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ABSTRACT

The High Intensity Learning Center System in Reading, funded under Title I of the 1965 Elementary Secondary Education Act, is a teacher support system which defines each student's unique reading needs and prescribes appropriate learning activities to fill those needs. It is a system that permits one teacher to manage the learning activities of up to 30 students per class hour on a purely individualized basis. The concept of " accountability," fundamental to High Intensity Instruction, enables the teacher to define the task which the pupil must learn, the methods and materials that will be used to learn it, and the specific behaviors the pupil must demonstrate in order for him and the teacher to know that learning has occurred. During the 1971-72 school year, High Intensity Learning Centers in Reading were established at 17 elementary, eight junior high, and four senior high schools throughout the Omaha Public School District, as well as in 12 non-public schools. During five or six hours per day, approximately 25 pupils were scheduled into these centers for one hour daily. The pedagogy utilized in the program defines 500 basic behavioral objectives in reading, assesses the level of competence of each child, and prescribes learning activities for each objective prescribed for the individual learner. (Author/JM)

HIGH INTENSITY LEARNING CENTERS – READING

OUTLINE

I. Introduction

The High Intensity Learning Center System in Reading is a teacher support system which defines each student's unique reading needs and prescribes appropriate learning activities to fill those needs. It is a system that permits one teacher to manage the learning activities of up to thirty students per class hour on a purely individualized basis.

The System, in operation for over nine years, is in a continual state of development and modification as coordinators and teachers across the country put it into process. Developed by Dr. S. Alan Cohen, of Yeshiva University, Syracuse, N.Y., the System provides not only prescriptions for instruction and classroom management strategies but also the resources enabling one teacher to operate several individual curriculums with several different students at one time.

At the outset of the program, Random House, Inc. sponsor of the program, recommended the purchase of specified materials available from various publishers which in its judgement were best suited to fit the requirements of individualized system instruction. In addition, they helped design and administer a professional development program for the instructional staff, helped to implement the new curriculum, and supported it during the entire year.

The concept of "accountability," fundamental to High Intensity Instruction, enables the teacher to define the task which the pupil must learn, the methods and materials that will be used to learn it, and the specific behaviors the pupil must demonstrate in order for him and the teacher to know that learning has occurred.

II. Overview

During 1971-72 school year, High Intensity Learning Centers in Reading were established at seventeen elementary, eight junior high schools and four senior high schools throughout the Omaha Public School District. In addition, twelve Centers began operating toward the end of the school year in Omaha Non-Public Schools.

During five or six hours per day, approximately twenty-five pupils were scheduled into these centers for one hour daily.

In the beginning of the program, pupils were diagnosed on the basis of two criteria. First, to determine their level of reading competency, a Basic Test of Reading Comprehension was administered. Second, all students were diagnosed on an initial module of six to ten Instructional Objectives Tests to set starting point objectives for each child. Materials and activities for each child were then prescribed according to this initial diagnosis. This process of diagnosis and prescription was then continued throughout the year.

As a student mastered each Instructional Objective (I-O) he needed to learn, new I-O Tests were administered and new prescriptions were assigned. A basic concept behind High Intensity Instruction is that of maximizing the time spent by pupils in active participation in prescribed learning activities. The High Intensity Learning Centers are designed to help children reach specific reading performance objectives.

The pedagogy utilized in the program is one that defines 500 basic behavioral objectives in reading, assesses the level of competence of each child, and prescribes learning activities for each objective prescribed for the individual learner.

III. Background and Philosophy

Several concepts are essential to the management of High Intensity Learning Centers, the most important of which are as follows.

A. **Prescriptive diagnosis** is a form of diagnosis which doesn't assign a number ("third-grade level"); doesn't assign an etiological label ("this boy has developmental dyslexia") but does help the teacher find a way to teach the student to read. Prescriptive diagnosis as utilized in High Intensity Learning has five main characteristics.

1. It defines the specific reading behavior to be measured, usually by the nature of the test used.
2. It describes the behaviors operationally, by definition and by the nature of the test item. (Sample test items: "Select one of four alternative titles that expresses the paragraph's main idea." "Circle the initial consonant in the word.")
3. It defines the conditions of behavior, specifying such circumstances as "with a timed test" and "in a classroom."
4. It defines the criteria of mastery in such terms as "grade level achievement" and "percent correct." These criteria of mastery are determined by the teacher, who takes into consideration the entering level of the student, his general level of ability, his degree of retardation, and level of the materials available. The teacher sets an expectancy level higher than that at which the student is currently operating, but low enough for the student to reach in a relatively short time.

B. **Motivation** is a concept essential to progress in High Intensity Instruction. It involves a method of reinforcement or "payoff" which the student experiences right after he responds to a learning stimulus. Formal or informal reinforcement sets an "affective tone," a tendency in the student to pay attention to the source of the learning stimulus and the feedback. The instant in which he is attending to the stimulus-feedback source is the ideal time to present the next learning stimulus. In this way the reinforcement of motivation in the learning process is assured.

C. **Individualization**

Reference studies which have tried to pinpoint the characteristics of both the successful teacher and the successful class point out that:

1. The more successful teachers (as defined by their students' higher reading-achievement levels) tend to differentiate that is, individualize their reading instruction more than the less successful teachers do.

2. In classes with higher reading achievement, students tend to spend more time in applying or developing reading skills than those in classes with lower reading achievement do.

Studies by Tennenbaum and Cohen have shown that more successful classes have a higher "participation-in-learning ratio" ("P" ratio) than less successful classes. They have as an example shown that given a period of time in which students are scheduled for instruction in reading, the more successful classes spend the highest proportion of the clock time on *prescribed* learning-to-read activities. These activities were intensified by being adjusted individually to each student's interests and needs, and by allowing each student to work at his own level and his own rate.

D. **Instructional Objectives within the Program**

The High Intensity Learning System utilized the concept of "instructional objectives" to determine a student's strengths and weaknesses. In this way schools, setting as a goal certain well-defined reading behaviors, can plan their curriculums more clearly; they can also evaluate students' performance with a knowledge of "what they are evaluating for."

With this System each behavior is defined operationally, such as:
"Given a word visually, the student writes each syllable of the word separately."
"After reading a selection, the student selects from four choices the statement that is *not* supported by the selection." With these definitions in mind, assessment techniques can be made specific for each of these behaviors.

IV. Objectives of High Intensity Instruction (from "Omaha Proposal")

A. General

1. That all the children in the program learn to read at a functional level.
2. That the children not only learn to read at a functional level but also are encouraged to achieve their full reading potential.
3. That the children are prepared to pursue those benefits in other subject matter areas that accrue from the ability to read well.
4. To provide all the children with the enriching opportunities that are presented in both classical and current literature.
5. To raise the level of aspiration and to improve career opportunities.

B. Performance (from Title I Proposal) The following performance objectives were contingent on the completion of at least 150 clock hours of instruction in a High Intensity Learning Center.

1. Gain 1.0 grade level on the reading comprehension sub-test of any established standardized reading test on which he has scored within plus or minus standard deviation on the pre-test.
2. Master thirty-five reading instructional objectives which on the pre-test indicated a deficiency. Criteria referenced assessments are available for every instructional objective in the classroom management system.
3. Show a mean gain pre-post on a questionnaire about his attitude towards reading instruction equal to 35% of the common (within) standard deviation of the two assessments (i.e., the pre- and post-scores on the questionnaire.)

V. Materials

The High Intensity Reading Center Program consisted of two sets of materials.

A. On the recommendation of Random House, the Omaha Public Schools purchased materials (kits, workbooks, trade books, audio-visual equipment, etc.) needed for the program from many different publishers. At the outset a materials inventory list was reviewed and those materials and supplies not already in use in the Omaha Public Schools were ordered directly from the appropriate publisher. Detailed lists of these materials can be found in the "Omaha Proposal for High Intensity Learning Centers—Reading."

High Intensity Instruction materials were selected on the basis of at least three criteria:

1. They were designed to allow the content, level and rate of learning to be adjusted for each pupil in classrooms with a 30 - 1 pupil teacher ratio.
2. They were relevant first to the needs and second to the interest of pupils being served.
3. Most of the materials were self-directing and self-correcting. B.

B. The Classroom Management System, including the following materials, was supplied by Random House, Inc. *(*See appendix for examples)*

1. ***The Basic Test of Reading Comprehension**-This ten-minute test of reading comprehension told the teacher at which Subsystem level the student was performing. In the Management System there are five levels or Subsystems (to be described later), each with specified instructional objectives, tests and prescriptions.
2. ***The Check-In Test Kit**-These components, including check-in test pads and booklets and supporting cassettes, measure students on all the the Instructional Objectives in the system that could be observed by pencil-and-paper assessment. Some I-O's that involved important reading behaviors can not be measured by these means and must be observed by the teacher.

3. *The Student Record Form-The Check-In Test for each instructional objective generated either a "pass" or a "fail" designation. If the test indicated that a student had passed, the number of the tested instructional objective was slashed on his copy of the Student Record Form. If he failed; however, the number of the tested or observed I-O was circled (152), directing the teacher and student to instructional objective 152 in the Catalogue of Instructional Objectives. The teacher kept a copy of the Student Record Form for each student. The System provided these forms for each center.

4. The Classroom Management Wall Chart-Each student wrote the number of the instructional objective he needed work on next to his name on a wall chart posted in the High Intensity Center. Both the teacher and student were then able to keep track of each I-O the student mastered and the new I-O's he would be working on. The System provided wall charts for each center.

5. The Catalogue of Instructional Objectives-The catalogue listed about 500 instructional objectives, numbered and organized by category (but not sequentially in a "scope and sequence"). With each instructional objective was a set of prescriptions for that objective, specified according to the name of the material, the page, the item number, and any other necessary information. The Catalogue came in two volumes; one set was provided for each High Intensity Center.

6. *Instructional Prescription Forms-These forms, provided with the Management System, were used by the teacher or student to record the prescriptions that have been taken from the catalogue to meet that particular student's needs.

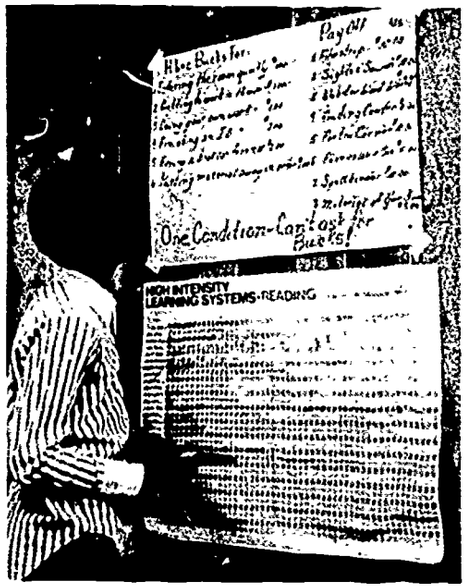
7. *Check-Out Tests-The Check-Out Tests, alternate forms of the Check-In Tests, were administered to students after they had worked their prescriptions for that instructional objective. The number of the Check-Out Test corresponded to the number of the Check-In Test for that objective. Both numbers corresponded to the number of the instructional objective and its prescriptions in the Catalogue.

8. Student Storage Folders-The Management System provided folders in which students stored all their records, progress plotters and answer sheets. These folders remained in the High Intensity Learning Center throughout the school year.

9. ***The Achievement Awards and Door Sign**-Each Center was supplied with 150 large achievement certificates and 300 smaller achievement certificates that were used as extrinsic motivation for various kinds of behavior. That behavior could have been something such as using center procedures for a period of time, completing a specified number of prescriptions in a period of time or anything else the teacher wished to reward A Door Sign was also provided for each High Intensity Learning Center.

C. **Components developed by Omaha Staff**

The following components were developed for use in the program as a part of the problem solving work of teachers and project leaders.



1. ***Hilinc Points**-Certificates of achievement, known as Hilinc points, were printed and used as a system of payoff providing reward for daily accomplishment. These could in turn be exchanged for extended opportunities to read or use materials in the center.

2. **Progress Plotters**-It became very important that students kept track consistently of the work they did in skills development materials. Progress plotters were designed so the child could keep a percentage record of success on each exercise in bar graph format.

3. ***Conversion Charts**-These were used to assist children in converting number of rights in an exercise to percentage right.
4. **Reading Record**-A record of all books read was made for use in the child's folder. The number of books each child read was also plotted on a wall chart.
5. ***Hilinc Idea Express**-This problem solving newsletter was written and distributed weekly to all Hilinc Teachers and school administrators. The newsletter was an extension of problem solving done by the project leaders indicating solutions devised in various situations for problems which were considered common to most centers.
6. ***Universal Answer Sheets**-Students wrote answers to questions on printed answer sheets wherever this was possible. In order to facilitate this, an answer sheet was developed which could be used universally in the centers.

7. **Teacher Checklist**-As desired performances in center management and instruction were designed in training sessions, a checklist was made to be used in studying the work of teachers and aides in each center. These checklists were approved by a teacher committee and served a useful purpose in setting precise goals for teachers.
8. **Computer retrieval of Objectives**-A computer program was developed to manage and collate information on objectives reached by individual students in the center. In long range evaluation of student performances in the Center it is expected that directions can be further defined to assist teachers in managing specific instructional problems in the centers.

VI. Personnel

A. Field Consultants

Random House supervisors acting as field consultants augmented the assistance to teachers provided by local project leaders.

The basic purposes of these supervisors were to:

1. Provide initial instruction in system development and management.
2. Provide needed assistance to the project leaders and center teachers in solving specific problems.
3. Judge the project against others in operation across the country.

B. Project Leaders

Local Project Leaders were selected by Omaha Public Schools from its staff to serve with their salaries paid during the contract year by the Random House Company.

The basic duties of the Project Leaders follow:

1. Define and solve instruction and management problems with teachers.
2. Carry on staff development projects including problem solving group meetings, individual conferences, and close observation of teacher performance.
3. Prepare to take over full control of the project in coming years.
4. Evaluate teacher performance against established definitions of their role.
5. Assist in collection of data for use in evaluation and problem solving.
6. Provide information for and coordinate problem solving with Omaha Public Schools Reading Clinic Supervisor and other interested decision makers.
7. Provide information through a variety of methods to the community and parents of students in the program.
8. Communicate all requirements for the program to the Hilinc Teachers.

C. Teachers

All the High Intensity Learning Centers were operated by regularly certified teachers. Teachers were selected by the Omaha Public School System and were salaried according to the regular Omaha School schedule.

The criteria for selecting High Intensity teachers were similar to those for selecting regular classroom teachers. They were selected as having the potential to:

1. Use effectively the Cohen instructional System.
2. Relate to and interact productively with children of the target population.
3. Apply current knowledge of how young people learn.
4. Respond flexibly to the changing needs of a unique situation.
5. Effectively use learning materials from the area of reading and language arts.
6. Use different learning strategies in accord with the needs of the learner and work effectively with individual students.

D. **Aides**

Aides in the centers have the following duties:

1. Modify and maintain all materials in the center.
2. Assist children in locating, using, and replacing materials.
3. Confer with children in their attempts to reach specific objectives as assigned by the teacher where instruction is not required.

VII. Type of Student Involved in High Intensity Instruction

Participants for High Intensity Instruction were selected on the basis of the following criteria.

A. They were eligible for Title I participation.

B. Their measured intelligence on an individual test was above a stated minimum (90 I.Q. in most schools).

C. Their reading achievement score was below a stated maximum (30-50th percentile).

VIII. General Methodology

A. Entering the Program

Each student entering the program was given the Basic Test of Reading Comprehension. The test results indicated the subsystem of diagnosis in which he should begin the program. Five subsystems were designated and diagnostic tests were divided into these subsystems to insure most appropriate placement of students.

B. Beginning in the program (Diagnosis)

The second procedure after entry into the High Intensity Center was prescriptive diagnosis of a child's reading problem. The prescriptive diagnostic method used in the Center was distinguished from classical diagnosis by five characteristics:

1. It defined the specific reading behavior measured, usually by the nature of the test used.
2. It described the behaviors operationally, usually by the nature of the test item.
3. It defined the conditions of behavior on such dimensions as: a timed test, in a classroom, etc.
4. It defined the criterion of success in such terms as "grade level achievement", or "percent correct," or rate. This criterion of mastery was determined by the teacher, who considered the entering level of of the child, his general ability level, his degree of retardation and level of the materials available. The expectancy level was set at a level higher than that at which the child was operating, but low enough for him to reach it in a relatively short time.

5. It provided a direct link to the retrieval system for materials the child could use to learn or exercise the skill he needed. This provided a prescription directly from the diagnosis, not a statement of failure.

   Each High Intensity teacher had a catalogue or bank of the instructional objectives that comprised the system. The instructional objectives were divided into four categories; word study skills, vocabulary, comprehension and work study skills.

   Each instructional objective (I-O) in the bank had a number. Each I-O had the exact items or resources that teach the behavioral or instructional objective at different levels of difficulty.

   The teacher administered an I-O test or assessment thus yielding an I-O number. The teacher then looked up the number in the I-O bank. Next to the operational description of that objective was a list of the specific resources that taught that objective with a minimum of teacher directed methods.

C. Organizational Procedures

Certain basic procedures were followed during the time that High Intensity Reading Centers were being organized.

1. All instructional materials, equipment, answer keys, etc. were modified and arranged so that they were readily available to students for individual study.
2. An attractive comfortable corner conducive to reading was reserved for books.

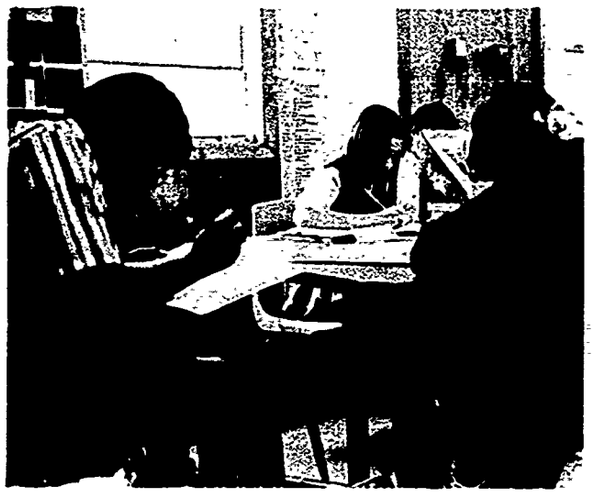
3. Materials were arranged so as to prevent traffic jams. Heavily used materials were placed in convenient spots so students could get what they needed quickly.

4. Each piece of material had a permanent place in the Center. Students were instructed to put each item back in its proper slot after using it.

5. Students were phased into High Intensity Learning Centers individually or in small groups of five or six each until the maximum number of students were introduced to the Center and working in it. Student Information Cards were completed for the purpose of securing data pertaining to each student. This card is 8½" x 14" and was designed to include census, socio-economic and test data as well as serving as a record for transferring or terminating student participation. All data was then stored for treatment and analysis.

   Students were initially screened as "candidates" for the program by means of group survey achievement tests. They were later qualified as "participants" when it was determined that they met the guidelines of the program.

6. At this stage in the program, before individual prescriptions were made, multi-level materials, such as Random House Reading Program (RHRP) materials, the SRA Reading Labs, or the Barnell Specific Skill Series, were used so that all students could learn the procedures of operating the materials. Generally by the second week, students began working on their prescriptions while continuing the phase-in procedure of the first week. Figure one on the following page shows some of the procedures suggested for starting up a High Intensity Learning Center.



The First Week in the High Intensity Learning Center

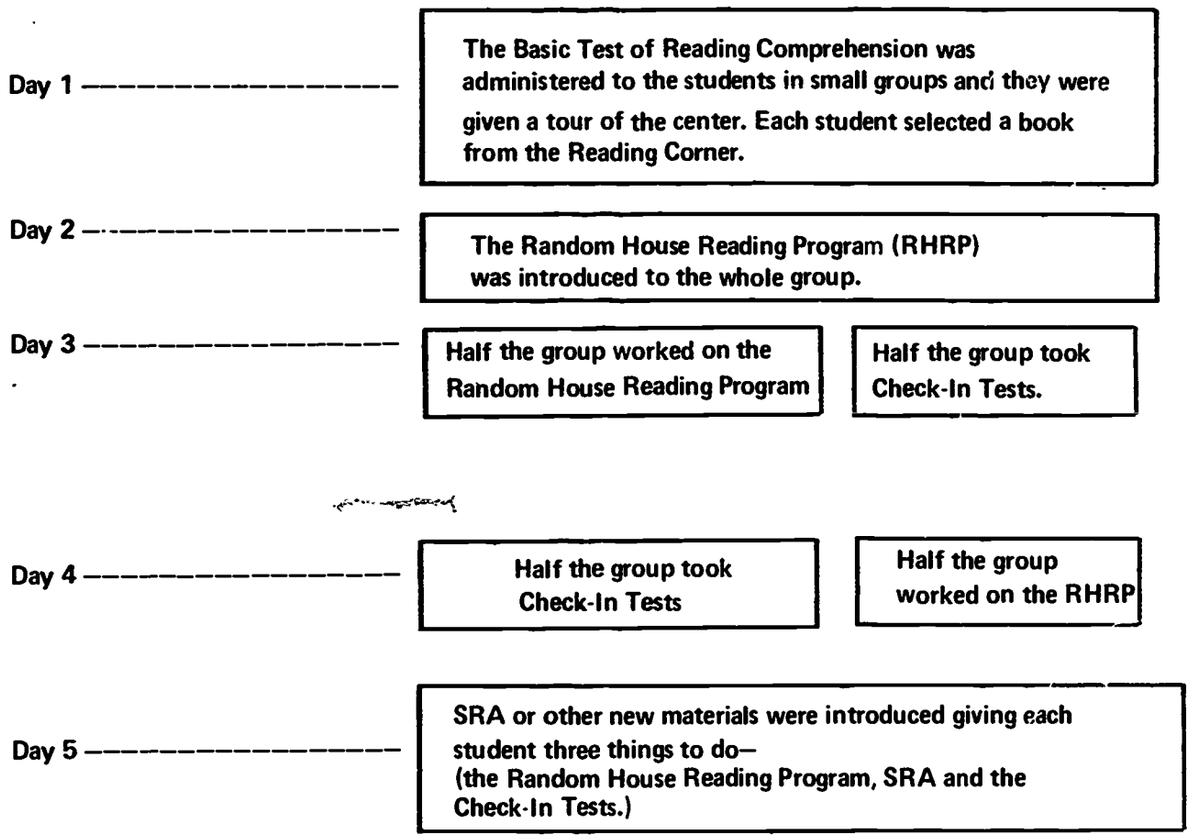


FIGURE 1

D. **Listing of Centers, Teachers and Aides**

With the exception of Technical Junior High, all of the following schools had one High Intensity Learning Center in operation during the 1971-72 school year. Technical Junior High had two Centers in operation.

	Public Schools	*Teacher*	*Aide*	*Avg. No. of Participants*
Elementary—17	Central Grade	Bonnie Skaff	Janet Mills	42
	Clifton Hill	Connie Caldwell	Charlotte Kennedy	125
	Conestoga-Long	Barbara Nardie	Irene Keeton	118
	Druid Hill	Kathleen Naugle	Sallie Hadley	124
	Franklin	Pricilla Roehm	Evelyn Robinson	112
	Indian Hill	Carolyn Casper	Berniece West	82
	Jackson	Suzanne Wies	Theresa Bendy	63
	Kellom	Grace Hatcher	Lucille Hawkins	119
	Kennedy	Marian Campbell	Carrie Ray	117
	Marrs	Kathleen Skaug	Audrey Prenderjest	126
	Mason	Rochelle Katz	Eileen Scarpello	94
	Miller Park	Susan Hussey	Kay Leu	125
	Pershing	Bonnie Skaff	Faith Delezene	80
	Saratoga	Georgia Gaukel	Sara Thomas	124
	Sherman	Victoria Radford	Elizabeth Peterson	126
	Walnut Hill	Linda Way	Marcella Carlson	123
	Yates	Suzanne Wies	Anne Cawthorne	62
Junior High—8	Bancroft	Agnes Nelson	Patricia Prososki	123
	Indian Hill	Carolyn Casper	Berniece West	50
	McMillan		Carol Behrens	103
	Mann	Susan Holt		112
	Marrs	Kathleen Skaug	Audrey Prenderjest	30
	Technical	Helen Hiatt		90
		Kathryn Stodola		84
	Individualized Study Center	Mildred Boyd		75
Senior High—4	Central	Robert Nelson		103
	North	Janet Baeder		94
	South	Nancy Huston		95
	Technical	Marjorie Cotler		123

Non-Public Schools	*Teacher*	*Aide*	*Avg. No. of Participants*
St. Agnes	Lucille Prior	Roberta Stevens	36
St. Ann	Mary Blum	Mary O'Brien	50
Dominican	Delores Houlihan	Terri Miller	30
St. Frances Cabrini	Cheryl Frederickson	Petra Arenas	52
Holy Name (Elem. & High)	Marion Dawson	Barbara Begley	103

Non-Public Schools	*Teacher*	*Aide*	*Avg. No. of Participants*
Immaculate Conception	Janet Rockwell	Mary Benak	74
St. Joseph	Lucille Prior	Anne Manual	64
St. Patrick	Cheryl Frederickson	Loretta Janiak	65
St. Peter	Mary Blum	Joann Varga	40
Sacred Heart	Mary Manhart	Lynette McCowen	95
St. Therese	Delores Houlihan	Betty Spindlen	51

E. In-Service

Intensive training was administered to all teachers by Random House personnel in three areas:

1. Proper use of educational materials
2. Implementation and maintenance of the program
3. Operation of the classroom management system

High Intensity teachers were also given a 40-hour training course in general principals of remedial reading instruction by the Central Reading Clinic. A test of knowledge was given after this training.

The teachers also received approximately 28 hours of intense training on the use of the system in the classroom.

F. Supportive Services – Media Center

The Media Center supported the Hilinc Program in these ways:

1. Printed answer sheets and other materials utilized in the program
2. Prepared a program of photographic slides to show the program in action for interested patrons.
3. Printed the *Idea Express,* an informative newsletter for the staff.
4. Prepared and printed a brochure entitled "Learning to Read" to publicize the program.

G. Evaluation Design

At the outset of the program an evaluation design was proposed to serve as a means of monitoring the program. In order to provide comparative data necessary for this pilot program it was recommended that the design include three levels of evaluation.

Level One

A group achievement survey was to be administered prior to participation in the learning activities of the program. A test appropriate to the grade placement of the student was to be used. This data, a part of the Title I testing program, would provide an indication of achievement shift in terms of grade equivalent. Particular attention was to be paid to the vocabulary and reading comprehension sub-tests as well as to the comprehension score.

Survey tests appropriate to the student's grade placement include:

–The Iowa Test of Basic Skills

–The Sequential Tests of Educational Development

–The National Educational Development Test

–The Gates MacGinitie (full test)

–The Nelson Reading Test

–Other Reading Tests

To be used in absence of above tests.

Determination of grade level shifts on the group achievement survey tests was designed to show the growth in basic skills which are the tools for handling everyday problems.

Level Two

On this level an individual reading comprehension test was to be administered prior to participation in the learning activities of the program. Shifts in reading comprehension during the period of participation in the "Hilinc" program were measured by means of this reading test given at the "instructional" level of the student. Such a test was described as one on which the student could score within one standard deviation from the mean.

Level Three

At this level the evaluation was to be based on the number of instructional objectives accomplished by the individual student. The **Check-In** and **Check-Out** Tests which are included as part of the "Random House Management System" provided the necessary data for this level of evaluation.

The above measurements were further studied in terms of the time students participated in the instructional activities of the "Hilinc" program.

IX. Operation of the Centers (The Management System)

Following the in-service training program and student selection procedures, the High Intensity Learning Center teachers followed several fundamental steps to group and involve participants in the program.

A. To determine placement in a Subsystem, traditionally known as a "level," each student took a **Basic Test of Reading Comprehension** (BTRC) provided by Random House Educational System.

The BTRC consists of numbered passages of one to three sentences, arranged in paragraph form so as to stimulate the normal reading exercise. Toward the end of each passage, a word has been inserted which spoils the meaning of the passage. The students are instructed to find the word which spoils the meaning and cross it out. If the student responds correctly, it may be inferred that he was able to comprehend the meaning of the passage.

On the basis of the number of correct responses on the times (ten-minute) group administered assessment each student was grouped according to a subsystem in the following manner.

CONVERTING BTRC RESPONSE TO SUBSYSTEM LEVEL

BTRC Number Correct	Subsystem Number	Description
0–5	I	Non-reader
6–18	I, II	Beginning reader
19–30	II	Elementary reader
31–40	II, III	Functionally literate
41–	III	Good reader

B. For each Subsystem there was a set of Check-In Tests and concomitant prescriptions. After it was determined which Subsystem a student should work in, he took a series of Check-In Tests to ascertain those objectives in which he was deficient. The set of objectives connected with a particular Subsystem was designed to insure that that student was prescribed reading tasks that he could reasonably handle.

Students initially took six to ten Check-In Tests at their Subsystem level on a pass-fail basis. Each Check-In Test was numbered according to its Instructional Objective (I-O) number. All I-O's that a student needed at that point were then recorded on the Student Record Form kept by the teacher and the Wall Chart posted in the High Intensity Center.

C. The Check-In Test number allowed the teacher to refer to the **Catalogue of Instructional Objectives** to get the corresponding prescription needed to remedy that specific reading problem. The I-O number and Subsystem level designation listed on the Check-In Test corresponded to the prescription the student worked on. When the prescription had been looked up it was noted on a Prescription Form and the student worked on these tasks until mastery was achieved.

D. When the student had completed the prescribed learning task, the teacher administered a **Check-Out Test** to ascertain his mastery of each Instructional Objective. As mentioned in the materials section of this report the Check-Out Test was simply an alternate form of the Check-In Test which was originally used to indicate a deficiency. If the student passed the Check-Out Test with an 85% or more degree of mastery he was ready to move into work on another objective. If not, it was necessary for him to go back and re-work the prescriptions associated with that objective until mastery was attained.

The progress of each student was accumulated both on the wall chart and as data in the Program Data Base. Further treatment is planned to analyze individual progress and shifts in reading skills.

FLOW CHART

How the Student Operates in HIGH INTENSITY LEARNING SYSTEMS—READING

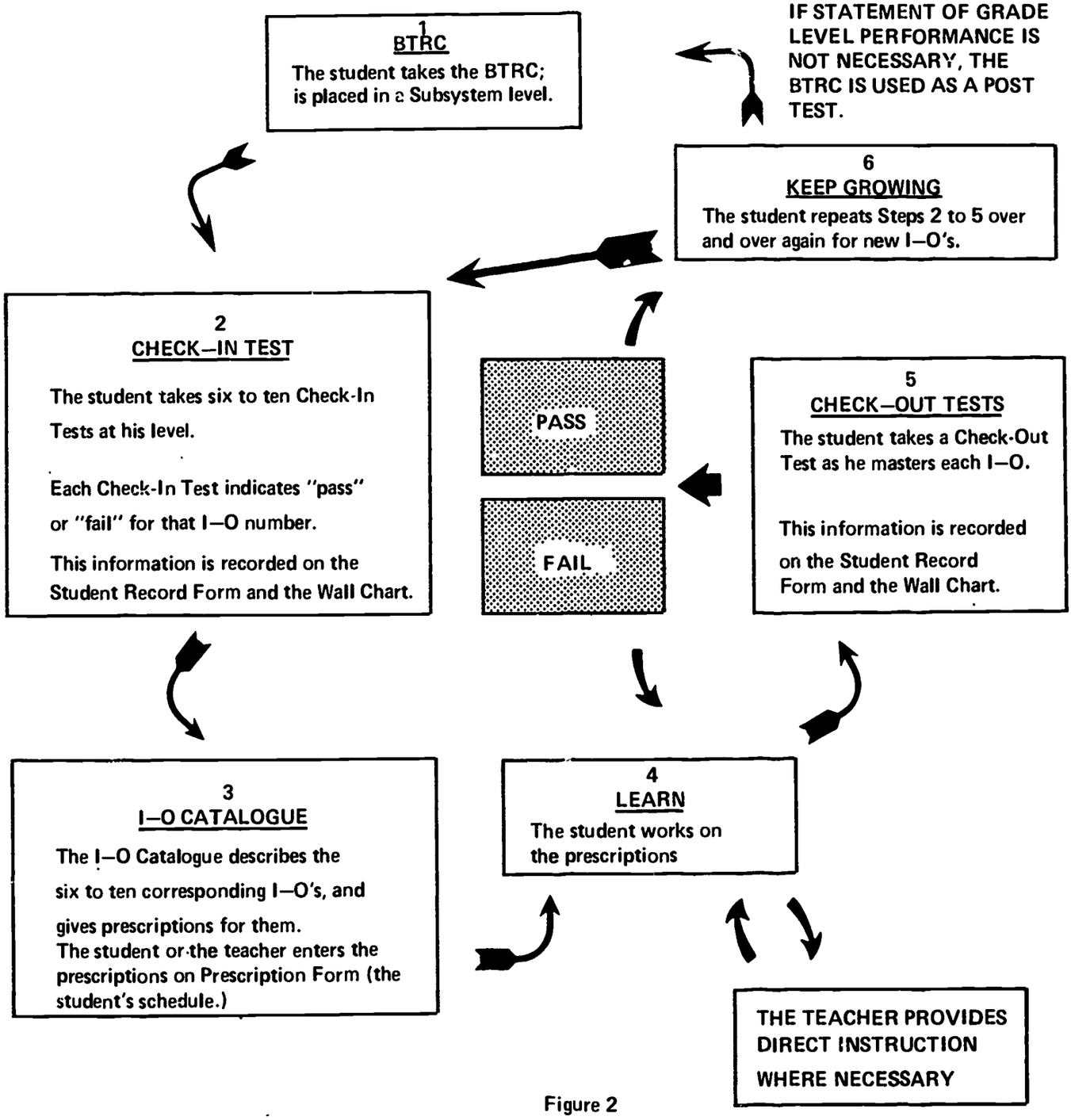


Figure 2

X. Evaluation of the Program

Summary of the High Intensity Learning Centers in Reading
(HILINC)
for the Omaha Public Schools, 1971-72

Section I

Dr. S. Alan Cohen, responsible for the development and design of the High Intensity Learning Centers in reading, has provided the summary report on the assessment of the HILINC program. All individual records have been maintained for supportive evidence and these records have been stored in a tag file in the Omaha Public Schools data processing center for future use. Complete summaries are available in the Omaha Public Schools Title I office.

Section II

Dr. Donald C. Cushenbery, Foundation Professor of Education, College of Education, University of Nebraska at Omaha serves as a consultant in reading for the Omaha Public Schools. He has submitted a study of reactions of pupils, classroom teachers, principals, and HILINC teachers with respect to High Intensity Learning Centers of the Omaha Public Schools. This provides additional supportive evidence for the HILINC program by the individuals most closely associated with the program.

SECTION I

RESEARCH REPORT: Omaha Project

INTRODUCTION

The Omaha project is particularly important in the ongoing assessment of the curriculum design known as High Intensity Learning Systems--Reading because of its scope. Omaha provided a large population representing three major disadvantaged minorities (Black, Mexican American and White) covering most grade levels in 30 urban schools. For assessment purposes this scope provided the kinds of controls and large sample size needed to demonstrate definitively the conclusion of the designers of the curriculum:

1. That intensive, quality instruction offsets the psychosocial effects on reading achievement of racism and poverty.
2. That intensive instruction derives from the systematic application of basic learning principles.
3. That replacing one publisher's materials with another's is not a curriculum change. Curriculum redesign requires an efficient and humane redeployment of human, instructional, physical and fiscal resources in the school to reach operationally defined instructional goals.
4. That systems approaches to curriculum design can be designed, delivered and implemented at a cost effective level superior to "programs" (publisher's materials) currently being used. Such a systems approach allows each student to learn what he needs to learn, in his unique way, at a learning rate and level unique to him.
5. That average non-specialist teachers can be trained quickly and inexpensively to operate such a cost effective curriculum based on behaviorally defined objectives in an accountability mode.

6. That disadvantaged children can make at least a year's growth in reading in a year's instruction.

7. That American public school educators can change their basic perceptions of the teaching learning process.

Results from a northern New York community demonstrated that this curriculum works equally as well with upper middle class children as with disadvantaged children. Results from Florida showed gains in vocabulary and comprehension to be of equal magnitude for disadvantaged (Title I) and middle class children. Results from Appalachia with severely deprived rural children who ordinarily show less than a half year gain in a full school year showed 1.47 years gain in 90 instructional hours (half a year) measured after the 2-month summer recess. Data from all over the country demonstrated what schools could do if they truly redesigned curriculum instead of buying another new package of basal readers, kits, or machines. But in most cases, these data derived from a seven-school project here, a one-school project there. No matter how consistent the results, skeptical critics justifiably eyed each result as a "special case."

The Omaha Project eliminates the "special case" criticism. In 1971-1972, a school system-wide application of 30 High Intensity Learning Centers for thousands of inner city children provided data that allowed control of teacher variable and school atmosphere, providing data drawn from "real world" curriculum redesign, free of the "special case" bias.

To insure a conservative assessment of the curriculum, each student was pre and post tested at his appropriate reading level, the pretest level at which he scored between ± 2 standard deviations. This technique reduced the regression to the mean effect; since the students were all underachieving, disadvantaged, Title I subjects their post test scores would otherwise have been inflated by test error biased toward the mean. All testing was done by

the school system's assessment personnel independent of the originators of the curriculum. All testing was done with the Gates McGinitie Forms B through E.

Certain statistical techniques used by the researcher allowed for control of "teacher-school effect." In fact, the amount of gain due to this effect in each Center is reported below.

This report describes the results of the work done by the Omaha Public School staff which implemented and supervised the High Intensity Learning Systems--Reading.

Ron Meyer, Director of the Omaha Reading Clinic led that staff. Elwanda Deason and Sally Jones supervised the curriculum redesign. This team of dedicated educators implemented the program, supported it, and parlayed the first 27 Centers into over 50 operating installations. An unusual quality of leadership was displayed by Dr. Owen Knutzen, Superintendent of Omaha's Public Schools and Dr. Craig Fullerton, Assistant Superintendent for Instruction; not only did they support the Reading Clinic staff, but they stood behind the decision of the Omaha Public Schools' Title I Director, Robert Davis, who was willing to risk most of the Title I federal funds on the project. In my own work in hundreds of school systems I have never met a more facilitating, cooperative and dedicated top administration.

Dr. Lloyd Texley coordinated the incredible job of administering tests, collecting and collating the results into one of the finest student data banks in the country. Thirty teachers, many of them fresh from the university, others with as much as 40 years' experience, suffered through the first months of implementation. My own staff, Dr. Joan Hyman, Brenda Clavon and John Bednarik executed the original staff training and implementation. Random House, Inc., Steve Berner, Vice President and Robert Knox, Manager of the Educational Systems Division made it possible for me to bring to fruition the results

of a decade of university research and experimentation.

High Intensity Learning Systems continues to be modified and expanded. A nation-wide system for updating the instructional materials as publishers produce newer and better programs is finally in operation. A series of techniques for more efficient classroom management is in development. Expansion of the curriculum into mathematics is underway. But Omaha, Nebraska, in 1971-1972 was the crucial place and time that established once and for all that America's disadvantaged children can learn to read in spite of the effects of racism and poverty.

New York City
December, 1972

S. Alan Cohen, Ed.D.

SUMMARY OF OMAHA PROJECT

Treatment

HILS--Reading for one class hour daily for 4 1/2 months.

Population

Results based on 2, 102 inner city, severely disadvantaged, Title I children, Black, Mexican American, White in 28 schools of a mid-western city. All students participating in the project had pre-test scores in reading at or below the 50th percentile with 70% of these students scoring below the 30th percentile.

Grade	Number of Children
3	46
4	429
5	493
6	433
7	308
8	163
9	113
10	52
11	61
12	4

Expected Gain

For this disadvantaged population:

1/2 year gain for one full year of instruction.

(For a middle class population:

one year gain for one full year of instruction.)

Expected Gain In This Study

For this disadvantaged population:

about .25 year gain in .45 year of instruction.

(For middle class population:

.45 year gain in .45 year of instruction.)

Actual Gain For All The Students After 4 1/2 Months In HILS

(Expected gain is 2 1/2 months.)

28% showed expected gain or below
68% showed gains above expectancy

22% showed 1/2 to one full year's gain in 4 1/2 months of instruction
42% showed 1 full year or more gain in 4 1/2 months of instruction

24% showed more than 1 1/2 year's gain in 4 1/2 months of instruction
14% showed more than 2 year's gain in 4 1/2 months of instruction

At Grade 3...

11% showed expected gain or below
78% showed gains above expectancy

30% showed 1/2 to one full year's gain in 4 1/2 months of instruction
48% showed 1 full year or more gain in 4 1/2 months of instruction

20% showed more than 1 1/2 years' gain in 4 1/2 months of instruction

At Grade 4...

24% showed expected gain or below
66% showed gains above expectancy

25% showed 1/2 to a full year's gain in 4 1/2 months of instruction
51% showed 1 full year or more gain in 4 1/2 months of instruction

18% showed more than 1 1/2 years' gain in 4 1/2 months of instruction
8% showed more than 2 years' gain in 4 1/2 months of instruction

At Grade 5...

27% showed expected gain or below
67% showed gains above expectancy

28% showed 1/2 to one full year's gain in 1/2 months of instruction
39% showed 1 full year or more gain in 4 1/2 months of instruction

20% showed more than 1 1/2 years' gain in 4 1/2 months of instruction
9% showed more than 2 years' gain in 4 1/2 months of instruction

At Grade 6...

23% showed expected gain or below
73% showed gains above expectancy

19% showed 1/2 to one full year's gain in 4 1/2 months of instruction
53% showed 1 full year or more gain in 4 1/2 months of instruction

33% showed more than 1 1/2 years' gain in 4 1/2 months of instruction
19% showed more than 2 years' gain in 4 1/2 months of instruction

At Grade 7...

32% showed expected gain or below
60% showed gains avove expectancy

17% showed 1/2 to one full year's gain in 4 1/2 months of instruction
43% showed 1 full year or more gain in 4 1/2 months of instruction

31% showed more than 1 1/2 years' gain in 4 1/2 months of instruction
23% showed more than 2 years' gain in 4 1/2 months of instruction

At Grade 8...

33% showed expected gain or below
61% showed gains above expectancy

15% showed 1/2 to one full year's gain in 4 1/2 months of instruction
46% showed 1 full year or more gain in 4 1/2 months of instruction

28% showed more than 1 1/2 years' gain in 4 1/2 months of instruction
19% showed more than 2 years' gain in 4 1/2 months of instruction

At Grade 9...

47% showed expected gain or below
51% showed gains avove expectancy

27% showed 1/2 to one full year's gain in 4 1/2 months of instruction
24% showed 1 full year or more gain in 4 1/2 months of instruction

13% showed more than 1 1/2 years' gain in 4 1/2 months of instruction
10% showed more than 2 years' gain in 4 1/2 months of instruction

At Grade 10...

40% showed expected gain or below
49% showed gains above expectancy

10% showed 1/2 to one full year's gain in 4 1/2 months of instruction
39% showed 1 full year or more gain in 4 1/2 months of instruction

27% showed more than 1 1/2 years' gain in 4 1/2 months of instruction
25% showed more than 2 years' gain in 4 1/2 months of instruction

At Grade 11...

50% showed expected gain or below
45% showed gains above expectancy

10% showed 1/2 to one full year's gain in 4 1/2 months of instruction
35% showed 1 full year or more gain in 4 1/2 months of instruction

22% showed more than 1 1/2 years' gain in 4 1/2 months of instruction
20% showed more than 2 years' gain in 4 1/2 months of instruction

At Grade 12... (N too small)

The Average Growth*

The average grade level growth for all grades in 4 1/2 months of instruction was 8.7 months, almost double the expected growth if the students had been middle class--over 3 1/2 times the increase in growth over what is usually achieved by Title I inner city children.

Sixth graders showed the highest average growth of 11 + months in 4 1/4 months.

S Sixth graders showed about 10 + months average growth in 4 1/2 months.

Third graders showed almost 10 months average growth in 4 1/2 months.

Fourth, fifth and eighth graders showed over 8 months growth in 4 1/2 months.

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* All data reported is statistically significant beyond the .01 level of confidence.

DESCRIPTIONS OF RESULTS

Table I shows the data combined over 30 Centers, 2102 students, displayed by grade levels. The average gain for all students, in all Centers, at all grade levels was .87 of a year after .45 of a year's instruction, one class hour per day in the High Intensity Learning Systems--Reading. That represents almost double the expected gain for average students and over three times the expected gain for the Title I students in this school system.

In Grade 3, the average gain for 46 third graders across three Centers was about a full year (.99) in .45 of a year's instruction. That is more than double the expected gain for average students and almost a 400% increase over the expected gain for disadvantaged students who were selected for this project.

The average gain for 429 fourth graders across 16 Centers was .84 of a year after .45 year's instruction. That represents slightly less than double the expected gain in average fourth graders. For Title I children in this project this represents an increase over expected gain in excess of 330%.

The 493 fifth graders serviced by 17 different Centers and the 163 eighth graders in 10 Centers showed approximately the same gains as the fourth graders.

The largest gains were made by 433 sixth graders in 17 Centers. After .45 year's instruction, the standardized tests showed 1.12 years growth. A close second was the 1.03 years growth in the 308 seventh graders. That, of course, represents over twice the gain expected of average students and over 400% greater gain than would ordinarily be made by the Title I students in this project.

TABLE I: Average Pre, Post and Growth Scores

By: Grade Level after 4 1/2 months of HILS
(1 class hour per day)

Total N (30 Centers)	Total Aver. Gain in Years
	.87

		AVERAGE SCORES IN YEARS		
Grade	N	Pre	Post	Growth
3	46	2.25	3.24	.99*
4	429	2.68	3.52	.84*
5	493	3.18	4.00	.82*
6	433	4.09	5.20	1.12*
7	308	4.66	5.69	1.03*
8	163	5.35	6.20	.85*
9	113	6.90	7.16	.25
10	52	7.24	7.62	.38
11	61	7.57	8.12	.55

(*P> .01)

TABLE 2: AVERAGE GAINS IN 4 1/2 MONTHS OF HILS (1 HOUR PER DAY)

All Gains Expressed in Years

Ctr. No.	Total N Per Ctr.	Aver. Gain Per Ctr.	Average Gain in Years for Grade... 3	4	5	6	7	8	9
A	100	1.73					1.79	1.64	
							61	39	
B	61	1.71	1.51	1.58	2.61	1.48			
			10	13	11	27			
C	58	1.30	1.21	1.02	1.53				
			19	14	25				
D	40	1.24					1.39	.73	1.04
							.25	3	12
E	71	1.18	.66	1.25	1.24	1.17			
			5	22	25	19			
F	116	1.08		.97	1.03	1.26			
				35	45	36			
G	42	1.05					1.29	.92	
							15	27	
H	99	1.01	.74	.98	1.23				
			27	34	38				
I	54	1.01					.98	.99	1.13
							30	13	11
J	109	.99		1.00	.76	1.29			
				34	43	32			
K	62	.98			.95	1.09	.81	1.52	
					15	17	25	5	
L	93	.98		.99	.79	1.02			
				51	12	30			
M	121	.95		.83	.83	1.26			
				54	34	33			

Total N (24 Centers) 1922

Total Aver Gain .92

Total Average Gain Per Grade Level Grades 3-9

Grade	3	4	5	6	7	8	9
Gain	.91	.87	.86	1.13	.94	.76	.27
N	46	429	493	433	308	163	50

Ctr. No.	Total N Per Ctr.	Aver Gain Per Ctr.	Average Gain in Years for Grade ... 3	4	5	6	7	8	9
N	86	.90	1.08	.49	1.20	1.20	.35	.92	.35
			21	13	19	13	8	6	6
O	95	.84		.59	.66	1.24			
				27	36	32			
P	37	.76	.98	.90	.43	.42			
			20	3	3	11			
Q	99	.76		.68	.67	.93			
				24	43	32			
R	118	.76		1.06	.75	.66	.82	.42	
				23	31	19	26	19	
S	65	.74		.68	.75	.78			
				16	26	23			
T	116	.67		.48	.58	.97			
				36	44	36			
U	45	.58					.53	.68	.10
							27	17	1
V	117	.50		.49	.48	.57			
				35	56	26			
W	48	.33					.36	-.35	
							46	2	
X	70	.14					.52	.09	-1.25
							18	32	20

The test results in Grades 9-11 show gains at or above expectancy for this Title I population, but the testing was most unreliable due to the poor ability of the particular level of the Gates McGinitie Reading Test used to discriminate at that grade level. Since data for Grade 12 were based on only four students, the results were not charted in Table I. (Those results showed .98 gain in .45 years--over double the expectancy for average students and four times the expected gain for these Title I students.)

Table 2 presents the data by Center and by each grade in each Center. It is based on 1922 of the 2102 in the total project population, covering Grades 3-9 in 24 of the 30 Centers. Six Centers (180 students) were excluded from this table because of incomplete data, low N's and unrealiable test data. The Grade 9 results in five Centers (50 students) is relatively unreliable. Small N's of six (Center N) and one (Center J) cannot be taken as a reliable index of the treatment effect. The average loss of -1.25 years for 20 ninth graders in Center M is an indication of the unreliability of the test level used to assess the treatment effects in the high school. The -.35 loss in the two eighth graders in Center W is probably accurate. Two students could have scored less on the post test compared to their pre tests. Minus scores, of course, represent no practical gain, not "real" losses.

Beyond these cells, only 32 eighth graders in Center X showed an average gain less than expectancy. In every other cell of Table 2, even in the "weakest" Centers, the average gains not only exceeded what would have been expected of these students (.25 years gain in .45 years instruction), but exceeded what would have been expected of average, on-grade level achievers (4 1/2 months gain in 4 1/2 months instruction).

By using Tables 1 and 2 together, the reader can compare average gain at a grade level within any Center with the average gain of that grade level across all the Centers. For example, in Center I, the 30 seventh graders had an average gain of .98, almost a full year's gain in 4 1/2 months. Table 1

shows 1.03 as the average gain for all seventh grades in all the Centers, indicating that this Center did almost as well with its seventh graders as the average for all eleven Centers servicing seventh graders.

The total average gain for all grades in all 24 Centers in Table 2 is .92 in .45 years of instruction. The .92 figure allows the reader to compare each Center's average gain for all grade levels serviced by that Center with average gain for all 1922 students. For example, the average gain for 61 seventh graders and 39 eighth graders in Center A was 1.73. This is significantly greater than the .92 average gain for the total population. This indicates that Center A was markedly more effective than most other Centers.

Teacher-School Effect (Accountability)

Controversial and threatening as it is to the profession, accountability need not be an illusive quality based on whim or prejudice, for this study produced a valid, objective assessment of teacher-school effect. Who is to be held accountable for these effects is an administrative decision, although tradition does dictate a teacher-to-principal-to-superintendent chain of command. Teacher-school effect was measured in two separate, independent methods that produced a mutual validity check. The first method was a supervisory staff assessment of "constraint." The second method was a sophisticated statistical analysis of test results performed by a researcher who had no knowledge of the constraint measurements or the schools involved.

Constraint Measures: During the 4 1/2 months of the HILS program, teachers were asked to list a summary of constraints that interfered with optimal systems operation. Those constraint reports were discussed among the supervisory staff and project director. The two project supervisors also submitted a constraint report and a final constraint chart was formulated by the project director.

Nine categories of constraints were compiled. Those categories are the key to interpreting the Constraint Profiles below.

Constraint Categories

1. Space
2. Administration problems or continuity
3. Teacher training
4. Teacher limitations in being unable to use the management system as designed
5. Materials late or unmodified
6. Furniture unavailable or unsuitable
7. Scheduling or student availability
8. Student attitude or unrest unrelated to the Hilinc program
9. Classroom teacher attitude towards the Hilinc program.

Interpreting Constraint Profiles: The column headings, numbers one to nine, in the profiles below represent the nine Constraint Categories. The values in each cell are interpreted as follows:

Constraint Rating Scale

No entry indicates no interference with the system from this category of constraint possibilities.

1 indicates a low grade nuisance problem that did not directly cause loss in total time of student participation but caused frustrations, indirect time loss, and need for problem solving time.

2 indicates a medium grade interference that caused estimated maximum of 20% loss of participation in the learning process.

3 indicates a high grade constraint that served as an immediate cause in delay or program interruption or inefficiency that caused more than 20% reduction in student participation in the learning process.

Thus a rating of 1 in column 7 for Center P7 indicates a "low grade nuisance problem" involving the category "scheduling or student availability".

The column marked Rate indicates the project director's subjective judgement of each Center's level of function using the same three-point rating scale. The rating 0 indicates an ideal level of function. The rating 3 indicates considerable interference by constraints in the project director's opinion.

Using Center O as an example to interpret the Constraint Profile, the rating 1 in column 2 indicates a low grade interference due to administration problems. The same low grade interference was caused by the unavailability or the lack of suitability of classroom furniture. A 2 rating in column 5 indicates moderate problems with delivery or modification of instructional materials. There was maximum interference (rating 3) due to poor management of the Center by the teacher (column 4). The total number of constraint points is 7. The project director rated over all functioning of the Center as 3 indicating that students last more than 20% of available participation time because of the constraints.

Center C shows three low grade constraints in materials availability, furniture and scheduling problems. But the outstanding job by the teacher

overrode these constraints causing the project director to score a near ideal level of functioning.

HIGH INTENSITY LEARNING CENTERS CONSTRAINT PROFILE

Center #	1	2	3	4	5	6	7	8	9	Total	Rate
P		1		2	1	1	1			6	2
T	1	2		1	1	1	1		1	8	1
Q		1		2	1			1		5	2
F	1			1	1	2	1			6	1
J	2			2	1	1	1			7	2
S	1				1	1	1	1	1	6	1
B	1				1	1	1			4	0
H	1			1	1	1	1			5	1
O		1		3	2	1				7	3
E	2				1	1	1	1		6	1
N	1	2	1	1	1	1	1		1	9	2
M	2	1		1	1	1				6	1
K	1			2	1	1	2	2	1	10	3
V	2	1		3	2	1				9	3
R				1	2	1	1			5	1
L	1			2	1	1				5	2
C					1	1	1			3	0

HIGH INTENSITY LEARNING CENTERS CONSTRAINT PROFILE

Center #	1	2	3	4	5	6	7	8	9	Total	Rate
A	2			1	1	1	2		1	8	2
D					1	1	1	1		4	1
G			1	1	1	1	2			6	2
R	2	1		1	1	2	1	1	1	10	3
I	2				1	1	1		1	6	1
W		2		3	1	1	1	2		10	3
W		2		3	1	1	1	1		9	3

Statistical Analysis: Table 2 displays accurately the results for each of the 24 Centers for which complete data are available. That table lists the Centers from those achieving highest gains (top) to those achieving lowest gains (bottom).

This hides pre test differences, and inflates the effect of one group of children within a Center who might score exceedingly high or low on post tests. In general, Table 2 does show the more effective Centers, but a much more reliable and valid assessment of teacher-school effect was needed that could covary out pre test differences and performance of exceptional subgroups.

Using multiple and partial correlations with beta weights, predictor variables

a. composite pre test grade equivalent score

b. Center number

c. all grades

d. grades squared

were correlated with the predicted variable: composite post test grade equivalent score. By pulling out of the multiple correlation the amount of variance accounted for by Center number, holding pre test scores and the other predictor variables constant, the regression coefficients revealed for certain schools at the top and bottom of the Table 2 array how much of the average gain for that Center was due to "teacher-school" effect. "Teacher-school" effect refers to factors other than those predictor variables that were held constant. Centers in the middle of the Table 2 array showed teacher-school effects that did not exceed statistical significance, $p > .10$, and are not included in Table 3.

TABLE 3

PERCENTAGE OF GRADE LEVEL GAIN OR LOSS ATTRIBUTED

TO INTERACTION OF HILS AND TEACHER-SCHOOL EFFECT

Center Number	Grade Lev. Gain or Loss	% Gain or Loss	P
A	+.99	+57	.0000
B	+.77	+45	.0000
C	+.37	+28	.02
D	+.33	+27	.01
E	+.29	+25	.05
T	-.31	-35	.01
U	-.33	-38	.08
V	-.49	-56	.000
X	-.54	-62	.0004
W	-.71	-82	.0001

The rank of each Center according to grade level gain or loss in Table 3 follows exactly the rank order of Centers in Table 2. But Table 3 shows exactly how much of the <u>average growth per Center</u> in Table 2 is accounted for by teacher-school effect. Note, teacher-school effect <u>cannot</u> be separated from the High Intensity Learning System, so that the most accurate interpretation of Tables 2 and 3 together must be stated in such form as:

"Using a High Intensity Learning System pedagogy in Center A, .99 of the 1.73 average growth--about 57% of the average gain--is accounted for by the interaction of High Intensity with teacher-school effect."

If, for example, Mr. Smith's personality is "warmer" than Miss Jones', and Smith ran Center A while Jones ran Center V, and those personality traits were in fact the main components of teacher-school effect, then .99 of the 1.73 gain in Mr. Smith's Center was the effect High Intensity has when Smith used that pedagogy.

On the other hand, .49 loss was the effect of Jones' personality when she ran a High Intensity Learning Center, leaving a .50 gain after her personality took its toll. The data in Table 3, however, do not tell us exactly what the factors were in teacher-school effect. For that information, we must analyze the constraint measurements presented below. Those constraint measurements already tell us that the major components of teacher-school effect in Centers W and X were tests that could not detect gains.

The "System" and Teacher-School Effect

One of the ultimate tests of a "systems approach" to any endeavor is the attempt to skew the results so that a minimum level of negative results is attained regardless of personality variables. Specifically, in education, a "true" system insures a certain level of results regardless of teacher-school effect. In a sense, a systems approach to instruction reduces teacher-school variability in one direction (negative) only, leaving variability open in the positive direction. Tables 2 and 3 show this "systems effect" dramatically. The "worst" Centers (T, U, V) had .67, .58 and .50 average years gain in .45 years. This is not only above national norm expectancy of .45, but significantly above the .25 gain usually reached by this school population. In other words, given a teacher-school effect with HILS that cut .31, .33 and .49 off the mean gain that the 2102 students as a total group made, the students in the "worst Centers" still achieved above expectancy. At the other extreme, given a system that reduced variability at the lower end (below the average gain for the total population of 2102), the same system opened up the upper end where teacher-school effect with HILS increased average gain from .29 to .99 years above what the total population average showed. In a sense, the systems approach accomodates individual teacher-school differences, but reduces the "negative" effects of these differences.

Constraint Measurements Compared to Teacher-School Effect

How did the statistical analysis of teacher-school effect compare to the Constraint Profiles? The average Rate score for the five most effective Centers shown in Table 3 was less than 1 (actually .80), while the average Rate score for the five least effective Centers was 2 1/2. Thus, the Constraint Profiles drawn independently of the statistical analysis of the standardized test results reflected in Tables 1 to 3 appear to be an accurate predictor of Center success. Furthermore, the Profiles indicate that the teacher's management role (Category 4) is the most important factor in the statistical analysis of teacher-school effect with school administration a second most potent factor.

The regular classroom teacher's attitude (as distinct from the High Intensity Learning System teacher) had little effect. When student unrest was high it had a relatively strong influence on the teacher-school effect, but only when the teacher management (Category 4) was poor. Furniture, materials and scheduling (Categories 5,6,7) were annoying but less of an influence on teacher-school effect.

By far then, the Center teacher seemed to make the difference in Table 3 with administration second, and all other categories of less importance.

Effect of Pre Test

Are the differences in results accounted for by differences in socio-economic level or other factors that influence test scores? If one Center or grade showed greater gains, could it have been due to the fact that to begin with (pre test), that Center or grade had a higher or lower pre test score? If final scores are influenced by better home or school conditions, slight differences in socio-economic level or previous years' experiences, then certainly pre test scores would be similarly influenced. Regression coefficients indicate no difference in results due to differences in pre test scores. In fact, regression coefficients show that .65 years gain is accounted for by pre test scores in every single school displayed in all the tables. In other words, the Centers with the highest gains did not have a pre test score advantage.

Effect of Grade

Table 5 shows that sixth seventh and eighth graders showed the greatest gains, as much as .20 to .30 of a year greater than the 2102 students as a whole achieved. Fourth and fifth graders seemed to show the lowest gains. This must be interpreted with severe caution. Tables 2 and 3 are a much more realistic view of High Intensity's effect on various grades. Table 5 does suggest that various factors could intervene to vary the effect of High Intensity on specific grade levels. At the present time this researcher suspects that floor-ceiling effects of standardized tests at different levels are reflected in Table 5. Junior high students, specifically grades 6-8, may have had much more room to move on the test norms compared to elementary and secondary school students.

TABLE 5

GRADE EFFECT: DIFFERENCE IN AVERAGE

GAIN OF EACH GRADE COMPARED TO

AVERAGE GAIN OF TOTAL (2102) GROUP

Grade	N	Amount of years gain... ...above average of total group	...below average of total group	P
6	433	.31		.0000
7	308	.29		.0001
11	61	.21*		.20
8	163	.19		.06
10	52		.02*	.89
3	46		.19*	.40
9	113		.25	.05
5	493		.26	.0001
4	429		.34	.0000

*These figures are not considered statistically significant. They must be assumed to be the result of chance.

Actually, the average gain for sixth graders was 1.1 years in .45 years instruction compared to .87 years gain for the total 2102 students. This finding could have occured by chance in one case out of 10,000, which means that the observed difference of .31 was a reliable statistic. (Note: the computed difference between the average of the total group and the average for a grade level is a statistically adjusted difference rather than a simple arithmetic subtraction.) Risking a six percent chance of the result being a chance finding, seventh graders showed a 1.02 year's gain in 4 1/2 months compared to the .87 gain for all the students.

Grade 9 scores showing an average growth of .25 compared to .87 for the total group is highly misleading. Table 2 shows that two Centers (23 students) showed over a year's gain in 4 1/2 months for their ninth graders. Two more Centers (7 students) showed under .35 growth in 4 1/2 months. One Center of 20 ninth graders showed an average loss of 1.25. This is statistically

improbable and indicates, once again, the testing problem in Center X with high school students.

CONCLUSION

The High Intensity Learning System represents an application of the principle that the redesign of curriculum in contrast to simply trying newly published programs is the key to getting the kinds of results presently demanded by taxpayers. Curriculum redesign implies a more cost effective deployment of resources, staff and physical plant--a behavioral definition of instructional objectives, a systematic instructional program that allows each student to learn what he needs to learn, at his level and at his optimal learning rate, using all the instructional resources available to the profession, rather than using X publisher's program.

In this study covering 30 schools and over 2000 students from grades three to high school, the results are dramatic. The project demonstrates, however, that average teachers can be accountable and effective--they can make the dramatic common place. High Intensity Learning shatters the myth that the psychosocial effects of racism and poverty prevent inner city disadvantaged children from making a year's gain in a year of instruction. The fact is that cost effective curriculum design can get more than a year's gain in a year's instruction in disadvantaged populations when the teachers and administrators are willing to invest their energies and egos in curriculum redesign.

SECTION II

STUDY OF REACTIONS OF PUPILS, CLASSROOM TEACHERS, PRINCIPALS, AND HILINC TEACHERS WITH RESPECT TO HIGH INTENSITY LEARNING CENTERS OF OMAHA PUBLIC SCHOOLS.

DONALD C. CUSHENBERY

December 30, 1972

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CLASSROOM TEACHER INTERVIEWS

Number and selection: Twenty-four classroom teachers who have pupils assigned to the HILINC classes were interviewed. Each principal was asked to suggest a teacher who would "tell it like it is" and who would be prone to be objective with respect to both strengths and limitations of the program. Most of the interviews took from ten to fifteen minutes. In a few buildings the interviews with classroom teachers were not practical because of heavy teaching schedules since there was no person available to relieve them. In the junior and senior high buildings no attempt was made for such an interview since each HILINC pupil reported to several teachers and there was no "homeroom teacher" as such.

Limitations: There were no significant limitations. One can never be sure that a given person is truly objective and frank, but it is the feeling of the interviewer that the twenty-four teachers do in fact represent a cross section of opinions which no doubt are representative of the total body of teachers.

QUESTION NUMBER ONE:

Generally speaking, what is the attitude of the majority of the teachers in your building concerning the HILINC program?

Very positive_____ Somewhat positive_____ Indifferent_____

Somewhat negative_____ Very negative _____

Response: Very positive 9 Somewhat positive 12
Indifferent 0 Somewhat negative 3
Very negative 0

QUESTION NUMBER TWO:

Do you feel that you have been adequately informed about the purposes and procedures of the HILINC program?

Yes_____ No_____

Response: Yes 13 No 9 Somewhat 2

QUESTION NUMBER THREE:

Mention several advantages which you think the HILINC program has when it is compared with the traditional basal reading program. Which one do you think is the most significant?

(Note: Since each respondent mentioned two to five advantages, the total number of responses is more than the number of persons interviewed).

Response	Number making this comment
Provides an individualized program and allows child to work on his own level (most significant)	20
Helps the child to be an independent worker	8
Motivates the child and they like it	6
Helps the pupil who has missed skills	2
Cuts down on behavior problems	1
Provides for constant evaluation	2
Pays off in skill development	6
Allows pupils to work with trained teachers	2
Lets pupil have a choice of a wide variety of material	13
Builds initiative in child	1
Provides for a high "P" ratio	1
Stimulates interest in books	1
Gives teacher time to work with top groups	3
Encourages wide reading	4
Creates an affirmative approach	1
Helps provide reinforcement for child	1
No advantages to program	1

QUESTION NUMBER FOUR:

No doubt you have discovered some weaknesses or limitations to the program. What are some of them? Which one is the most significant?

(Note: Since each respondent mentioned one or more limitations, the total number of responses is more than the number of persons interviewed.)

Response	Number making this comment
Some children cannot work in the program because they cannot function independently (Most significant)	11
Work in HILINC does not correlate with work in the classroom	5
HILINC teachers are not trained well enough to handle the program	5
More help is needed in HILINC room	4
Lack of discipline noted in the room	2
Entirely too much "red tape" involved in the program	2
Program is too expensive	3
Pupils miss valuable instruction back in the regular classroom	2
Lack of communication with classroom teacher	1
All pupils should be in the program	3
Program should be started in primary grades	4
Opportunity to cheat by pupil	1
Materials are "childish"	2
Pupils are not challenged enough	1
HILINC teacher does not have all of her materials	1

QUESTION NUMBER FIVE:

If the HILINC center is to develop as a truly productive and innovative educational project, what recommendations would you make for changes in your building during the next few years?

(Note: Since each respondent mentioned one or more recommendations, the total number of responses is more than the number of persons interviewed.)

Response	Number making this comment
Include all children in middle and upper grades in the program	8
Include primary children in the program	3
Two teachers should be hired for this building	3
System of better HILINC information delivery to classroom teacher	1
Program should start the first week of school	2
Switch HILINC teachers around so one teacher does not have the same pupils for 3 years	1
Keep adding materials or the pupils will tire of the program	1
Need better training for HILINC teachers	1
HILINC class periods should be longer	2
Closer communication is needed between the HILINC teacher and classroom teacher	1
More individualized help should be developed in the program	1
Smaller classes are needed for program	2
Program should be developed to train classroom teachers in HILINC techniques	1
System should be organized to provide more oral reading activities in program	1
More materials are needed for HILINC room	1

QUESTION NUMBER FIVE: (Continued)

Response	Number making this comment
Henceforth consider teacher opinion in the selection of students for HILINC	1
Program should allow classroom teachers to observe in HILINC room	1
All children should go to HILINC daily with the teacher	1
We need a different teacher here	2
Don't worry, program will die out when profit dies out	1

IMPLICATIONS OF THE CLASSROOM TEACHER INTERVIEWS

Donald C. Cushenbery

1. The vast majority of classroom teachers who send pupils to HILINC classes are positive in their attitudes with respect to the program. Those few who have negative attitudes feel that their building does not have an efficient HILINC teacher. Those situations that have well organized, hard-working teachers have been able to generate a wholesome attitude on the part of classroom teachers for HILINC. The HILINC teacher must "sell" the program.

2. There is a feeling among a significant number of classroom teachers that they have somehow been left out of the HILINC information system. Too much of what they do understand has come second-hand from principals and the HILINC teacher. It would be advisable to publish materials especially designed for the classroom teacher which would answer many of the more common questions asked about the program.

3. The most significant advantages of the HILINC system include the fact that the program is individualized and that the pupils have a wide choice of reading materials for skill development. Classroom teachers realize the great need for an individualized reading program and HILINC satisfies this aspect. They see many more advantages than disadvantages to the program.

4. In some classrooms various teachers remarked that as many as twenty-five percent of the pupils have work habits which will not allow them to successfully work in HILINC, since they are not independent workers. Some teachers feel that the skills developed in the program are somewhat divorced and different from those they are trying to build in the classroom. Some method must be devised, it seems to me, to communicate with these teachers that "we are all in this together."

HILINC TEACHER INTERVIEWS

Number and procedure: A total of thirty-five HILINC teachers were interviewed. There are more HILINC rooms in operations than there are teachers since some teachers serve two buildings. Three or four teachers did not feel it would be profitable to be interviewed because they had just started the program.

Limitations: There were no significant limitations. The purpose and use of the interviews were made known to the respondents and there is reason to believe that they gave frank reactions.

QUESTION NUMBER ONE:

Data for this question are grouped according to the time when the teacher took in-service training.

Fall, 1971 N: 14

1. Did in-service training prepare you adequately for HILINC teacher position?

   Yes 4 No 10

2. Was the training program too long, too short, or just right in length?

   Too long 0 Too short 10 Just right 4

3. What were the strengths of the in-service program?

Response	Number*
Overall concepts were well developed	1
Program was well explained	4
Good leadership	1
Mr. Meyer's overview was very good	3
Everything was in a positive manner	1
Dr. Cohen was great!	2
Were no strengths	1

*responses total more than the number of respondents since some of them gave more than one response.

4. What were the limitations?

Response	Number
Program was much too brief	2
There were no teachers' mannuals	1
Materials were not available for explanation	6
Whole thing was unorganized	1
Too many manuals to absorb in such a short time	3
Disappointed all the way around	1
We needed a class to observe	1
Program turned out to be "gripe" sessions	1
Michigan Language Program was never explained	1
No way of seeing HILINC in actual operation	1
Leaders did not explain the negative aspects of the operation--should have prepared us	1

Spring, 1972 N: 5

1. Did in-service training prepare you adequately for HILINC teacher position?

Yes 3 No 2

2. Was the training program too long, too short, or just right in length?

Too long 0 Too short 4 Just right 1

3. What were the strengths of the in-service program?

Response	Number
Trainers were competent and able to give good examples	1
Materials were explained thoroughly	2
Good general overview of program was presented	1

QUESTION NUMBER ONE (Continued):

Response	Number
People believed in it and were enthusiastic	1

4. What were the limitations?

Response	Number
Training was much too hurried	3
We needed teacher objectives to complete	1
Testing program was not thoroughly explained	1
We needed a laboratory situation to observe	1

Summer, 1972 N: 6

1. Did in-service training prepare you adequately for HILINC teacher position?

Yes 3 No 3

2. Was the trai ning program too long, too short, or just right in length?

Too long 0 Too short 4 Just right 2

3. What were the strengths of the in-service program?

Response	Number
We were actually in the HILINC classroom to observe	1
It was possible to learn the program quickly	1
Overall program explained in satisfactory manner	2

4. What were the limitations of the in-service program?

QUESTION NUMBER ONE (Continued):

Response	Number
We did not pay enough attention to teaching materials	2
Went to details of program too quickly--we needed an overview	1
More information should have given to filling out forms and the day-to-day operation of the program	1
No information was given relative to behavior modification techniques	2
Needed more help relative to how to take care of disruptive pupils	1

Fall, 1972 N: 10

1. Did in-service training prepare you adequately for HILINC teacher position?

   Yes 5 No 5

2. Was the training program too long, too short, or just right in length?

   Too long 1 Too short 6 Just right 3

3. What were the strengths of the in-service program?

Response	Number
Showed us how to complete forms	1
Explained different aspects of program	3
Room procedures were explained carefully	1
Got a good "pep" talk	1
Explanations regarding step-by-step operation of program were given	3
Instructor attitudes were good	1

QUESTION NUMBER ONE (Continued):

4. What were the limitations?

Response	Number
Procedures seemed unorganized--up to the teachers to find out things on their own	3
Wished we could have seen pupils at work	2
Thw whole thing seemed overwhelming	1
We needed the materials at the time of the in-service sessions	3
Sessions should be conducted before school opens	1

QUESTION NUMBER TWO:

Generally speaking, what is the attitude of the majority of the other teachers in your building concerning the HILINC program?

Very positive 16 Somewhat positive 12 Indifferent 4

Somewhat negative 3 Very negative 0

Have you taken any direct steps to create a positive image of HILINC among the teachers?

Yes 25 No 10

If yes, what have you done?

Response	Number
Talked to teachers individually	18
Talked to teachers collectively	7
Lectured to Home-School Association	1
Put out complimentary reports on students	1
Worked on curriculum task force	1

QUESTION NUMBER TWO (Continued):

Response	Number
Invited teachers to visit my room	4
Held interviews with teachers to discuss individual pupil's progress	1
Prepared and distributed bulletin explaining the program	1
Held in-service training meetings with teachers	1
Trained one teacher in HILINC techniques	1
HILINC consultant and I gave a presentation explaining the program	1

QUESTION NUMBER THREE:

Regarding the room which has been assigned for HILINC, would you consider it outstanding, average, or inferior?

Outstanding 16 Average 11 Inferior 8

QUESTION NUMBER FOUR: (Random House materials)

Are general procedures easy to understand?	Yes 28	No 7
Is the book selection good?	Yes 28	No 7
Are the tests well constructed and easily understood by the majority of the pupils?	Yes 29	No 6

QUESTION NUMBER FIVE:

Is the equipment and service adequate to operate the program?	Yes 21	No 14
Is the equipment in good working order?	Yes 24	No 11
Do you have enough storage space for tapes and supplies?	Yes 25	No 10

QUESTION NUMBER FIVE (Continued):

Are there a sufficient number of electrical outlets for your operation? Yes 15 No 20

QUESTION NUMBER SIX:

Do you feel that you are receiving adequate assistance from your HILINC consultant? Yes 26 No 9

If no, explain further

Response	Number
Unless I actually call for assistance, I don't get it	1
My consultant does not understand the program herself	1
She always seems to be in a hurry	1
Instruction not clear	1
More open minded and not so negative	3
Tell us about the good things we are doing	3

QUESTION NUMBER SEVEN:

Is the location of your space satisfactory for the operation of your program?

Yes 28 No 7

Is the amount of space adequate?

Yes 21 No 14

QUESTION NUMBER EIGHT:

Mention several advantages which you think the HILINC program has when it is compared with other reading programs you know about or have heard about. Which one do you think is the most significant?

QUESTION NUMBER EIGHT (Continued):

Response	Number
Provides individualized instruction (most significant)	23
Enables child to work with o vast amount of material	18
Behavior is positively modified through pay-offs	16
Develops independence in the child	7
Allows the child to feel successful	7
Pinpoints the exact skill needs of learner	4
Provides a change of classroom atmosphere for pupil	3
Self-direction skills are learned	4
Expands skill development of children	3
Program is well organized	2
Allows teacher to work with more pupils	1
Provides many learning modalities	2
Improves attitude and discipline of child	2
Allows for practice in needed skills	1

QUESTION NUMBER NINE:

No doubt you have discovered some weaknesses or limitations to the program. What are some of them? Which one is most significant?

Response	Number
Entirely too much work involved for the HILINC teacher (Most significant)	14
Class size should be decreased	12

QUESTION NUMBER NINE (Continued):

Response	Number
Some students cannot work in this program due to lack of self-discipline	12
Program needs more material for primary and/or very retarded levels of readers	6
Better student selection program needed	3
Teachers ought to be given more authority to demand discipline of pupils	3
Random House books are boring	1
Check-in tests need examples	1
Don't agree with pay-off idea	3
Better equipment is needed	1
Some students should not be in program, but are forced to come	1
All students should be in the program	1
Don't agree with the Progress Plotters	1
No oral reading in program	1
Directions are too difficult	1
Need guide for each set of materials	1
Better orientation program about HILINC for classroom teacher is needed	1
Not sure if the skills are retained	1
Too few check-out tests in the program	1
Program is too rigid and has too much "red tape."	1

QUESTION NUMBER NINE (Continued):

Response	Number
Consultants are spread too thin	1
I.Q. book needs to be enlarged and revised	1
Aides need to be treated as professionals	1

QUESTION NUMBER TEN:

As the HILINC programs progress, no doubt a number of changes need to be made to make it more effective. What recommendations would you make for change which you think would result in a better program?

Response	Number
Decrease the number of students in each class from 25 to 20 or less	9
Include all pupils in the program	7
Additional materials for the program are needed	7
Eliminate the position of HILINC teacher and train classroom teachers so they can bring their own students to the room	4
Two HILINC rooms are needed in my building	4
Need a different room--this one not satisfactory	4
Modify program to eliminate so much work for the teacher	4
HILINC in-service in the evening, not after school	1
Parents should be involved in the selection process	1
Each teacher should be required to accompany pupils to the HILINC lessons	2

QUESTION NUMBER TEN (Continued):

Response	Number
Use teacher recommendation as well as tests scores for pupil selection for the program	1
Program should allow for stricter discipline of the pupils--they get away from me	2

IMPLICATIONS OF THE HILINC TEACHER INTERVIEWS

Donald C. Cushenbery

1. There is a distinct feeling that HILINC in-service programs to date have not been satisfactory. Teachers want the programs to be longer, to be more specific, and to be in a laboratory setting if possible so the day-to-day operation can be grasped. Direct training in the use of materials is especially desired. Though the in-service training is apparantly improving, it still needs to be revised to care for the limitations mentioned in this paper.

2. The HILINC teacher feels that the program has a positive reception of the part of classroom teachers. Seventy per cent of the teachers have taken definite steps to improve the image of HILINC in their buildings--thirty per cent have not. (It is interesting to note that three of the "indifferent" and somewhat negative" replies to question two came from teachers who said that they have done nothing to create a positive image.)

3. Most teachers are satisfied with their classrooms with regard to space and location. Some aspects of the rooms such as electrical outlets are most unsatisfactory in some locations. Three of the rooms are much too small for HILINC operations.

4. Random House materials are approved by most teachers. In certain instances more books need to be added such as those for the very retarded reader.

5. The HILINC consultants are well received by the teachers. There is, however, a vocal minority that feels that they can be more positive in their approach to them.

6. HILINC teachers see many advantages to the program--the most significant being that it is an individualized program which is designed to pinpoint the exact needs of individual pupils. The child is able to use a large number of interesting materials and his behavior is modified through the program of pay-offs, such as the use of HILINC "bucks." The activities also stimulate independence for the pupil and allows him to feel that he is successful.

7. There is a very definite feeling among teachers that the program requires entirely too much work from them. They feel that class size should be lowered. There are some students who cannot function in the program and they should not be forced to participate. A few teachers feel that the program is too informal and that they should have more authority in making the pupils conform to discipline patterns they have set.

8. The recommendations for change reflect the limitations which they have listed. These include lowering number of pupils in classes, adding materials, and modifying program to require less owrk. It is interesting to note that four of them feel that their position should be eliminated.

HILINC PUPIL INTERVIEWS

Number: A total of 64 students were interviewed in approximately 35 schools. By grade level the proportions were as follows:

Third grade	1
Fourth grade	5
Fifth grade	12
Sixth grade	21
Seventh grade	13
Eighth grade	4
Ninth grade	3
Tenth grade	3
Eleventh grade	1
Twelfth grade	1

Selection: The interviewer selected two students at random in most of the HILINC rooms. Because of certain conditions such as scheduling, problems of either the teacher or interviewer, not all schools have students represented. In most instances, one boy and one girl were chosen.

Limitations: Interviewing students, especially those at the lower grade levels, represents some problems since the interviewer is a total stranger to the pupils. Until adequate rapport was established in each case, there was a feeling on the part of some of them that they should give the "right" answers. There was a natural tendency for them to think that their answers would be given to the teacher and possible retaliation would occur. After a brief conversation regarding the true nature of the survey, the student gave frank answers in a large percentage of cases.

QUESTION NUMBER ONE:

Do you like to come to the HILINC room for reading? Yes ____ No ____
Explain why you feel this way.

Response: The results were: Yes 62 No 4 .

Explanations: Typical comments relating to "yes" responses were:

1. "It's fun because I can improve my reading."
2. "Because it's fun and you get to do many more things than you do in the room."
3. "It helps me to read better."

QUESTION NUMBER ONE (Continued):

4. "I can't read very good and it is helping me."

Comments from the four who said "no" to this question were:

1. "I don't think I need to be here."

2. "No particular reason, I just don't like it."

3. "I don't feel like working."

4. "Too much reading involved."

QUESTION NUMBER TWO:

Do you think most of the other children like to come to the HILINC room? Yes _____ No _____. Explain your answer.

Response: The results were: Yes 40 No 14 Not sure 12

Explanations:

Typical comments relating to "yes" responses were:

1. "It's fun and very educational."

2. "The books are great!"

3. "They like the tapes."

4. "They come to get the credit." (H.S. class)

5. "It's a change from our regular class."

6. "We get to work in lots of different things."

7. "Because we get money for doing things."

Typical comments relating to "no" responses were:

1. "Most don't know how to find the material."

2. "Most just like to fool around and they can't do that back in the room."

3. "Have to do too much work."

QUESTION NUMBER TWO (Continued):

4. "Some boys hove been fighting and I don't like it here."

5. "Too many can't settle down."

6. "They think this is the dumbroom."

QUESTION NUMBER THREE:

What two or three things do you like most about the HILINC lessons?

Comments not reloting to commercial materials were made by one to five students. These were:

1. "I can learn to improve my reading."

2. "I get to work with many different reading kits."

3. "Getting to go to the reading corner."

4. "They have taught me how to find the main ideas."

5. "You get to work on your own level."

6. "I've learned how to follow directions."

7. "The lessons are easy."

8. "The books ore so interesting."

9. "I can read what I want to."

10. "I like the book conferences."

The following materials were specifically mentioned by respondents as being aids they liked to use:

Material	Number of responses
Spellbinders	7
Random House Books	24
Reading Attainment System	2

QUESTION NUMBER THREE (Continued):

Material	Number of responses
S. R. A. kits	14
A. R. P.	6
Read On	5
Tapes	25
Working with sounds	1
Gateway and Step-Up Books	1
Word Pacers	1
Mr. Launch	2
Webster Reading Clinic	1
Miscellaneous responses in this category include:	
Hi-Link bucks	14
Check in and check out tests	11
Like all of the materials	8

QUESTION NUMBER FOUR:

Is there anything about the class or lessons you don't like? If so, what is it?

Responses not relating to materials were as follows:

1. "Too much talking in the room."
2. "Need more variety in books."
3. "Some kids are bad and the disturb me and I can't work."
4. "Don't like to be rushed to get started on lessons."
5. "Boring, because I don't want to be here."

QUESTION NUMBER FOUR (Continued):

6. "I have to go out of the building for HILINC lessons."

7. "I just don't like reading."

Comments regarding materials were as follows:

Material	Number of responses
Barnell-Loft	2
S. R. A. kits	3
Spellbinders	1
Read On	1
Be A Better Reader	2
Reading Attainment System	1
Random House books	3
Word Pacers	4
Skill Pacers	2
Addison-Wesley	1
Tapes	1
Check in - check out tests	3

IMPLICATIONS OF THE PUPIL INTERVIEWS

Donald C. Cushenbery

1. Virtually all pupils like to go to the HILINC lessons because it is "fun" and it is different from the regular classroom work. Many of them realize that the program is helping them to improve reading competencies. The few students who have negative feelings about the program are those who have a long history of personal defeat with respect to reading and who have personality conflicts with the HILINC teacher.

2. They like to work with most of the commercial materials, especially the Random House books. From their point of view, the materials have been well chosen for the program and the variety intrigues them.

3. The reward system using the "HILINC BUCKS" goes fairly well with the pupils and they look forward to buying items with the money. Apparently this aspect is a selling point with them.

4. Subjectively, I felt there was a fairly high correlation between the degree of positive reaction by a pupil and the observed effectiveness of the HILINC teacher. In the few cases where the teacher was having troubles controlling pupils, organizing instruction, and/or communicating to the students, the respondent was somewhat negative. Very positive comments were elicited when the reverse was true. The teacher is the key.

HILINC PRINCIPAL INTERVIEWS

Number and procedure: Thirty-five principals were interviewed. Interviews were not conducted with five principals where there are HILINC rooms for various reasons such as prolonged illness, individual did not feel qualified to answer questions since the program had just been initiated, and other reasons. Each respondent was asked to give frank answers and the purpose of the study was outlined thoroughly for each person.

Limitations: There were no significant limitations involved which would detract from this phase of the study.

QUESTION NUMBER ONE:

From what you know or have heard about the HILINC in-service training program, do you think it has been adequate for the training of the HILINC teacher(s) in your building?

Yes 25 No 8 Unsure 2

Those that said "no" did so for the following reasons:

Response	Number
A two week in-service workshop is not enough, especially for a beginning teacher	4
Does not help teacher enough with organizational procedures	1
Policies developed with teachers seem inconsistent	1
It should be longer and before school opens in the fall	1
Whole program needs to be more thorough. These teachers need a complete re-education	1

QUESTION NUMBER TWO:

Generally speaking, what is the attitude of the majority of the teachers in your building concerning the HILINC program?

Very positive 21(16*) Somewhat positive 10(12*) Indifferent 3(4*)

Somewhat negative 1(3*) Very negative 0

*the numbers in brackets are the responses of the HILINC teachers for comparison. It appears that the principal feels there is better acceptance on the part of the classroom teachers than is the case with the HILINC teacher.

QUESTION NUMBER THREE:

Do you feel that the room and floor space which is available for the HILINC center is adequate?

Yes 26* No 9

*in analyzing the results of the HILINC teacher interviews for very similar questions, one derives the notion that teachers find more fault with their rooms than their principals do.

QUESTION NUMBER FOUR:

Do you feel that the HILINC teacher is receiving adequate help from the HILINC consultant?

Yes 31(26*) No 2(9) Not sure 2

*numbers in bracket indicate the HILINC teacher's response to the same question. It would seem that either the teachers who have complaints about supervisors have not discussed them with their principals or the principals do not feel that the complaints are justified.

QUESTION NUMBER FIVE:

Do you feel that you have been adequately informed about the purposes and procedures of the HILINC program? If no, comment.

Yes 27 No 8

Comments for "no" answers were as follows:

Response	Number
Too short a time to be indoctrined properly	1
I needed printed material for myself and the parents	1
There ought to be regular meeting times for principals about HILINC	3
No one has come for a promised meeting with me and the teachers	1
More time needed to initiate the program-- I heard about it and here was my teacher	2

QUESTION NUMBER SIX:

Mention several advantages which you think the HILINC program has when it is compared with the traditional basal reading program. Which one do you think is the most significant?

Response	Number
It is an individualized program to meet unique needs of children (most significant)	24
Vast amount of materials available	16
Very structured, organized program	4
Makes learning "fun" for the pupils	4
Pay-offs are proven incentives	4
Pinpoints child's reading deficiencies	3
Pupil s can realize success	3
Good testing program	3
Trained teacher available	3
Teacher aide is supplied	3
Develops independence for child	3
Excellent supplementary program	2
Frees classroom teacher to work with more able pupils	2
Pupils read many books	2
Various learning modalities available	2
Classroom teachers can learn techniques	1
Makes other teachers aware of what they need to do in the content areas with respect to individualization	1
Provides a "change of pace" for child	1

QUESTION NUMBER SEVEN:

No doubt you have discussed some weaknesses or limitations to the program. What are some of them? Which one is the most significant?

Response	Number
Certain number of pupils cannot work in program because they can't function independently (most significant)	14
All pupils should have HILINC	5
Not sure pupils are really learning the developmental reading skills	4
Scheduling is a problem--they are missing some valuable lessons	4
Too much work for HILINC teacher	3
Too expensive	2
Need at least one or two more rooms	2
Takes so long to get the pupils started in the program at the start of school	2
HILINC teachers not trained well enough	2
No room for group expression	2
Skills developed in HILINC seem so divorced from those learned in the classroom	1
Need program for primary grades	1
Not sure pupils will retain skills	1
Pupils and some parents think it is a program for retarded children	1
No studies to date show that it works at the high school level	1

IMPLICATIONS FROM HILINC PRINCIPAL INTERVIEWS

Donald C. Cushenbery

1. Most principals feel that the HILINC in-service training is adequate; however, the sessions need to be longer and more individual and intensive in nature.

2. They feel that the vast majority of their teachers have somewhat to very positive attitudes with respect to the program.

3. According to the principals, the room and floor space designed for HILINC is adequate in most instances.

4. They are very well satisfied with the services received from the HILINC consultant.

5. For the most part, they are of the opinion that they have been informed about the purposes of procedures of HILINC; however, a few feel that there ought to be regular face-to-face meetings with school officials about the program. (In all candor, two principals mentioned privately that they received more than enough information about HILINC and they did not want any more meetings to attend).

6. The principals are "sold" on the program and feel that it is a distinct advantage for their schools. The fact that it is individualized and is geared to meet the unique needs of children with a vast amount of teaching materials and procedures appears to be the most significant advantage of the program.

7. According to the principals, the fact that some pupils simply don't have the necessary independent habits to work in the program is the most serious limitation. Others have problems scheduling the program while others have reservations about the skills which are learned.

8. The value of the program is borne out in the recommendations by the principals. They want it expanded to include primary children and more pupils should be added at the intermediate level.

APPENDIX A

PUPILS INTERVIEWED FOR THE HILINC STUDY

NAME	SCHOOL	GRADE
Donna Johnson	McMillan	7
Henry Koonce	McMillan	7
Rhonda Haley	Clifton Hill	6
Kevin Gamble	Clifton Hill	6
Desiree Nicholson	Central High	11
Dave Steiner	Central High	12
Teresa Liggins	Kennedy	5
Ronald Burton	Kennedy	5
Gene Montes	St. Patrick's	7
Paul Oddo	St. Patrick's	7
Perri Bregen	St. Patrick's	7
Danny Muhleka	Miller Park	6
Gweniver Lay	Miller Park	6
Lee Beck	Miller Park	6
Leon Hallam	Mason	6
Irene Whited	Mason	6
Mike Bertino	Mason	6
Cindy Morris	Pershing	6
Roger Coffelt	Pershing	6
Janelle Kostka	Bancroft	8
Lori Abraham	Bancroft	7
Alette Smith	Franklin	4

APPENDIX A (Continued)

NAME	SCHOOL	GRADE
Rhonda Gaskin	Franklin	4
Charles Land	Technical High	10
Bill Kowalski	Marrs	4
Joseph Leyendecker	Indian Hill	5
Vicki Hill	Technical High	10
Jody Blankenship	Vinton	6
Debbie Smith	Vinton	6
Luciann Mitchell	Indian Hill	5
Mack Murcek	St. Agnes	7
Steve Biggs	St. Agnes	7
Cathy McClinton	Conestoga	7
Anthony Hicks	Conestoga	7
Larry McEntaffer	Castelar	6
Donna Hirniak	Castelar	6
Tom Powers	St. Theresa	5
Jeff Ethritge	Holy Name	5
Patricia Lanonette	Walnut Hill	4
Laura Wilson	St. Theresa	5
Rosie McAndraw	Holy Name	5
Mary Goff	Walnut Hill	5
Keith Hammel	Yates	5
Christopher West	Yates	5

APPENDIX A (Continued)

NAME	SCHOOL	GRADE
Bob Chambers	North High	9
Gary Birley	Walnut Hill	5
Debra Convey	Central Grade	3
Galen Hastings	Central Grade	4
Suzie Miller	Jackson	7
Gregory Johnson	Holy Name	5
Bill Fotpoulous	Jackson	7
Bruce Shelton	North High	10
Charlene Pappan	Jackson	7
Jackie Fleming	Kellom	6
Keri Emery	Kellom	6
Anne Kellogg	North High	9
Katheleen Sharrar	St. Peter's	8
Donna Brown	Kellom	6
John Lester	Marrs	6
Cheryl Baker	Marrs	6
Debbie Gaines	Sherman	6
Jim Nichol	Sherman	6
Greg O'Donnell	St. Peter's	8
Ronnel Bennett	Bancroft	7

APPENDIX B

CLASSROOM TEACHERS INTERVIEWED IN HILINC STUDY

Name	School	Yrs. Exp.	Total Here
Mrs. Gracie Spears	Kennedy	8	8
Mrs. Ella Koehler	Jackson	38	16
Mrs. Phyllis O'Brien	Conestoga	12	3
Sister Marguerite	St. Agnes	22	2
Mrs. Elaine Penkava	Castelar	9	3
Mrs. June McNamara	Immaculate Conception	20	5
Miss Genevieve Smejkal	Indian Hill	6	6
Mrs. Judith Berry	Vinton	4	3
Miss Mary Spornitz	Hawthorne	1	1
Mrs. Katharine Anderson	Mason	25	12
Mrs. Sandra Kostos	Clifton Hill	4	2
Mrs. Mary T. LaBute	Franklin	15	5
Mrs. Heler Ortlieb	Kellom	5	3
Mrs. Jeanne Kuehl	Sherman	25	12
Miss Gaynelle Applegate	Wainut Hill	11	2
Mr. Paul Albeanesius	St. Patrick's	2	2
Mr. Frank Hobbs	North High	25	18
Mrs. Mary Collins	Pershing	12	10
Mrs. Sherryl Johnson	Miller Park	4	4
Miss Carolyn Kenney	Holy Name	7	3

APPENDIX B (Continued)

Name	School	Yrs. Exp.	Total Here
Mrs. Marie Redding	Central Grade	26	1
Mrs. Mary Newell	Druid Hill	5	3
Mrs. M. Masonbrink	Saratoga	24	9
Mrs. Romona McCurry	Yates	13	10

APPENDIX C

NAMES OF HILINC TEACHERS INTERVIEWED

NAMES	SCHOOL
1. Mrs. Kathy Skaug	Marrs
2. Mrs. Bonnie Skaff	Pershing
3. Mrs. Pat Kisicki	North High
4. Mr. Jim Broberg	South High
5. Mrs. Quanita Vice	Bancroft
6. Mrs. Susan Ferber	Horace Mann
7. Mrs. Rachelle Catz	Mason
8. Miss Connie Caldwell	Clifton Hill
9. Mrs. Carol Wunderlich	Franklin
10. Mrs. Grace Hatcher	Kellom
11. Mrs. Vicki Hester	Sherman
12. Miss Joan Wilson	Walnut Hill
13. Mrs. Cheryl Fredickson	St. Patrick's
14. Mrs. Mary Blum	St. Peter's
15. Mrs. Tamia Killgore	McMillan
16. Mrs. Lucie Pryor	St. Agnes
17. Mrs. Irene Batres	Indian Hill
18. Miss Susan Holt	Technical High
19. Miss Beverly Grenier	Technical High
20. Mrs. Janet Rockwell	Immaculate Conception-Assumption
21. Mrs. M. Dawson	Holy Name

APPENDIX C (Continued)

NAMES	SCHOOL
22. Miss Barbara Nardie	Conestoga
23. Mrs. Pauletta Cortese	Castelar
24. Miss Vicki Stauffer	Vinton
25. Mr. Robert Nelson	Central High
26. Mrs. Susan Hussey	Miller Park
27. Mrs. Pat Bailey	McMillan
28. Miss Linda Evans	McMillan
29. Mrs. Kathy Naugle	Druid Hill
30. Mrs. Rita Hart	Saratoga
31. Miss Suzanne Wies	Henry Yates
32. Mrs. Pat Granger	Jackson
33. Miss Marian Campbell	Howard Kennedy
34. Mrs. Linda Olson	Central Grade
35. Mrs. Judy Lessman	McMillan

APPENDIX D

PRINCIPALS INTERVIEWED FOR HILINC STUDY

NAME	SCHOOL
Mrs. Evelyn Crawford	Saratoga
Mr. Jeff Brown	Mason
Mrs. N. M. Pearce	Central Grade
Mr. Harold Reeves	North High
Mr. Clarence Bobbee	Horace Mann
Sister Teresita	St. Theresa
Mr. Robert Hladik	St. Joseph's
Sister Concetta	St. Agnes
Miss Ida Gitlin	Indian Hill
Mrs. Maxine Morledge	Vinton
Mr. John Pease	Technical High
Mrs. Viola Taylor	Castelar
Mrs. Josie Reed	Conestoga
Sister Raymundine	Immaculate Conception
Mrs. Ruth Boykins	Hawthorne
Father James Gilg	Dominican High
Sister Mary Priscilla	St. Patrick's
Mr. Paul Malcolm	Pershing
Miss Laurel Shawan	Bancroft
Mrs. Eleanor Snellenberg	Franklin
Sister Marie	St. Peter's

APPENDIX D (Continued)

NAME	SCHOOL
Mrs. Darlene Blotzer	Sherman
Mrs. Edamae Swain	Jackson
Dr. Leonard Hansen	South High
Sister Ann	Holy Name
Mr. Harvey Springer	Yates
Mrs. Carol Jorgensen	Walnut Hill
Mr. Lester George	McMillan
Dr. Gaylord Moller	Central High
Mrs. Buelah Grice	Clifton Hill
Mrs. Quanita Moore	Howard Kennedy
Mr. James Freeman	Druid Hill
Mr. Fred Widoe	Marrs
Mrs. Katherine Fletcher	Kellom
Mrs. Margaret Baker	Miller Park

APPENDIX E

CLASSROOM TEACHER INTERVIEW FORM

Name _____ School _____

Years experience as a teacher _____ Total here _____

I. ATTITUDES OF TEACHERS IN THE BUILDING CONCERNING HILINC CENTER

Generally speaking, what is the attitude of the majority of the teachers in your building concerning the HILINC program?

Very positive_____ Somewhat positive_____ Indifferent _____

Somewhat negative_____ Very negative_____

If somewhat or very negative, what would you say has caused this feeling to exist?

II. Do you feel that you have been adequately informed about the purposes and procedures of the HILINC program?

Yes_____ No_____

If no, comment.

III. PROGRAM ADVANTAGES

Mention several advantages which you think the HILINC program has when it is compared with the traditional basal reading program. Which one do you think is the most significant? (This item is underlined by the interviewer)

IV. PROGRAM LIMITATIONS

No doubt you have discovered some weaknesses or limitations to the program. What are some of them? Which one is most significant? (This item is underlined by the interviewer).

V. RECOMMENDATIONS FOR THE FUTURE

If the HILINC center is to develop as a truly productive and innovative educational project, what recommendations would you make for changes in your building during the next few years?

APPENDIX F

OMAHA PUBLIC SCHOOLS
DEPARTMENT OF INSTRUCTION

HILINC PUPIL INTERVIEW FORM

Name_____ Grade _____

School_____ Homeroom teacher_____

HILINC teacher _____

Progress and attitude of the pupil according to teacher _____

I. Do you like to come to the HILINC room for reading? Yes____ No____
Explain why you feel this way.

II. Do you think most of the other children like to come to the HILINC room? Yes____ No____

Explain your answer.

III. What two or three things do you like most about the HILINC lessons?

IV. Is there anything about the class or lessons you don't like? If so, what is it?

Prepared by:
Dr. Donald C. Cushenbery

APPENDIX G

HILINC TEACHER INTERVIEW FORM

Name_____School_____

Total years experience as teacher_____As HILINC teacher_____

I. IN-SERVICE TRAINING PROGRAM

Did in-service training prepare you adequately for HILINC teacher?

Yes_____ No_____

Was training program too long____ too short____ or about the right length____ ?

When did you receive your training? Fall, 1971____ Spring, 1972____
Summer 1972 ___ Fall, 1972_____

What were the strengths of the in-service program?

What were the limitations?

II. ATTITUDES OF OTHER TEACHERS IN YOUR SCHOOL CONCERNING HILINC CENTER

Generally speaking, what is the attitude of the of the majority of the other teachers in your building concerning the HILINC program?

Very positive____ Somewhat positive____ Indifferent____
Somewhat negative____ Very negative____

Have you taken any direct steps to create a positive image of HILINC among the teachers? Yes_____ No _____

If yes, what have you done?

III. FACILITIES

Regarding the room which has been assigned for HILINC, would you consider it outstanding____, average____, or inferior____?

IV. BASIC PROGRAM PROCEDURES (Random House materials)

Are general procedures easy to understand?	Yes_____	No_____
Is the book selection good?	Yes_____	No_____
Are the tests well constructed and easily understood by the majority of the pupils?	Yes_____	No_____

V. EQUIPMENT AND SERVICE

Is equipment and service adequate to operate the program adequately?	Yes_____	No_____
Is the equipment in good working order?	Yes_____	No_____
Do you have enough storage space for tapes and supplies?	Yes_____	No_____
Are there a sufficient number of electrical outlets for your operation?	Yes_____	No_____

VI. SUPERVISION

Do you feel that you are receiving adequate assistance from your HILINC consultant?	Yes_____	No_____

If no, explain further.

VII. SPACE FOR PROGRAM

Is the location of your space satisfactory for the operation of the program?	Yes_____	No_____
Is the amount of space adequate?	Yes_____	No_____

VIII. PROGRAM ADVANTAGES

Mention several advantages which you think the HILINC Program has when it is compared with other reading programs you know about or have heard about. Which one do you think is the most significant? (This item is underlined by the interviewer).

IX. PROGRAM LIMITATIONS

No doubt you have discovered some weaknesses or limitations to the program. What are some of these? Which one is the most significant? (This item is underlined by the interviewer).

X. RECOMMENDATIONS FOR THE FUTURE

As the HILINC programs progress, no doubt a number of changes need to be made to make it more effective. What recommendations would you make for change which you think would result in a better program?

APPENDIX H

HILINC PRINCIPAL INTERVIEW FORM

Name _____ School _____

Years experience as a principal _____ Total here _____

I. IN-SERVICE TRAINING PROGRAM

From what you know or have heard about the HILINC In-Service Training Program, do you think it has been adequate for the training of the HILINC Teacher(s) in your building?

Yes_____ No _____

If no, explain.

II. ATTITUDES OF TEACHERS IN THE BUILDING CONCERNING HILINC CENTER

Generally speaking, what is the attitude of the majority of the teachers in your building concerning the HILINC program?

Very positive____ Somewhat positive____ Indifferent____

Somewhat negative____ Very negative ____

If somewhat or very negative, what would you say has caused this feeling to exist?

III. FACILITIES AND SPACE FOR THE PROGRAM

Do you feel that the room and floor space which is available for the HILINC center is adequate?

Yes_____ No _____

If no, comment further including plans for change.

IV. SUPERVISION

Do you feel that the HILINC teacher(s) are receiving adequate help from the HILINC consultant?

Yes_____ No _____

If no, explain reason.

V. Do you feel that you have been adequately informed about the purposes and procedures of the HILINC program?

Yes_____ No_____

If no, comment.

VI. PROGRAM ADVANTAGES

Mention several advantages which you think the HILINC program has when it is compared with the traditional basal reading program. Which one do you think is the most significatt? (This item is underlined by the interviewer).

VII. PROGRAM LIMITATIONS

No doubt you have discovered some weaknesses or limitations to the program. What are some of them? Which one is most significant? (This item is underlined by the interviewer).

VIII. RECOMMENDATIONS FOR THE FUTURE

If the HILINC center is to develop as a truly productive and innovative educational project, what recommendations would you make for changes in your building during the next few years?

QUESTION NUMBER EIGHT:

If the HILINC center is to develop as a truly productive and innovative educational project, what recommendations would you make for changes if your building during the next few years?

Response	Number
Program should include primary as well as intermediate grades	7
Expand number of rooms at imtermediate and upper grade levels	7
Train classroom teachers in HILINC techniques	6
No recommendations--keep it the way it is	5
Program needs to be carefully studied--could we use the $6,000 plus some other way, more profitably?	2
Eliminate the position of HILINC teacher and let each teacher take her pupils to the HILINC room--retain the aide	2
Start all programs at the beginning of of school each year	2
Building firm commitment--this is a government program, how long will it last?	2
Construct better in-service program for the HILINC teacher	2