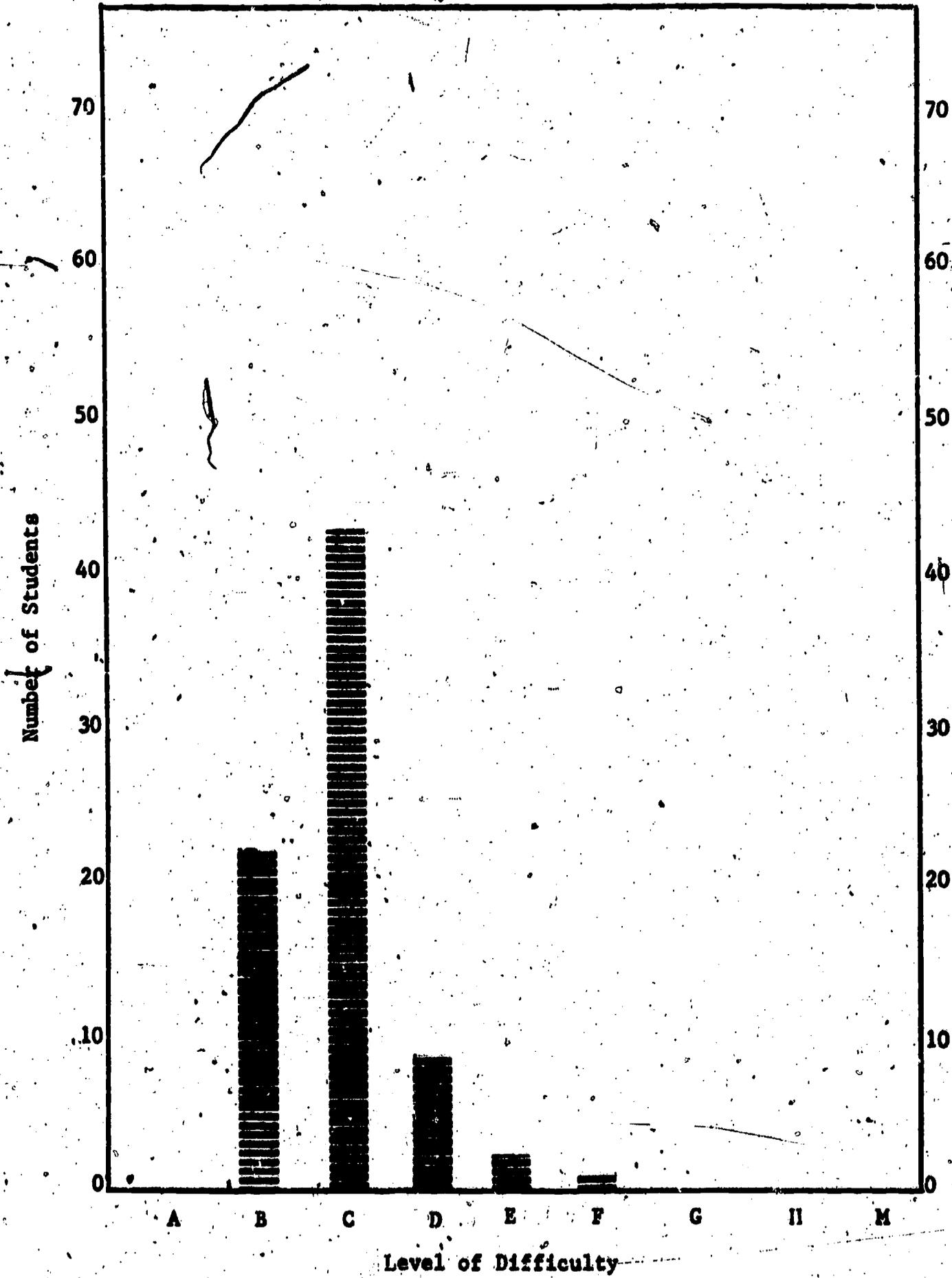


FIGURE 8 ENTRANCE STATUS OF 76 ABE STUDENTS

Geometry-Measurement



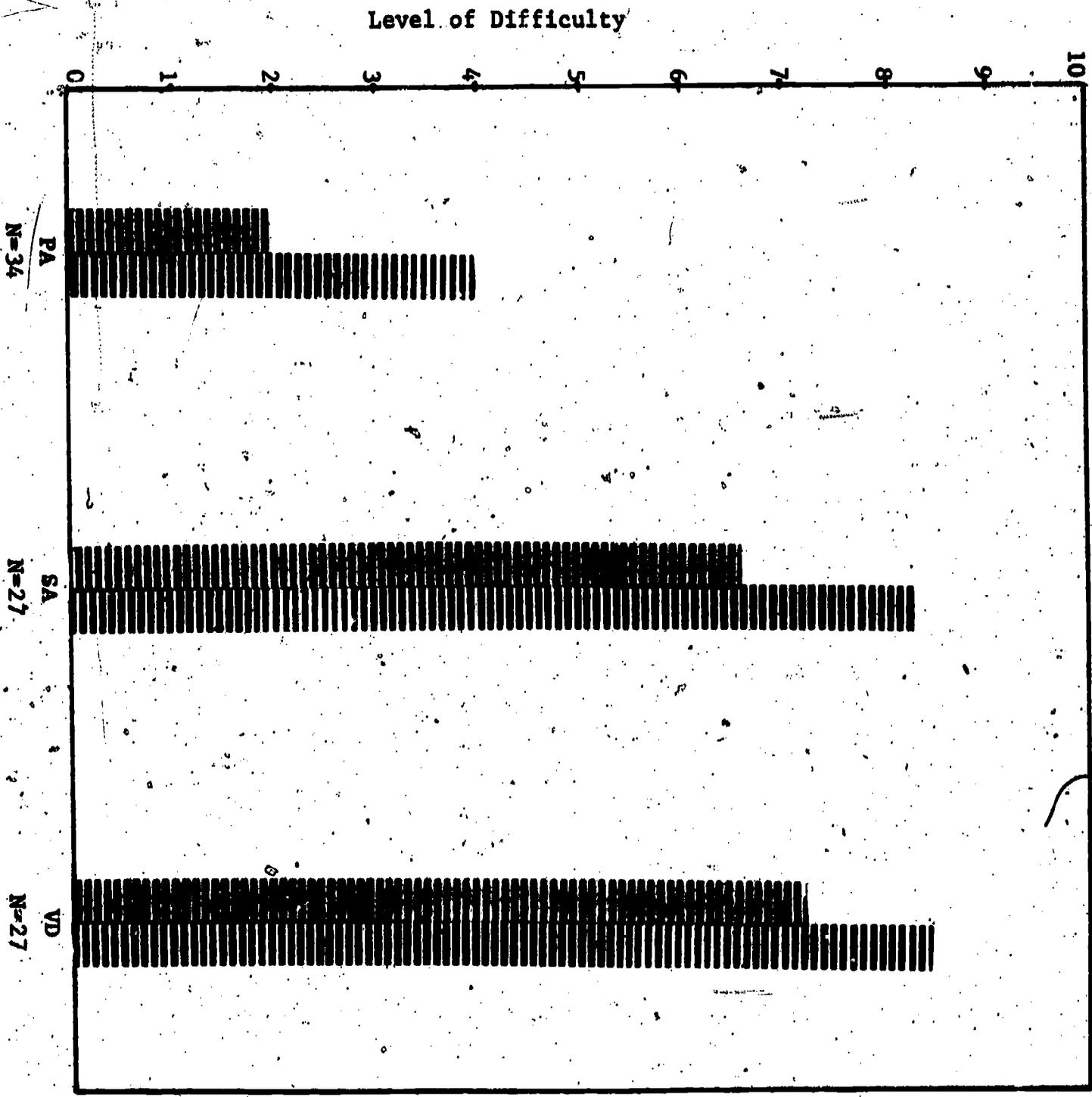
B. Rate and Amount of Progress

After determining that the instructional program was suitable for use with the test populations, the next piece of information sought was how far and how fast were students able to move through each continuum.

Communication Skills. Each level was given a numerical equivalent A-1, B-2, C-3, D-4, M-5, E-6, F-7, G-8, H-9, M-10. Mastery appears twice, once at the close of the decoding segment and again after level H. The entrance level, the number of hours worked in the program, and the last level worked were recorded for each student for whom all three pieces of information were available. If all three pieces of information were not available, the data were not used. For this reason the N for each area such as PA or SA, varies from either 34, 27, or 26. Of the students comprising the N of 34, 24 were from site #1 and ten were from the Teachers' College site. Of the students comprising the N of 27, 17 were from Site #1 and ten were from Teachers' College. The N of 26 represents 16 from Site #1 and again ten from Teachers' College.

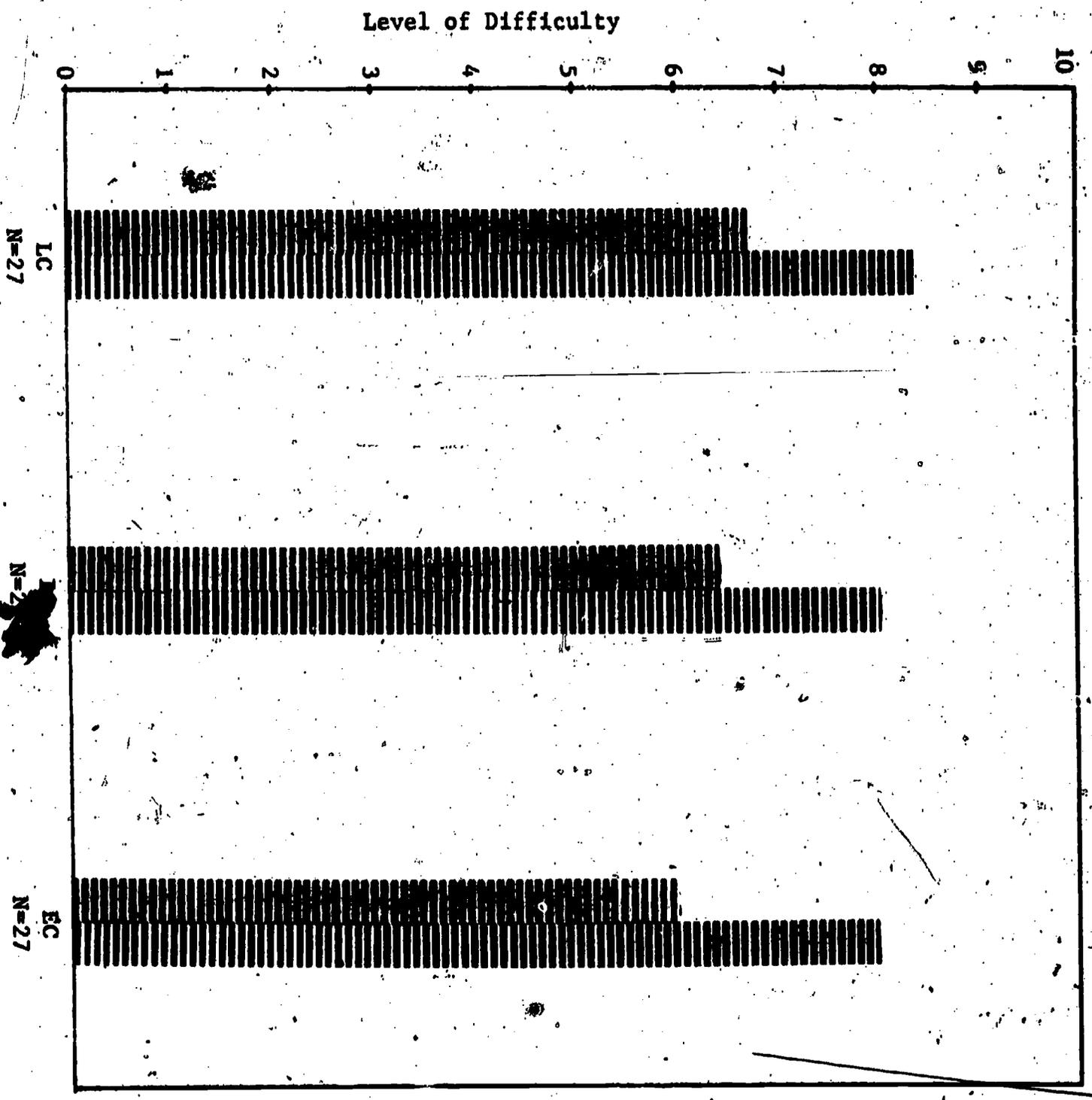
From the data an average entrance level, an average closing level, and an average number of hours worked were computed. Figures 9, 10, and 11, report these data. The data revealed that the students did progress through the areas of ILA Communication Skills at a fairly even rate with an average of approximately 1.5 levels in all areas per 33 working hours.

FIGURE 9 IIA COMMUNICATION SKILLS: AVERAGE STUDENT ACHIEVEMENT AT ENTRANCE COMPARED WITH AVERAGE STUDENT ACHIEVEMENT AFTER 33 HOURS



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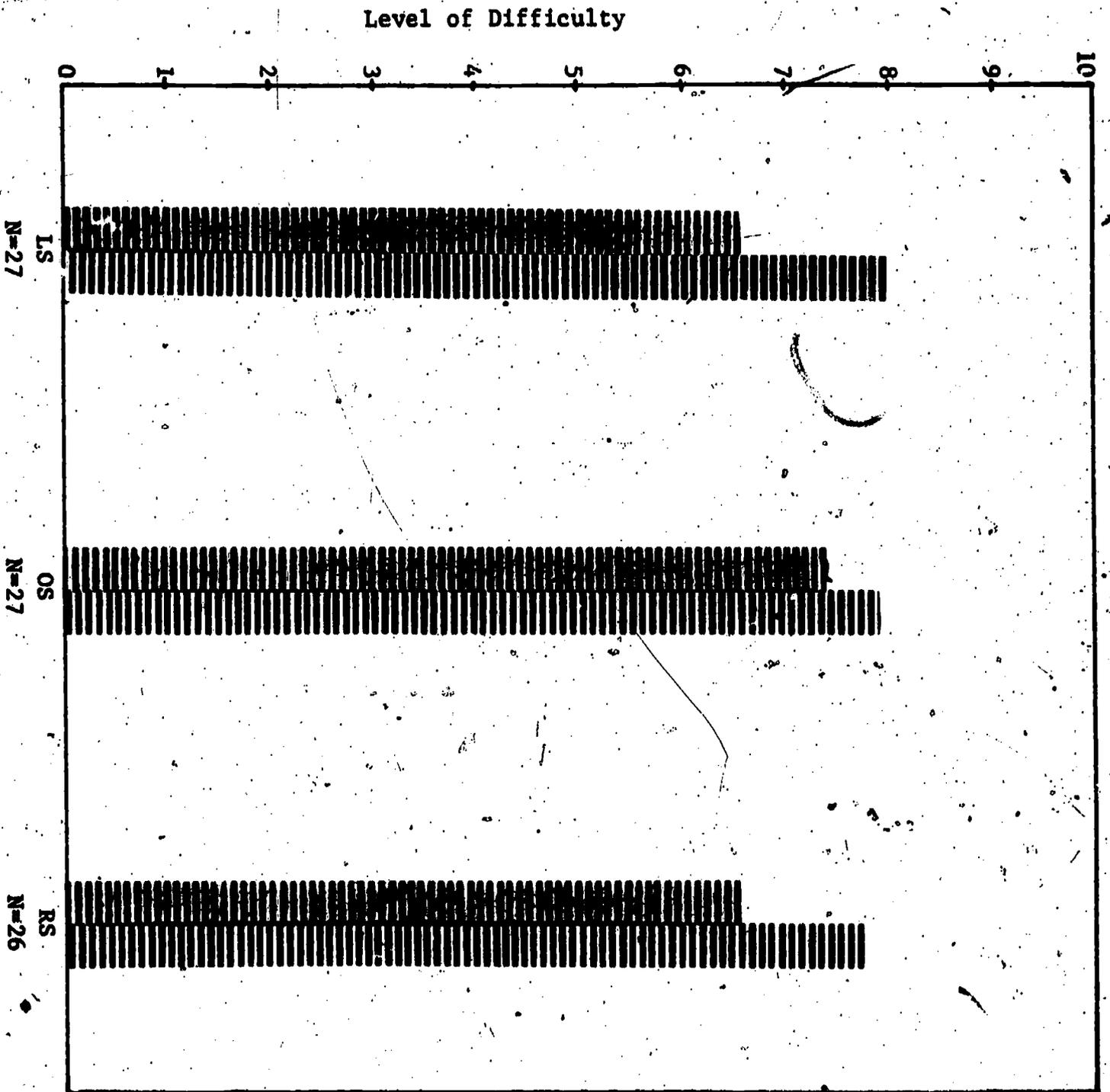
FIGURE 10 IIA COMMUNICATION SKILLS: AVERAGE STUDENT ACHIEVEMENT AT ENTRANCE COMPARED WITH AVERAGE STUDENT ACHIEVEMENT AFTER 33 HOURS



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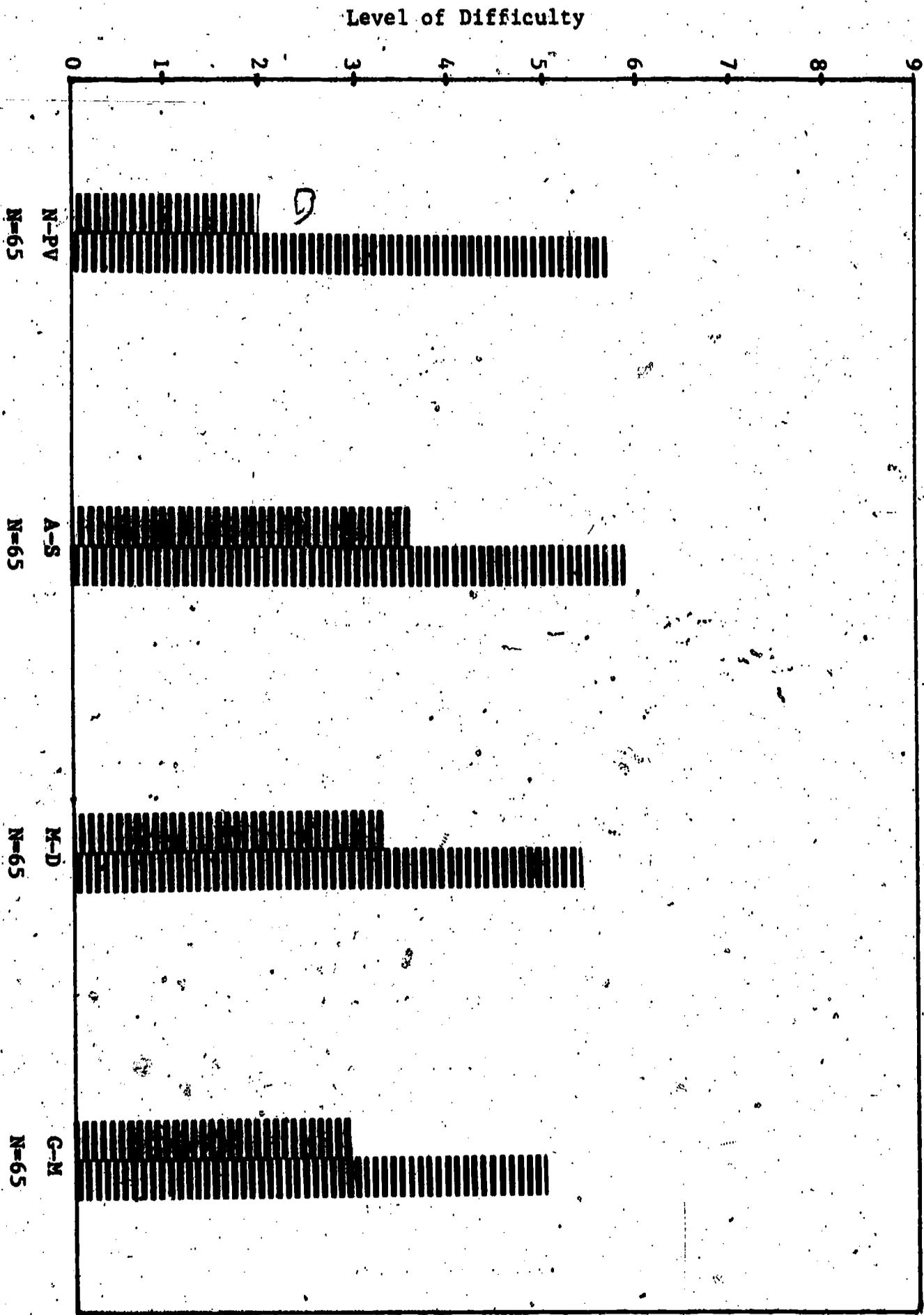
FIGURE 11

IIA COMMUNICATION SKILLS: AVERAGE STUDENT ACHIEVEMENT AT ENTRANCE COMPARED WITH AVERAGE STUDENT ACHIEVEMENT AFTER 33 HOURS



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FIGURE 12 IIA MATHEMATICS: AVERAGE STUDENT ACHIEVEMENT AT ENTRANCE COMPARED WITH AVERAGE STUDENT ACHIEVEMENT AFTER 45.5 HOURS



9v

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Mathematics. Each level of the Math continuum was also given a numerical equivalent: A-1, B-2, C-3, D-4, E-5, F-6, G-7, H-8, M-9. The entrance level, the number of hours worked in the program, and the last level worked were recorded for each student for whom all three pieces of information were available. The N of 65 was the same for all areas in Math. Of these students, 55 were from Site #2 and ten from Teachers' College. From this data an average entrance level, an average closing level, and an average number of hours worked were computed. Figure 12 reports these data which revealed that students did progress through the Math continuum at a fairly even rate, an average of approximately 2.54 levels in all areas per 45.5 hours of work.

C. General Education Development (GED) Test

In fiscal year 1970-71 Site #2 reported that 82 ILA Math and Communication Skills students took the GED test and 64 or 78% passed it. In fiscal year 1971-72 Site #2 used only ILA Math. Fifty students took the GED test and 46 or 92% passed the Math portion of the test. This seems to support the premise that the ILA Math Program prepares students for the Math skills needed for the GED.

D. Student Evaluation of ILA

To appraise the students' attitude toward ILA materials and procedures, questionnaires were administered to 71 ABE students. The questionnaire can be found in Appendix B. An analysis of the response is presented below.

Questions 2, 8, and 10 were intended to ascertain the comfort level of students using ILA:

99% thought that they were really learning.

97% thought that they got help whenever they needed it.

54% thought that all students could profit from the ILA system.

Four pairs of questions were designed to estimate the student's independence as a learner:

1. Questions 1 and 5. Although 93% said that it was easy to find the booklet that they wanted, 77% wanted the teacher to give it to them.
2. Questions 3 and 7. 89% thought that working alone was useful, and 89% reported that they did not work alone too much.
3. Questions 4 and 9 dealt with self-scoring. 77% reported that they liked to correct their own work, but 42% believed that people often cheat when self-scoring.
4. Questions 6 and 11 were concerned with attitudes toward self-prescribing. Only 40% liked to prescribe for themselves, and 93% believed that the teacher should prescribe for them.

Questions 12, 13, 14, 15, and 16 sought to discover whether or not directions in the instructional booklets and the cassettes were perceived as helpful. 100% said that they could read the directions on the Math booklets and 96% said that they could understand them. 100% said that they could read directions in the Communication Skills booklets and 91% could understand them. 91% found the Communication Skills cassettes helpful.

Of the 71 ABE students responding to this questionnaire, 28% wore glasses when reading and 73% had had their eyes tested within the last two years.

Table V reports these data completely.

TABLE V
RESPONSES TO STUDENT QUESTIONNAIRE

N=71

Question	No. of "Yes" Responses	No. of "No" Responses	No. of Students Not Responding
1	66 93%	5 7%	
2	70 99%	1 1%	
3	7 10%	63 89%	1 1%
4	55 77%	16 23%	
5	55 77%	14 20%	2 3%
6	28 40%	42 59%	1 1%
7	63 89%	8 11%	
8	54 76%	16 23%	1 1%
9	30 42%	39 55%	2 3%
10	69 97%	2 3%	
11	66 93%	5 7%	

N=55
(Math Only)

12	55 100%		
13	53 96%	2 4%	

N=11
C.S. Decoding
Only

14	10 91%	1 9%	
----	--------	------	--

N=23
C.S.-E-H
Only

15	23 100%		
16	21 91%	1 4.5%	1 4.5%

N=71
Vision

17	52 73%	19 27%	
18	20 28%	50 71%	1 1%

E. Correlation of ILA and ABLE

It was thought that objective data confirming or negating the scale of difficulty within the ILA Math and Communication Skills programs would be one means of identifying those sections of each program in need of rewriting. A standardized test of basic learning designed especially for adults could provide such data.

The Adult Basic Learning Examination (ABLE) published in 1967 by Harcourt, Brace and World, Inc. was used. This is "a battery of tests designed to measure the level of educational achievement among adults. Although the examination is designed for use with adults and consists of items with adult content, it may be used to assess achievement as low as first grade."¹ ABLE consists of two batteries, Level I (grades 1-4) and Level II (grades 5-8). Six scores are obtained from each level: Vocabulary, Reading, Spelling, Arithmetic Computation, Problem Solving and Arithmetic Total. This is essentially a power test since students may use as much time as they need despite approximate times given in the handbook.

ABLE was administered to students who had worked in ILA for 15 hours or longer. ILA Communications Skills students took the first three tests:

¹Bjorn Karlsen, Richard Madden, and Eric F. Gardner, ABLE Handbook, Level I and Level II (New York: Harcourt, Brace and World, Inc., 1967), p.3.

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TABLE VI
CORRELATION OF ILA AND ABLE

		<u>Number of Students</u>	<u>r</u>
ABLE Level I	Vocabulary	54	.45
	Reading	54	.62
	Spelling	52	.66
	Computation	83	.03
	Problem Solving	82	-.08
	Arithmetic Total	83	-.03
ABLE Level II	Vocabulary	164	.34
	Reading	164	.22
	Spelling	165	.40
	Computation	107	.44
	Problem Solving	107	.38
	Arithmetic Total	107	.45

Vocabulary, Reading, and Spelling. Those working in ILA Math took the last three tests: Computation, Problem Solving, and Arithmetic Total.

The level of ILA at which the student was working was the determining factor in deciding which level of ABLE should be administered. Students working in Levels A-D (inclusive) were given ABLE Level I. All others received ABLE Level II. Table VI reports the correlations obtained. Correlation between the level at which students are working ILA and their performance on ABLE is evident in the strong positive correlations for ILA Communication Skills and for ILA Math levels E-H. However, the negative coefficients of correlation obtained for ILA Math levels A-D and ABLE Level I are puzzling. The restricted range in ILA and extended range in ABLE may have influenced the coefficient of correlation derived. On the basis of this evidence, analysis of items on ABLE Level I and in ILA Math levels A-D will head the agenda for future curriculum development.

F. Other Evaluative Data

In the description of the project setting, it was stated that more than the three experimental sites had used ILA during the past year. These sites consisted of 5 ABE centers, 3 Regional Opportunity Centers, 5 secondary schools, 6 correctional institutions and 2 Opportunities Industrialization Centers (OIC). RBS was in contact with some of these additional sites, and through this contact further evaluative data on ILA were generated. An example of this was the data received from the ABE class at Teachers' College, Columbia University which was previously reported in this document. This section attempts to present additional findings from those sites.

Achievement

Site #2 did a small study with 100 ABE students, 50 in ILA Math and 50 in a traditional Math course. In using the Metropolitan Achievement Test, the average entry score for the 100 students was 4.7 (4th grade 7th month). After 100 hours of instruction the students in ILA scored on the average 6.2 and the other group scored 5.8. After 200 hours of instruction the ILA student scored 7.8 and the other group scored 6.6, again using the Metropolitan.

	Entry	After 100 hrs.	After 200 hrs.
ILA	4.7	6.2	7.8
Other	4.7	5.8	6.6

Motivational Value of ILA

ILA Mathematics was implemented in a correctional institution. In this particular institution inmates are permitted to attend certain academic courses on a volunteer basis. Ordinarily the drop-out rate from volunteer courses is about 70%. Of the 20 students who began the ILA Math, only 1 dropped out. When a drop-out rate is reduced from 70% to 5% the change is dramatic enough to demand attention despite the small number in the group. Since ILA was the only change that could be identified, it would seem that the members of this group perceived ILA as meeting their needs.

Twelve students participated in an inner city adult basic education class held at Teachers' College. All of the males and all but two of the females had been drug addicts. Of these twelve only two dropped out. One of these drop-outs was remanded to a correctional institution, the other moved away.

Ten of the above students entered ILA in the decoding segment. Of these ten, one mastered the total Communication Skills program and eight mastered decoding and moved well into the skills segment. Gains in ILA were computed for these students: gains from 6-13 units in Math and 13-31 units in Communication Skills were reported after 60 working hours.

The situations described above lend substance to the informal observations of teachers and administrators that ILA permits students to understand the nature of the task that they are about to undertake. The learning tasks are perceived as possible of accomplishment, and so students tend to work purposefully and find their efforts quite rewarding.

ILA as a Remediation Tool for Secondary Students. ILA was used in several settings in Nevada: a correctional institution for boys, an after-school tutorial reading program, a regular day school program with emotionally handicapped students, and a regular day school program with mentally retarded.

The Stanford Achievement Test was administered to 99 boys in the correctional institution before and after ILA instruction. A comparison of the means of this pre- and post-testing disclosed a gain in reading achievement significant at .001 level of confidence. Its Coordinator of Federal Programs shared this information with RBS and he also indicated that ILA was the major instructional system used.

This same administrator shared his report of the secondary tutorial program which used ILA Communication Skills. The Metropolitan Achievement

test was used in a pre-post situation and the average grade equivalent scores for 36 students are as follows:

	Pre-Test	Post-Test	Gain
Word Knowledge	5.5	6.4	+ 0.9
Reading	5.0	6.2	+ 1.2
Total Reading	5.2	6.3	+ 1.1

Data indicate grade level function, e.g., 5.5 is 5th grade, 5th month.

The data display that a Tutorial Reading Program that utilizes ILA materials can be an effective means to raise the reading level for some students in grades 7 thru 12.

Another finding came out of informal reports from teachers of the emotionally handicapped and mentally retarded students. These reports indicate that ILA was useful for the emotionally handicapped, but unsatisfactory with the mentally retarded. For this latter group the program moved too swiftly and was presented in too abstract terms.

On the whole, this area of use of ILA as a remediation tool for secondary students shows real promise and further exploration is indicated.

Summary

Results of the evaluation show:

1. In Mathematics, the range of instruction was adequate. In Communication Skills, the scope of ILA is suitable in six of the eight areas. In Structural Analysis and Vocabulary Development, an extension may be desirable.
2. Students progress through the programs at a fairly even rate with an average in Communication Skills of approximately 1.5 levels in all areas per 33 working hours, and in Mathematics of approximately 2.54 levels in all areas per 45.5 hours of work.
3. ILA Math Program prepares students for the math skills needed for the GED.
4. Students feel they are really learning using ILA.
5. Students can read and understand the directions on the materials.
6. The scale of difficulty of Communication Skills and Math levels E-H was confirmed using the Adult Basic Learning Examination as a criteria. However, ILA Math levels A-D need investigating in future curriculum development.

Findings based on other evaluation data provided to RBS are:

1. ILA Math students achieve higher than traditional math students on the Metropolitan Achievement Test.
2. Students in ILA tend to work purposely and have a low drop-out rate.
3. The use of ILA as a remediation tool for secondary students appears promising, with gains in achievement shown.

RECOMMENDATIONS

In its effort to develop a system for providing for Individualized Learning for Adults, RBS has been successful. During 1971-72, ILA was tested and the results were most encouraging. However, the printing and distribution of materials remains as the major difficulty. Many institutions need ILA and are eager to use it provided printing and distributing costs can be kept at or below \$50.00.

Currently two proposals involving ILA have been submitted. The first is a grant application to the New Jersey Department of Institutions and Agencies to utilize ILA in three adult correctional institutions and three youth correctional institutions. Variable sentences, court appearances, work schedules, etc. combine to make open exit classrooms necessary. ILA with its individualization of procedures and materials meets the special needs of institutionalized learners.

The second proposal is for funds under the Adult Education Act, Section 309 (b) for the rehabilitation of inmates with individualized instruction and career orientation programs. Utilizing ILA and career education, the basic objectives are:

1. To raise the literacy and basic math levels of target populations within three State correctional institutions located in Pennsylvania, New Jersey, and Delaware to ninth-grade equivalents.
2. To help participating inmates make sound career choices so that, upon release, their chances of staying out of prison and of gaining employment are increased.
3. To assess existing learning centers within the three institutions and recommend changes which would improve their effectiveness in regard to career education.

- 54
4. To train the education staff of the three institutions in the use of basic education instructional system and career information.

Based on the field test data and results, the following developmental efforts are recommended:

Communication Skills

In order to accommodate the varied learning styles of students, the decoding segment should be branched. Levels I, J, K of the Comprehension areas, Literal, Interpretive, and Evaluative should be redesigned so that their content relates directly to occupational clusters, i.e., Research, Utilities, Sales, Government, Health, Communications, Finance, Manufacturing, etc. This plan, if followed, would enable a student to select the package of tests and instructional materials appropriate not only to his instructional level in reading but to his vocational interests as well.

Sequences designed to develop skill in oral and written expression should be added in order to carry out the concept implied in the program title, Communication Skills.

A sequence to teach English as a second language is much in demand and should be added.

Mathematics

Items in ILA Math levels A-D should be analyzed and compared with items in Level I of ABLE in order to discover the reason for the apparent dissonance indicated by the data reported under Evaluation.

Additional activities should be the revision and extension of the 1971 edition to include specific preparation for the General Education Development test (GED) and the field test of the newly written booklets and tests for the Applications Area.

CONCLUSION

This report of the Individualized Learning for Adults project has focused on the procedures, accomplishments and results of the field test conducted during 1971-72. The results show that:

1. The ILA system, materials and instructional procedures, are effective with different kinds of learners.
2. Based on data from field testing, the complete ILA curriculum program, Mathematics and Communication Skills, have been re-developed.
3. Teacher training materials have been developed, field tested, refined, retested, and found to be highly successful.
4. Investigation of a viable system for printing and distributing materials has been initiated and should be continued.

With continued effort in curriculum and dissemination development over the next few years, ILA can prove to be an effective program in many different educational environments.

APPENDIX A

PUBLISHER'S MEETING - January 25, 1972

<u>NAME</u>	<u>POSITION</u>	<u>COMPANY</u>
Daniel H. Raffensperger	Executive Vice President	The Continental Press, Inc.
Warren Cox	Chief Executive Editor	Noble & Noble, Publishers
Carol Ross		Grolier Educational Corporation
Kathryn Ring	Director, Product Development	Imperial International Learning
Spencer Barnard		Imperial International Learning
George Searls		Imperial International Learning
Conrad White		Charles E. Merrill Publishing, Co.
Dominica Raciti		American Book Company
Roger E. Egan	Editorial Director	McGraw-Hill Book Company
Irwin Harris		McGraw-Hill Book Company
Brian McLaughlin		McGraw-Hill Book Company
Gene Wheatley		McGraw-Hill Book Company
A.W. Bingham	Vice President	Encyclopedia Britannica Ed. Corp.
Otello Meucci	Sales Manager	Borg-Warner Educational Systems
Thomas Beebe		Borg-Warner Educational Systems
I. Lopatin	Editorial Director	Hayden Book Company, Inc.
Anthony Gentile	Editor	Steck-Vaughn Company
Joseph F. Sweeney	Vice President	McCormick-Mathers Publishing Company
Anthony Quaglia	Ex. Editor/Science & Math	McCormick-Mathers Publishing Company
Jean M. Palormo	Manager-Industrial Systems	Science Research Association, Inc.
Mr. & Mrs. William Spangler	Manager/Career Program Dev.	ixtext
Oliver Rice		General Learning Corporation
Richard Tuber		Pip Systems, Inc.
Charles E. Smyth	Vice President Editorial	Randon House, Inc.
Louis P. Prete	Manager Editor, College Division	Field Educational Publication
Hyung W. Pak	General Manager, School Division	Appleton-Century Crofts
Ray Haas	Mathematics Division	Field Educational Publication
W.D. Stephens	President	McKnight & McKnight Publishing Co.
Martin S. Pincus	President	Story House, Inc.
Robert Marshall		U.S.O.E.

RESEARCH FOR BETTER SCHOOLS, INC.

INDIVIDUALIZED LEARNING FOR ADULTS

PUBLISHERS' MEETING

January 25, 1972

REQUEST FOR PROPOSALS

REQUEST FOR PROPOSALS

Request for Proposals (RFP) for the publication and distribution of the Individualized Learning for Adults (ILA) Program in Mathematics and Communication Skills including requirements and criteria for selection.

INTRODUCTION.

Research for Better Schools, Inc., Philadelphia, Pennsylvania, solicits proposals from publishers of educational materials for the world-wide publication and distribution of the ILA Program, which is being developed with a grant from the U.S. Office of Education (USOE), Department of Health, Education, and Welfare.

Under the Copyright Program of the USOE, as set forth in its Copyright Guidelines dated May 9, 1970, RBS has been authorized to select a publisher, and enter into an agreement with that publisher, for the publication and distribution of these materials, under copyright, on an exclusive basis, for a period of ten years, provided that all of the requirements of the Copyright Guidelines are met. The principal requirement is for the selection of a publisher on a competitive basis.

DESCRIPTION OF MATERIALS

The ILA Program emphasizes basic skills in Mathematics and Communication and is designed for adult students ranging in achievement from totally illiterate to the 9th-grade reading level.

The Program has been planned to help the learner achieve mastery of 450 objectives. Materials of instruction consist of: 450 booklets, 125 diagnostic tests, 37 cassettes and other supplemental teaching devices. The ILA program contains approximately 6,000 pages. Appropriate record forms and an instructor's manual have also been developed.

HISTORY OF DEVELOPMENT

The materials were developed under the Adult Education Act, Section 309(b), Special Projects. To date, the USOE has funded the project in the amount of \$527,000.

The curriculum materials are presently undergoing their third major revision and are being used by:

- Adult Basic Education Students
- Institutional Students (State & Local Prisons)
- Junior and Senior High Students (Remedial Education)
- Students in Manpower Centers & Vocational-Technical Schools, and others.

Results are encouraging and a fully-tested program is expected to be available for publication by June 1972.

PUBLICATION GOALS

The selected publisher will:

1. be required to package the program, including editing, refilming, and provide appropriate illustrations and other art work,
2. provide competent sales personnel who are trained to demonstrate ILA to those interested in its adoption,
3. conduct regional institutes for the purpose of demonstrating ILA to potential users, and
4. print, manufacture, stock, catalog, advertise, promote and sell the materials.

USOE REQUIREMENTS

The selected publisher must:

1. agree to mark each piece of the material with a legend, to be specified by the USOE, which will state the date when the materials will go into the public domain; state that the materials were developed under a contract with a grant from the USOE, but disclaim any official endorsement of the materials by the USOE;
2. agree to copyright the materials in the name of Research for Better Schools, Inc. and to register the copyright in the U.S. Copyright Office within six months after the date of publication;
3. agree to recognize the free right of the Government to use the materials for U.S. Government purposes;
4. agree to permit the USOE to make periodic audits of its books of accounts relating to sales and royalties of the materials; however, the USOE would not normally expect to exercise that right; and
5. agree to the right of the USOE to require termination of the agreement in the event of noncompliance by the publisher with the publication agreement; however, a review procedure is provided for the protection of the publisher and Research for Better Schools, Inc.

GENERAL REQUIREMENTS

1. The publisher will be required to pay royalties in accordance with the schedule set forth in its proposal, and to provide semi-annual royalties on a semi-annual basis.

2. Appropriate termination provisions will be required.
3. Arrangements for handling infringements will be required.
4. Arrangements for handling disputes will be required.
5. The publisher will permit Research for Better Schools, Inc., as well as the USOE, to audit its books of accounts relative to sales of these materials.
6. The contractor/grantee will warrant the materials published, but only to the extent of any royalties which might be due or accrue after a notice of infringement or violation of other right is received.

CRITERIA FOR PUBLISHER SELECTION

The following criteria will be used in evaluating publisher proposals:

1. **The investment the publisher is willing to make in this enterprise —**
A primary concern here is the amount of money the company can make available to RBS to supplement Federal and other funds available for program and materials development.
2. **The amount of calendar time that could be allowed for this effort —**
RBS realizes the importance of early return on investment in private industry and has attempted to develop time-lines which are feasible from our point of view yet realistic from the commercial viewpoint.
3. **The qualifications of the company to produce and distribute an instructional system —**
As can be seen from the prospectus, we are contemplating more than a textbook, so a broad experience in marketing will be important, as well as the company's commitment to teacher training and the installation of new programs.
4. **The availability of editorial assistance —**
RBS realizes that the publisher is more than a printer and wants to participate in the creative aspects of instructional design as well as production and marketing. We are interested in knowing how much editorial support can be supplied, from initial development through final field testing.
5. **The degree of control which the company is willing to place in RBS' hands —**
Although we would prefer to have complete control over the developmental process, we understand that you must protect your investment. Therefore, we would like you to specify what kinds of decisions we would be allowed to make and which ones you would reserve for yourselves.

4

SUBMISSION OF PROPOSALS

All proposals are to be submitted in duplicate by March 17, 1972. Proposals are to be sent to:

Dr. Robert G. Scanlon
Research for Better Schools, Inc.
1700 Market Street
Suite 1700
Philadelphia, Pennsylvania 19103

It is expected that a publisher selection will be made within 30 days after the deadline for the receipt of proposals.

January 25, 1972

APPENDIX B

DESCRIPTION OF ILA
FIELD TEST SITES

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1. Name of Site: _____
2. Mailing Address: _____

3. Street Address (if different): _____

4. Name of ILA Coordinator: _____
 - a. Telephone Number: _____
 - b. Hours Available: _____
5. Number of Teachers in the ILA Program: _____
6. Number of Classes in the ILA Program: _____
7. Time, Days of ILA Classes: _____
8. Hours of ILA per Week per Student: _____
 - a. Will students be permitted to work at home? _____
 - b. Any limits to amount? _____
9. Description of Area (urban, rural...): _____

10. Description of Students (age group, socio-cultural-economic, reasons for attendance, etc.) _____

11. Description of Site and of ILA Classroom Locations: _____

12. What is the best way to get to the site from Philadelphia? _____

13. Where is the best, most convenient place to stay on site visits? _____

14. Dates of Training Sessions: _____ No. Participants: _____

ADULT --ILA

TEACHERS BIOGRAPHICAL INFORMATION

1. Name of State: _____

2. Name of Center: _____

3. Name of Teacher: _____

4. Sex:

- (1) Male
- (2) Female

5. Age Group:

- (1) 20-29 years
- (2) 30-39 years
- (3) 40-49 years
- (4) 50-59 years
- (5) 60 years or over

6. Race: _____

7. Educational Background:

- (1) below BA
- (2) BA
- (3) MA
- (4) above MA

10. Teaching Experience

- (1) 0-1 year
- (2) 1-2 years
- (3) 2-3 years
- (4) 3-4 years
- (5) 4-8 years
- (6) 8-12 years
- (7) 12-16 years
- (8) more than 16 years

8. Teaching Experience at Center:

- (1) 0-1 year
- (2) 1-2 years
- (3) 2-3 years
- (4) 3-4 years
- (5) 4-8 years
- (6) 8-12 years
- (7) 12-16 years
- (8) more than 16 years

11. How many times a week does each class group attend the Center?

- (1) 1
- (2) 2
- (3) 3
- (4) 4
- (5) 5
- (6) 6

9. Teaching Experience in Adult Educ.

- (1) 0-1 year
- (2) 1-2 years
- (3) 2-3 years
- (4) 3-4 years
- (5) 4-8 years
- (6) 8-12 years
- (7) 12-16 years
- (8) more than 16 years

12. How many class groups are you presently teaching?

- (1) 1
- (2) 2
- (3) 3
- (4) 4
- (5) 5
- (6) 6
- (7) 7 or more



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

FORM APPROVED
BUDGET BUREAU NO. 51-R0781

U.S. OE CONTRACT OR GRANT NUMBER

**SPECIAL EXPERIMENTAL DEMONSTRATION PROJECT
ADULT EDUCATION ACT OF 1966, Section 309(b), Title III, P.L. 89-750
PARTICIPANT INFORMATION**

FISCAL YEAR OF AWARD

The teacher, counselor, or other staff member will interview and fill out this form for each participant of an Adult Basic Education Special Experimental Demonstration Project which is supported by the Office of Education under authority of Section 309(b) of the Adult Education Act of 1966 (Title III,

P.L. 89-750). Within two weeks after the participant enrolls in the project, the project director will forward this form to: DHEW/U. S. Office of Education, Bureau of Adult, Vocational, and Technical Education, Washington, D.C. 20202.

PART I - PARTICIPANT DATA

1. NAME OF PARTICIPANT (Print or type) 		1a. ADDRESS (Number, street, city, State and ZIP code) 	
2. SOCIAL SECURITY NUMBER 	3. SEX A. <input type="checkbox"/> MALE B. <input type="checkbox"/> FEMALE	1b. COUNTY 	1c. CONGRESSIONAL DISTRICT
4. DATE OF BIRTH MONTH YEAR	5. U.S. CITIZEN A. <input type="checkbox"/> YES B. <input type="checkbox"/> NO	6. MILITARY SERVICE (If veteran, give discharge date) A. <input type="checkbox"/> VETERAN ALL DISCHARGE DATE: _____ B. <input type="checkbox"/> REJECTEE C. <input type="checkbox"/> OTHER NON-VET	
7. MARITAL STATUS A. <input type="checkbox"/> NEVER MARRIED B. <input type="checkbox"/> MARRIED C. <input type="checkbox"/> WIDOW/WIDOWER D. <input type="checkbox"/> DIVORCED/LEGALLY SEPARATED		8. HEAD OF FAMILY OR HOUSEHOLD A. <input type="checkbox"/> YES B. <input type="checkbox"/> NO	9. PRIMARY WAGE EARNER A. <input type="checkbox"/> YES B. <input type="checkbox"/> NO
10. IS ENGLISH THE PRIMARY LANGUAGE SPOKEN IN THE HOME A. <input type="checkbox"/> YES B. <input type="checkbox"/> NO	11. LANGUAGE REGULARLY SPOKEN IN THE HOME (Other than English) A. <input type="checkbox"/> CUBAN B. <input type="checkbox"/> MEXICAN-AMERICAN C. <input type="checkbox"/> PUERTO RICAN D. <input type="checkbox"/> OTHER	12. UNEMPLOYED INSURANCE CLAIMANT (Check one) A. <input type="checkbox"/> YES B. <input type="checkbox"/> NO C. <input type="checkbox"/> EX-HAUSTEE	13. PUBLIC ASSISTANCE RECIPIENT A. <input type="checkbox"/> YES B. <input type="checkbox"/> NO
14. RACE (Check one) A. <input type="checkbox"/> WHITE B. <input type="checkbox"/> NEGRO C. <input type="checkbox"/> AMERICAN INDIAN D. <input type="checkbox"/> ORIENTAL E. <input type="checkbox"/> OTHER	15. IF SPANISH SURNAME (Check one) A. <input type="checkbox"/> CUBAN B. <input type="checkbox"/> MEXICAN-AMERICAN C. <input type="checkbox"/> PUERTO RICAN D. <input type="checkbox"/> OTHER	16. NUMBER OF DEPENDENTS A. <input type="checkbox"/> 0 D. <input type="checkbox"/> 3 G. <input type="checkbox"/> 5 AND OVER B. <input type="checkbox"/> 1 E. <input type="checkbox"/> 4 C. <input type="checkbox"/> 2 F. <input type="checkbox"/> 5	
19. PREVIOUS JOB TRAINING A. <input type="checkbox"/> YES B. <input type="checkbox"/> NO (If "YES", complete No. 20 and 20A)		23. PARTICIPATION IN OTHER PROGRAMS <input type="checkbox"/> A. NONE <input type="checkbox"/> B. PARTICIPATED IN (Check all relevant items) <input type="checkbox"/> (1) WORK EXPERIENCE <input type="checkbox"/> (4) MANPOWER DEVELOPMENT <input type="checkbox"/> (2) ADULT VOCATIONAL <input type="checkbox"/> (5) ON-THE-JOB TRAINING <input type="checkbox"/> (3) MILITARY OCCUPATIONAL <input type="checkbox"/> (6) ADULT BASIC	
20. JOB TITLE 	20A. DATE COMPLETED MONTH YEAR		
21. PRIMARY OCCUPATION TITLE (Give specific job designation, such as freight handler, oiled girl, etc.) 			
22. OCCUPATION TITLE OF LAST FULL-TIME CIVILIAN JOB 			
24. HAVE YOU EVER BEEN EMPLOYED FULL TIME (at least 32 hours a week) CONTINUOUSLY FOR A SIX-MONTH PERIOD? A. <input type="checkbox"/> YES B. <input type="checkbox"/> NO			
25. CURRENT WORK STATUS (Check one) <input type="checkbox"/> (1) EMPLOYED FULL TIME (at least 32 hours a week) <input type="checkbox"/> (2) EMPLOYED PART TIME (less than 32 hours a week) <input type="checkbox"/> (3) UNEMPLOYED BUT SEEKING WORK <input type="checkbox"/> (4) NOT IN LABOR FORCE		26. IF NOT EMPLOYED FULL TIME, GIVE PRIMARY REASON (Check one) <input type="checkbox"/> (1) UNABLE TO FIND WORK <input type="checkbox"/> (7) TRANSPORTATION PROBLEM <input type="checkbox"/> (12) OTHER (Specify) <input type="checkbox"/> (2) KEEPING HOUSE <input type="checkbox"/> (8) LACKS EDUCATION, TRAINING SKILL, EXPERIENCE, OR HAS OBSOLETE SKILL <input type="checkbox"/> (3) IN SCHOOL <input type="checkbox"/> (9) CHILD CARE PROBLEM <input type="checkbox"/> (4) RETIRED <input type="checkbox"/> (10) CARE OF OTHER FAMILY MEMBER <input type="checkbox"/> (5) NOT SEEKING WORK <input type="checkbox"/> (11) CONVICTION RECORD <input type="checkbox"/> (6) HEALTH PROBLEM	



27. YEARS OF GAINFUL EMPLOYMENT <input type="checkbox"/> (1) UNDER 1 YEAR <input type="checkbox"/> (3) 3 - 9 YEARS <input type="checkbox"/> (2) 1 - 2 YEARS <input type="checkbox"/> (4) 10 YEARS AND OVER	28. ESTIMATED AVERAGE HOURLY EARNINGS ON LAST FULL-TIME CIVILIAN JOB \$	29. INCOME	
		<input type="checkbox"/> (1) PARTICIPANT'S ESTIMATED EARNINGS FOR LAST 12 MONTHS	\$
		<input type="checkbox"/> (2) ESTIMATED FAMILY INCOME FOR LAST 12 MONTHS	\$

30. REFERRED TO PROJECT BY <input type="checkbox"/> (1) JOB CORPS <input type="checkbox"/> (6) ABE RECRUITER OR COUNSELOR <input type="checkbox"/> (2) UNION <input type="checkbox"/> (7) RADIO, TV, OR NEWSPAPER <input type="checkbox"/> (3) EMPLOYER <input type="checkbox"/> (8) ANOTHER STUDENT <input type="checkbox"/> (4) CHURCH <input type="checkbox"/> (9) OTHER (Specify) <input type="checkbox"/> (5) WELFARE	31. REASON FOR PARTICIPATION <input type="checkbox"/> (1) TO GET A JOB <input type="checkbox"/> (2) TO GET A BETTER JOB <input type="checkbox"/> (3) FOR EDUCATION OR SELF-IMPROVEMENT <input type="checkbox"/> (4) OTHER (Specify)
--	--

PART II - AUTHENTICATION

1. NAME OF CONTRACTOR OR GRANTEE		ADDRESS (Number, street, city, State, ZIP code)	
2. NAME OF PROJECT		LOCATION OF PROJECT (address)	
3. DURATION OF PROJECT FROM _____	4. NAME OF PROJECT DIRECTOR (Print or type)		DATE
	SIGNATURE OF PROJECT DIRECTOR		
5. TITLE OF INTERVIEWER	SIGNATURE OF INTERVIEWER (if different from Project Director)		DATE (Mo., Day, Year)

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IIA MATHEMATICS
PROFILE

Center

Date of Testing

Student's Name

AREA	A	B	C	D	E	F	G	H	Placed at Level
NUMERATION									
PLACE VALUE									
ADDITION									
SUBTRACTION									
MULTIPLICATION									
DIVISION									
GEOMETRY									
MEASUREMENT									
APPLICATIONS									

ILA - COMMUNICATION SKILLS

PROFILE

Center

Date of Testing

Student's Name

AREA	A	B	C	D	E	F	G	H	I	J	K	Placed at Level
PHONIC ANALYSIS												
STRUCTURAL ANALYSIS												
VOCABULARY DEVELOPMENT												
LITERAL COMPREHENSION												
INTERPRETIVE COMPREHENSION												
EVALUATIVE COMPREHENSION												
LIBRARY SKILLS												
ORGANIZATIONAL SKILLS												
REFERENCE SKILLS												

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ILA

PERIODIC PROFILE RECORD

_____ Student Name
_____ Date

ILA MATHEMATICS

Area	Level in which Student is now Placed
NUMERATION PLACE VALUE	
ADDITION SUBTRACTION	
MULTIPLICATION DIVISION	
GEOMETRY MEASUREMENT	
APPLICATIONS	

ILA COMMUNICATIONS SKILLS

Area	Level in which Student is now Placed
Phonic Analysis	
Structural Analysis	
Vocabulary Development	
Literal Comprehension	
Interpretive Comprehension	
Evaluative Comprehension	
Library Skills	
Organizational Skills	
Reference Skills	

9/71
RBS, Inc.

ILA: ERROR (AND PROBLEM) REPORT FORM

1. Site Name: _____

2. Name of Reporter: _____

a. _____ student

b. _____ teacher

3. Subject:

a. _____ Mathematics

b. _____ Com. Skills

4. Entrance Tests:

a. _____ Mathematics: _____ Level; _____ Area; _____ Page

b. _____ Com. Skills _____ Level; _____ Area; _____ Page

5. Skill Booklets:

(fill in)

(check if applicable)

a. _____ Level

e. _____ Unit Pre-Test

b. _____ Area

f. _____ Unit Post-Test

c. _____ Skill Number

g. _____ Skill Test A

c. _____ Page Number

h. _____ Skill Test B

6. Describe error or problem: _____

ILA: TERMINATION FORM

STUDENT NAME

Date of Student's Last ILA Class: _____

Reason Given for Dropping Out of ILA Program:

1. _____ completion of the ILA program
2. _____ illness
3. _____ change to (interference from) other education programs
4. _____ moved from area
5. _____ job interference
6. _____ dropped-out (no particular reason)
7. _____ other



INDIVIDUALIZED LEARNING FOR ADULTS**Research for Better Schools, Inc.****1700 Market Street-Suite 1700****Philadelphia, Pa., 19103****STUDENT QUESTIONNAIRE**

This questionnaire should be used only with students who have used ILA for ten or more hours.

Directions for Administering: Read each statement aloud. Allow a five second response time during which students record their response on a separate answer sheet. Students will circle yes or no depending on which most nearly expresses their reaction.

To the Student: All statements refer to ILA.

1. It is easy to find the booklet that I want.
2. I am really learning.
3. I work alone too much in this program.
4. I like to correct my own work.
5. The teacher should give me the right booklet when I am ready for it.
6. I like to prescribe for myself.
7. Working alone gives me a chance to get ideas clear in my own mind.
8. All students would learn more if they were taught this way.
9. When people correct their own work they often cheat.
10. I get help whenever I need it.
11. The teacher knows more so she should prescribe for me.

Only Students who have used ILA Math should answer the next two questions.

12. I can read the math booklets.
13. I can understand the directions in the math booklets.

Only Students who have used the cassettes in Communication Skills should answer the next question:

14. The cassettes are helpful.

Only students who have used E-H of Communication Skills should answer the next two questions.

15. I can read the questions in the Communication Skills booklets.
16. I can understand the questions in the Communication Skills booklets.

General Questions follow:

17. My eyes have been tested by a physician or by an eye doctor within the last two years.
18. I wear glasses when I read.

Response Sheet for Student Questionnaire

Name: _____ Center: _____ Teacher: _____

1. yes no

2. yes no

3. yes no

4. yes no

5. yes no

6. yes no

7. yes no

8. yes no

9. yes no

10. yes no

11. yes no

12. yes no

13. yes no

14. yes no

15. yes no

16. yes no

17. yes no

18. yes no

INDIVIDUALIZED LEARNING FOR ADULTS

Research for Better Schools, Inc.

1700 Market Street-Suite 1700

Philadelphia, Pa., 19103

TEACHER QUESTIONNAIRE

Teacher's Name: _____ **Center:** _____

ILA Subjects Taught: _____

Directions: Please read each statement and circle the response that most nearly expresses your reaction. All statements relate only to ILA.

1. Most of my students are self-prescribing.

yes no

2. My students usually mark their own instructional booklets.

yes no

3. Students quickly learned to get their own booklets.

yes no

4. It is better for students if I write their prescription for them.

yes no

5. Many students will cheat if I let them correct their own booklets.

yes no

6. I can usually find time to work with students when they need help in class.

yes no

7. It would be better for the students if the teacher gave out all material.

yes no

8. These ILA students are really learning.

yes no

9. My class is so big that I cannot always get to a student when he needs help.

yes no

ABSTRACT OF FINAL REPORT

INDIVIDUALIZED LEARNING FOR ADULTS (ILA)

submitted by

RESEARCH FOR BETTER SCHOOLS, INC.
1700 MARKET STREET
PHILADELPHIA, PENNSYLVANIA 19103
(215) 561-4100

Robert G. Scanlon, Executive Director, RBS
Louis M. Maguire, Program Director, Career Education
Donald Deep, Project Director, ILA
Ethel Schmidt, Research Assistant, ILA
C. Van Youngman, Research Assistant, ILA

to the

BUSINESS MANAGEMENT UNIT
OFFICE OF THE ASSOCIATE COMMISSIONER
BUREAU OF ADULT, VOCATIONAL, AND TECHNICAL EDUCATION
U.S. OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

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DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, OFFICE OF EDUCATION
GRANT NUMBER OEG-0-71-4412 (324) ADULT EDUCATION ACT, SECTION 309 (b)

August 1972

83/84

ABSTRACT

INDIVIDUALIZED LEARNING FOR ADULTS (ILA)

PURPOSE

The heterogeneity of adult learners in ABE has created a need for an individualized learning program designed to meet the specific goals of each student. The frequently erratic attendance of adults, the fact that many have experienced failure so often that they are not conditioned to expect success, and the lack of relevant learning materials all serve to emphasize this need. Curriculum materials, incorporated into an easily managed instructional system, that allow for the accurate diagnosis of each student's learning needs are essential if individualized instruction for adults is to become a reality.

PROCEDURES

Research for Better Schools, Inc. with the cooperation of various state departments has been developing and field testing an individualized learning program for adults called ILA (Individualized Learning for Adults).

The ILA system of education leads to the mastery of those educational objectives in the areas of Mathematics and Communication Skills which are needed by adults. It includes planning with and guiding adults in achieving the objectives pertinent to his learning goals. Emphasis is placed on having all learning relevant, individualized, and personalized within the ILA system.

The ILA instructional system includes:

1. A set of behavioral objectives for each subject area

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2. Diagnostic test instruments to determine a student's competency within the set of objectives
3. Materials designed to teach the objectives
4. Methodology which enhances individualization within the instructional setting
5. Monitoring and continual assessment of student performance
6. Generation of data for evaluating and improving the curriculum and instructional system.

It is within this context that the application of the ILA instructional system to ABE classes has been directed. Each of these six elements has to be present to assure that individualization does occur.

The field test of ILA took place in adult basic education classes, remedial classes in secondary schools, and in correctional institutions.

CONCLUSIONS

During 71-72, the field test of ILA was conducted and the results were most encouraging.

The ILA continuums in Mathematics and Communication were shown to be appropriate in range and content for Adult Basic Education. Students did progress through the continuums at a steady rate.

Responses to questionnaires indicated that ABE students working in the programs felt that ILA was an appropriate instructional system for their use. In addition, the system of ILA has proven to be advantageous in a remedial setting in secondary schools and in correctional institutions. The system also was looked upon favorably by instructors because of little, if any, disruption whenever new students enrolled or students dropped out.

However, the printing and distribution of materials remains as the major difficulty. Many institutions need ILA and are eager to use it provided printing and distributing costs can be kept at or below \$50 per student. Unfortunately, as of this writing, efforts to turn printing and distributing over to the commercial world have been unsuccessful.

In summary, the conclusions of this year of field test are:

1. The ILA system, materials and instructional procedures, are effective with different kinds of learners.
2. Based on data from field testing, the complete ILA curriculum program, Mathematics and Communication Skills, have been re-developed.
3. Teacher training materials have been developed, field tested, refined, retested, and found to be highly successful.

4. Investigation of a viable system for printing and distributing materials has been initiated and should be continued.

With continued effort in curriculum and dissemination development over the next few years, ILA can prove to be an effective program in many different educational environments.