

DOCUMENT RESUME

ED 079 962

EM 011 289

TITLE Curriculum Change Through Nongraded Individualization. Second Operational Year and Final Report.

INSTITUTION Snake River School District 52, Blackfoot, Idaho.

SPONS AGENCY Bureau of Elementary and Secondary Education (DHEW/OE), Washington, D.C.; Idaho State Dept. of Education, Boise.

REPORT NO P-22-70-0021

PUB DATE 72

NOTE 193p.

EDRS PRICE MF-\$0.65 HC-\$6.58

DESCRIPTORS Continuous Progress Plan; Differentiated Staffs; Elementary School Mathematics; Grade 1; Grade 2; Grade 3; Individual Development; *Individualized Curriculum; *Individualized Instruction; *Individualized Programs; Individual Needs; Kindergarten; Nongraded Classes; *Nongraded Primary System; Program Descriptions; Reading Instruction; Self Concept

IDENTIFIERS Blackfoot; Elementary Secondary Education Act Title III; ESEA Title III; Idaho; Quads; Snake River School District

ABSTRACT

A project undertaken by the Snake River School District, Blackfoot, Idaho provided children with an educational experience geared to their individual needs. The project was designed to assure that they made continuous progress in subject matter areas such as reading and math and toward the development of a positive self-concept. A team leader, three teachers, an instructional intern, two instructional aides, and a clerical aide participated in a summer workshop to develop individualized curriculum materials. Approximately 100 children were placed in "quads" containing students usually found in kindergarten and grades one to three; each quad contained an equal number of five, six, seven, and eight year olds. Differentiated staffing and nongraded team teaching were utilized to meet their individual needs. Evaluation indicated that nongraded instruction, differentiated staffing, and team teaching was feasible and that student achievement in reading and math was satisfactory. Curriculum materials developed for the project were extended to all classes in the district and results of the project have been disseminated throughout Idaho and other states. (LB)

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- II. Individualized Math
- III. Curriculum Change Through Nongraded Individualization
- IV. Differentiated Staffing
- V. Philosophy and Program of the Handicapped Child
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GENERAL INFORMATION

Project Sponsor: Snake River School District Number 52

Location: Route 2, Box 125, Blackfoot, Idaho, 83221. The school in which the project is located is the Moreland Elementary School which is about 6 miles north-west of Blackfoot, 1 mile south of Highway 26.

Grade Levels: The program is non-graded and includes children from ages 5 through 9. There are approximately 100 children in the project.

Project Director: Jack Thompson was the project director during the planning stage and first year of operation. Dr. Darrell Loosle, Superintendent of Snake River School District has been the project director and David Wilson the assistant director during the third year of the project.

Project Overview: A staff of seven people was selected to work in a summer workshop in curriculum and materials development--one team leader with total responsibility for team operation, 3 teachers, an instructional intern, one instructional aide, and one clerical aide. One instructional aide was later added to assist with the kindergarten phase of the program when school started.

One-third of the students normally enrolled in the Moreland Elementary School, grades one through three, were selected to be included in the project. The selection consisted of including every third child from alphabetized rolls, to work in the nongraded quad. In addition, 20 tuition-paying five year olds were also enrolled in the quad. In an open area called a quad, were the equivalent of four classrooms--grades 1, 2, and 3, plus the kindergarten in an open area. This would ordinarily be staffed with 4 teachers and 2 aides. The project had a team leader, 3 teachers, an instructional intern, 2 instructional aides, and 1 clerical aide for a total of 8 staff members. (Our traditional program would have 6.)

Children are grouped for homerooms in a heterogeneous manner with each home room containing an equal share of 5, 6, 7 and 8-year-olds. Grouping is according to specific needs, with individualizing being the central key.

BACKGROUND OF PROJECT FROM APPLICATION

I. ABSTRACT

Problem. Basic problems in education today are the subject centered curriculum which fails to recognize the individual differences of children and the self-contained classroom organization which encourages children to fit textbook molds. Ill conceived methods of overcoming these problems, such as non-promotion and ability grouping, are still in practice today without substantiation in research. Children still are generally not recognized as important human individuals for whom education becomes a tool for maximum development of potentialities according to individual differences.

Target Population: The target area includes all schools in Southern Idaho with potential utilization of program for children in an even wider area. Primary level children, five year olds, and educable children who are often housed in special education classes will be direct recipients of the program.

Major Activities: The project proposal covers three basic phases with an innovative dissemination program and follow-up evaluation: (1) development and implementation of individualized curriculum and development of materials for implementation, (2) organizational change to nongraded team teaching, and (3) differentiated training with provision for development of a pre-service training program.

Rationale: A full summer of research into problems and solutions in the literature has revealed many labels being changed in attempts to resolve educational problems, without real changes being made in the curriculum. Curriculum change and adaptation of the curriculum to meet students individual needs is the prime focus of this project. This project proposes to produce environment which actually brings about individualization and humanization of educational programs which includes the basic elements recommended by some of the foremost authorities in education today. The proposed project is an offshoot of the Riverside Cooperative Teaching, Title III, ESSEA, project with provisions for greater depth, continuity, and dissemination capabilities.

1. Jack Thompson, Toward Individualization, unpublished research report on Title III, ESSEA project, "Individually Prescribed Instruction Through Multi-Grading," RTE 2, Blackfoot, Idaho; Snake River School District 52, 1969, Chapter II, "Problems Which Have Produced New Directions," pp. 5-18.

2. John I. Goodlad and Robert H. Anderson, The Nongraded Elementary School, revised edition. New York; Harcourt, Brace & World, Inc., 1963. 243 p.; and Robert H. Anderson, Teaching in a Nongraded Classroom, New York: Harcourt, Brace and World, Inc., 1966. 180 p.

II. STATEMENT OF THE PROBLEM

Needs Assessment following:

The proposed project was designed to meet the following:

- A. Curriculum development and application in terms of the individual needs of children utilizing individual diagnosis.
- B. Development of curriculum materials which are tailored to individual use and which provide for independent activity based on the students learning style.
- C. Implementation of developmental skills and readiness activities for students regardless of the chronological age of the child and makes provisions for continuous progress starting at the time of entry into school.
- D. Development of a child's self concept.
- E. Growth and development of educationally handicapped children in a social setting with "normal" children while providing for their regular and special needs.
- F. Utilization of unique strengths of teachers and differences in styles and methods of teaching and for assignment of staff members according to a description of performance objectives.
- G. Cooperation of university and public schools in development of pre-service training program for school staff members to function according to performance objectives.

Identification of Need The needs have become evident in that recognizing the inability of the present educational structure to meet the individual needs of the students. Some indicators of the major areas are as follows:

- a. Inability of educators to provide programs tailored to the individual needs of children has resulted in their seeking different solutions such as keeping children in the same room a second year, placing children in remedial and transition classes; placing on the staff special service personnel to remediate subject matter by individual grouping students according to ability; and having some children "busy" work while waiting for their turn.
- b. Authorities in the field of education have not conveyed the programs and methods by which they are conveyed to children. An example is cited by Edith Buchanan, consultant from UCLA in the Three on Two program, in a meeting at the Lake Elementary School. She reported that

information collected on a Ford Foundation Project called, "The Study of Childhood Schooling," during which she with other members of a team visited schools all over the United States, was so damning that the report was never printed.

- c. Parents are extremely critical of the placement of their children in school--both as to age (class) and teacher.
- d. School systems are unable to guarantee success in reading for every child.
- e. The drop-out problem and unrest as evidenced by riots might be indications that, as yet, education does not prepare children for life.
- f. No exemplary center presently exists in Idaho for the operation of a nongraded, team teaching, multi-age grouping of children in an educational program or for training of persons in such a program. Inadequate curriculum and materials exist for conducting an individualized program.

III. THE PROPOSED PROGRAM

Goals to be Accomplished: It was intended that the proposed program would enable school personnel to change curriculum so that the school program was geared to the needs and capacities of individual children, and help them make continuous progress during their primary years toward individual goals established through assessment processes. It was further proposed that curriculum materials be prepared to assist the educational staff in carrying out a program of individualization.

Materials were disseminated to participating districts as part of the dissemination program. The organizational aspects of staff and students were changed to better permit achievement of these goals. It was also proposed that the project serve as a pilot program to help other schools in developing nongraded, individualized, team teaching schools in which the individual needs of children are met.

How Program is Innovative or Exemplary: A great deal has been learned from the operation of the Riverside Cooperative Teaching School, Title III, ESEA project of individualization and team teaching in grades 4, 5, and 6, which helps establish the project being sought as a truly exemplary center. The application for this project followed a summer of research

³ Edith Buchanan, unpublished speech entitled, "Meeting at Encarnated Elementary School," March 13, 1969, Speaker: Mrs. Edith Buchanan 3 on 2, UCLA--University Elementary School, p. 1-2.

into practices in the public schools which are held by authorities in education to be most important in developing children to the-fullest extent of their capabilities while improving their self-concept and enabling them to take responsibility for their progress toward educational goals. Research indicated that nongraded, individualized instruction, and team teaching, offer the best organizational patterns available today.⁴ The project was based upon this tenet. The proposed project is innovative in that students aged five to nine were grouped together, without regard to gradelines, in the same quad. The teachers were organized into a team, with the responsibility to establishing an individualized instructional program for all of the students; even those who have previously been branded as "special education" children. It is innovative in that the many facets found through research to be important ingredients of an individualized program are included, with emphasis being given to the curriculum and its development to meet individual needs as the foundation upon which true programs of individualization must be built.

⁴ Thompson, op. Cit., p. 97

PROJECT PREPARATION

Change. A common question which arises with an innovative project is, "How did the change come about--what was it that produced change?" This question cannot be directly answered, but a description of the activities which preceded the project may provide some insight into change.

A climate was developed in the school where staff members were actually participating in the decision making process. Each staff member was given a portion of the budget for which he was accountable. This supply money purchased many things which teachers felt would improve their educational programs. They looked closely at the needs of children in their classrooms and at materials which might help resolve these needs. The basic need identified by the staff which they could not seem to resolve completely was that of providing a learning program for children which was geared to the individual differences that exist between and among students. The staff started looking at such things as organizational patterns to find new ways of grouping children or individualizing the educational experiences for them.

Information on projects being developed in other places was reviewed. Hope was given the staff through the group planning that followed. The idea developed that ANYTHING was possible, that it was necessary to break a problem into segments so that a small unit could be dealt with at a time. Teachers started trying things in their classrooms, sharing ideas and experiences and developing a common philosophy of what schools ought to be doing for children or helping them to do for themselves.

Planning Grant Application. Teachers were encouraged to visit other schools and try new ideas. The staff agreed on the specific direction which they could go to start changing the educational program. Title III was viewed as a resource where funds could be obtained to implement the desired program. A proposal was drafted, approved by the staff and final application written.

The first year's Title III approval brought a planning grant of \$7950 to pursue study of feasibility and direction. The feasibility and direction were reviewed with the staff. The decision was made to change the title so that it more nearly fit the educational jargon currently in vogue. A successful application was then written for an operational grant to develop the type of program desired by the staff as the answer to solving children's problems.

Visits To Other Schools. When the operational proposal was approved and the staff was selected for operation of the project, the next step in preparation was undertaken--that of visiting schools where some facets of desired programs were thought to exist.

The project team visited six schools in the year before the project started. The team usually traveled as a unit in an eight passenger van, which enabled them to compare notes and discuss the visit both before and after. There were seven team members at that time and also the project director. (Later the eighth member was added).

The team was especially interested in several factors in the schools they visited. They studied the floor plans and room arrangements. They were interested in team operation and teacher interaction. They looked to see to what extent and how instruction was individualized. They wanted to know what materials were being used for instruction and how they were being managed. They wanted to know how kindergarten fit into their school situation, if at all. Finally, they wanted to know how teachers reacted and felt about the things they were doing.

The team saw many interesting things--from the computer based Westinghouse system PLAN at Robert Frost Elementary School in Salt Lake City, to the doughnut shaped East Elementary School at Toole, Utah. They saw ideas and things that they thought were good, some that could be adapted and used in the nongraded project, and some situations that were merely the "same old thing" under a new label. The team did not find one school that embodied all of the facets desired in the nongraded program they were developing, but they did see many useful and interesting ideas from which they could "borrow".

Summary. To advise a specific route which another group could follow to produce desirable educational change would not be appropriate. It would, however, be appropriate to suggest components which this project has found to be necessary in reaching objectives.

Developments which this project director would recommend as necessary to producing change fall in four general areas. (1) There must exist some problem which the staff can identify and for which they desire to find a solution. One could call this "dissatisfaction". (2) The staff must have HOPE that solutions can be found, even to the point that they honestly feel individually and as a group that ANY change desired is possible. (3) The staff must have a vital part in the decision making. Each person must become an active communicator of ideas and be willing to share in making decisions which may alter direction drastically. Decision making must become a shared process with accountability to the public for results. (4) The role of the building principal is crucial. He must be willing to share the decision making process with the entire staff, provide for some system to manage the decision making process, and administer decisions made by the staff in a consistent, fair, and if necessary, firm manner.

PROJECT ACTIVITIES

The basic thrust of the program has been to develop individualized materials in the math and reading curriculum areas and apply them to students based upon individual assessment. To best facilitate the application of the skill program to children and improve self-esteem of children, organizational changes have been made in the grouping of children and the administration of the school.

I. ORGANIZATIONAL PLAN, PROGRAM ELEMENT II (Program Element II precedes Program Element I in this description).

Facility. Four classrooms in the Moreland School were joined together by removing walls. The area, called a quad, was carpeted to provide necessary accoustical qualities.

Nongrading. Nongrading was used as a vertical management tool for the purpose of destroying psychological goals and barriers related to age/grade level groupings and expectations. One-third of the children from the Moreland Elementary School were selected by a random process from each grade level, one through three, to be included in the Nongraded Quad. To insure a random selection of children to be included in the nongraded program, names were alphabetized into grade level boy-girl lists. Every third child from each grade level boy-girl list was selected for inclusion. In addition, every third new child to enroll at the Moreland School was included in the project.

Five-year-olds were included in the project on a first-come first-entered tuition basis until nineteen five-year-old children were enrolled. The tuition was set at \$17.50 if the child came on a half day basis or \$25.00 if he attended full days. Four children attended for half-day sessions. One five-year-old child dropped from the project when his parents moved from the area. Fifteen children attended full day sessions. Tuition was eliminated in the 2nd operational year because of federal emergency funds allocated by the government for kindergartens in districts throughout the state. Parents whose children were selected for inclusion in the project were notified prior to the beginning of school. They were given the option of withdrawing their child from the project if they desired. If a child was withdrawn from the project, the child whose name followed on the list was selected to enter the project.

After inclusion in the Quad, the 100 children whose ages ranged from 5 to 9, were not identified as to grade level.

Also randomly selected for inclusion in the nongraded program were children who had been identified for Special Education.

Differentiated Staff. The staff hired to work in the nongraded program was hired to perform differentiated roles and operate as a total team. The purpose of differentiating the staff was to implement the individualized curriculum. Five different types of staff members were hired after advertising the positions: team leader (1), teachers (3), instructional intern (1), instructional aides (2), clerical aide (1). The team leader was selected first, then became a member of the selection committee for the selection of the remaining staff members.

Team teaching with differentiated staff assignments provides a framework for sharing expertise, exchanging information about children and teaching materials, and for organizing children according to need-groups. More time for working individually with children can be provided through differentiated staff assignments without an increase in educational expenditures. However, an increase in expenditures through additional staff members can improve the learning program for children.

II EDUCATIONAL PROGRAM, PROGRAM ELEMENT I

The main activities of the project were the development of curriculum materials in reading and math, and carrying out the individualized program based on assessment.

Summer Workshop. A workshop was held for the development of individualized materials during the summer of 1970 and 1971-72. Curriculum guides and professional books were reviewed to develop a hierarchy of skills based upon suggestions of authorities in the math and reading areas. Suggested skills were reviewed by the workshop team and organized into a sequenced list. The master list of sequenced skills was reviewed by State Department members and Mabel Athay, Reading Specialist in the Snake River School District.

Behavioral objectives were written for each skill in the sequenced list. Packets of materials for implementation of learning routes were developed in the reading program. The implementation of each packet is based upon the assessment of the child's learning skills. A pre-test and post-test was developed for each of the packets. A route sheet provides opportunity for the selection of any one route, combination of routes, or parts of routes.

Scope/sequence charts from the Idaho Curriculum Guide in Mathematics, K-12, were utilized in the development of the revised sequence of skills. The numbering system utilized in the sequence of skills relates the sequence to the State Math Guide. Scope and sequence charts were developed for the reading skills and are part of the reading description.

Individualized Program. Individualized materials developed in the summer workshops were used to implement the learning of children in the nongraded program. A needs assessment was completed with each child and he was placed in the learning program where he could make continuous progress without regard to his age or grade level. Complete records have been kept of each student's progress through the skills.

Personnel Descriptions. Personnel descriptions written for the purpose of selecting staff for the project are included in a dissemination packet which is available through the school district.

III STAFFING PATTERN AND TRAINING PROGRAM, PROGRAM ELEMENT III

The description of the differentiated staff and its selection is included in I. ORGANIZATIONAL PLAN.

Performance Objectives. Role descriptions have been written for each team member (included in the Appendix) but performance objectives which are detailed enough for the selection and evaluation of staff members have been beyond the scope of this project. It is recommended that this would make an excellent three year project by itself.

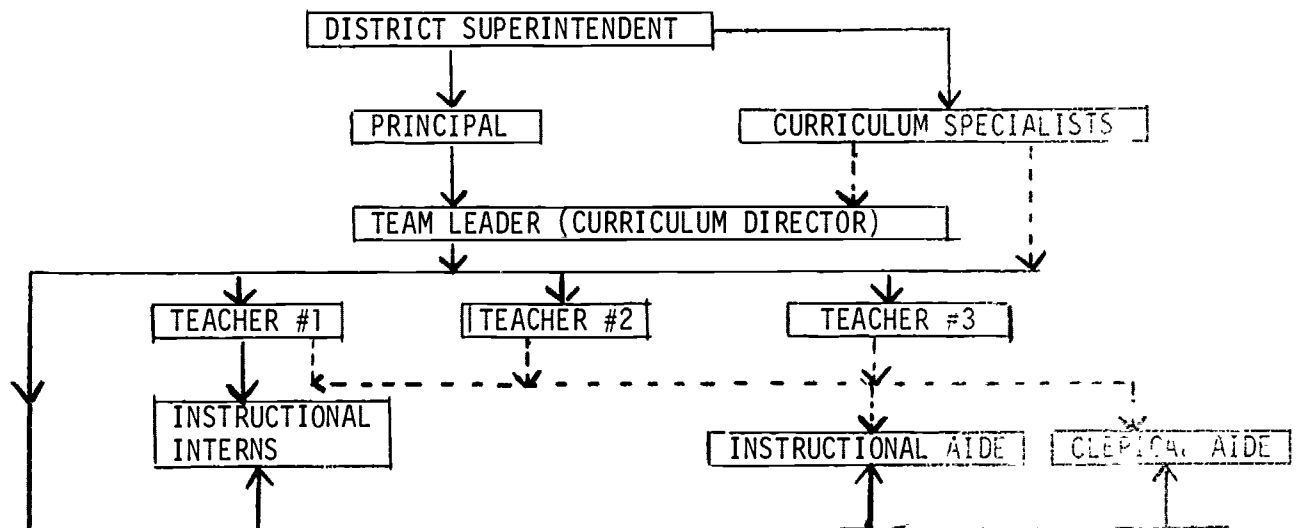
Pre-service Training. Plans were made with Idaho State University for the development of a set of guidelines which would be acceptable to both the University and the Snake River School District for the training of teachers. The result has been the development of detailed INTERN TRAINING GUIDELINES. The instrument details the guidelines and the agreement between the University and Snake River School District. At present, these guidelines remain an oral agreement between the University and Snake River School District.

In-service Training. A reading consultant was brought into the summer workshop to review facets of the program as they were developed. She met with the team several days a week for approximately a month. She brought information and ideas which were especially helpful in launching the language experience approach as part of the nongraded reading program. The consultant participated and guided the development of the reading philosophy and assisted with the writing of the program and program description for dissemination. She reviewed the sequence of skills developed for teaching word attack skills and record keeping.

During the summer workshop the team attended a series of symposiums sponsored by Idaho State University, Department of Special Education. Noted authorities came and lectured on different aspects of behavior modification. Since most of the team members were unfamiliar with behavior modification techniques, the experience was profitable as an introduction to a practicum in behavior modification in which team members participated in the fall. During the school year some applications of behavior modification techniques were made in the nongraded program. A class was also taught during the summer of 1972 by Dr. Melvin Rexroat on higher level think skills, later to be applied to the social studies and science programs.

MORELAND NONGRADED QUAD DIFFERENTIATED STAFF

LINE AND STAFF CHART



IV. DISSEMINATION

The dissemination activities of the project have been in three general areas: (1) the visitation of the nongraded program, and (2) the dissemination of printed curricular materials developed by the project staff. A third segment, that of carrying out workshops to train other personnel, was not directly funded but was accomplished in part in conjunction with the state Title III dissemination.

Visitation. The project was opened for visitation in January 1971, after the individualized program was well developed. Between January and May 206 visitors came to the project. These visitors represented 35 school districts and private schools and 5 states. In the 1971-72 school year, a record number of 330 visitors from all over the state as well as Utah, Wyoming, Montana, Oregon and Canada visited the project. Sample letters received following visitations are included in the Appendix. (See Appendix III)

Curriculum Materials. Printed materials were ready for beginning the dissemination in May, 1971. The project has revised materials at such a pace that there have been delays in disseminating printed material that is up-to-date. At present a dissemination packet is in preparation on all aspects of the nongraded project for distribution to interested schools and teachers.

Seven hundred copies each of the READING PROGRAM, MATH PROGRAM and the SUMMARY REPORT have been distributed. In addition, 600 copies of segments of the Reading Program were distributed before the segments were brought into a single volume. At the time of this printing, complete sets of the Math Skills program developed during the summer of 1970 and summer of 1971 and revised during 1972, are being sent to several districts and other states for dissemination purposes. A single copy of this program runs in excess of 3000 pages, and covers skills numbered 001 through 800's (approximately eight grade levels.) Copies of this material are available at cost from the school district.

Table I is a listing of the materials that have been printed and indication of their availability.

Workshops. Budget written into the application requesting funds to carry out workshops within interested districts was not approved. However, during summer of 1971 and 1972, the project staff participated with the Idaho State Department of Education in carrying out a workshop to help other districts individualize their math programs. One was held in Boise in 1971 and two during the summer of 1972: one at I.S.U. and the other at U. of I. Several districts sent personnel to the workshops. The staff presented a model for adopting an individualized method of teaching math and for developing materials and records for conducting the program. Approximately 60 people were in attendance at each workshop.

During the summer of 1972, a workshop was also presented to the 8 southern counties of New Jersey on How to Implement a Nongraded k-3 program.

TABLE I

MATERIALS PRINTED BY NONGRADED PROGRAM FOR DISSEMINATION

<u>Item Name</u>	<u>Approx. length</u>	<u>Availability</u>
1. Philosophy	2 pgs.	Upon request
Statement of philosophy of nongraded, individualized program		
2. Project Overview	2	Upon request
Brief description of project activities		
3. Reading Program	22	Upon request
Brochure describing program (contains the following:)		
Description of program	1	Included above
Bibliography	18	"
Scope and Sequence	6	"
Skills sequence and record keeping pages	18	"
Behavioral objectives for each skill	20	"
Sample packets	5	"
Sample of record pages		
4. Math Program	5	Upon request
Brochure describing program (contains the following:)		
Description of program	8	Included above
Copy of Scope & Sequence from Idaho State Math Guide	15	Incl. above & in Ida. State Math Guide
Skills Sequence (also used as record keeping pgs.)	30	Included above
Behavioral Objectives	46	"
Sample packets	3	"
Sample of record keeping pages		
5. Differentiated Staff Role Descriptions	4	Upon request
Description of use of differentiated staffing in the Nongraded Quad with role descriptions		
6. Intern Program	12	Upon request
Rationale, guidelines, and agreement being negotiated between Snake River School District and Idaho State University for the training of interns		

* A Dissemination Packet for The Nongraded Program is being prepared to cover the entire Dissemination Program (Available after December 1st, 1972.) See Appendix.

Summary of completed dissemination activities since first operation year.

A. Methods of dissemination

1. Public meeting in the community
2. Information has gone to the newspaper numerous times as reported by the reporter covering the School Board meetings.
3. A special feature article of the project was published in the local paper with pictures published almost daily during that week.
4. Occasional press releases have been made since the time of the feature article.
5. Parts of curriculum materials have been given to visitors.
6. Many visitors have visited the project and more are scheduled for visitation.
7. Open house was held for parents and interested patrons.
8. Conferences were held at the Quad with the parents of each child in the project.
9. Telelecture to I S.U. students.
10. Presentation to other School Districts in state and out.
11. One-week workshop held at Boise. Workshops at I S U, Univ. of Idaho and Boise State.
12. News coverage on statewide television.
13. National recognition by the United States Title II committee in Washington, D C
14. Workshop in New Jersey.

B. Assessment of dissemination activities.

All of the primary grade teachers in our own district are utilizing the curriculum materials developed in the project. We have received numerous and positive feed-back on the implementation from many districts in our own state and other states as well.

C. Number of visitors to Quad (through March 7, 1972) 1971-72 school Year

<u>No.</u>	<u>Classification</u>	<u>School and Address</u>
3	Teachers	Falls Valley School, Idaho Falls
3	Teachers	A. H. Bush School, Idaho Falls
2	R.T.O. & Headstart	Boise State College
3	Teachers	Twin Falls
3	Teachers	Hemingway School, Twin Falls
1	Superintendent	Twin Falls Schools
1	Principal	Hemingway School, Twin Falls
2	Teachers	Nampa
3	Teachers	Boise
3	Interns	Boise
1	Principal	Lewiston
3	Teachers	Lewiston
12	Professors	Northwest Nazarene College, Boise
40	Students	Northwest Nazarene College, Boise
3	Teachers	Boise
1	Superintendent	Kuna
1	Principal	Kuna
2	Teachers	Kuna
6	Teachers	Arco
1	Librarian	Cathedral City, California.
1	Teacher	Groveland
2	Principals	Pocatello
1	Administrator	Nampa
5	Teachers	Nampa
1	Curr. Consultant	Nampa
1	Principal	Arco & Moore
1	Principal	Howe Elementary School
1	Speech Therapist	Arco & Challis
1	Principal	Shoshone Elementary
2	Teachers	Shoshone Elementary
4	Principals	Nampa Schools
3	Teachers	Mountain View School, Boise
2	Teachers	Mountain Home
1	Teacher	Firth Jr. High
9	Head Start	Burley
1	School Psychologist	Grace
2	Teachers	Grace
1	Superintendent	Grace
1	Principal	Grace
1	Principal	Thatcher Elementary
1	Instructor	Idaho State University
1	Principal	Paul Jr. High
1	Principal	Heyburn
1	Principal	Paul Elementary School
1	Principal	Acequia Elementary, Cecoma, Idaho
1	Superintendent	Minidoka County Schools
1	Teacher	East Minico Jr. High
1	Principal	Minico High School
1	School Psychologist	Minico Co. Schools
1	Principal	Pershing, Rupert
1	Principal	Washington School, Rupert
1	Principal	Lincoln School, Rupert
1	Principal	Roosevelt School, Nampa

C. Visitors to Quad (Cont.)

5	Teachers	Roosevelt School, Nampa
3	Teachers	Hansen, Idaho
2	Trustees	Hansen, Idaho
1	Instructor	Idaho State University
5	Students	Idaho State University
3	Teachers	Edahow School, Pocatello
1	Teacher	Washington School, Pocatello
1	Principal	Washington School, Pocatello
1	Mother	Riverside School, Snake River
8	Teachers	Rupert School, Rupert
6	Teachers	Memorial School, Rupert
3	Teachers	Lincoln School, Rupert
3	Teachers	Pershing School, Rupert
1	Teacher	Acequia, Rupert
1	H.S German Teacher	Rupert
4	Teachers	Hansen
1	Superintendent	Hansen
4	Teachers	Webster School, Lewiston
1	Principal	Webster School, Lewiston
12	Teachers	Heyburn
5	Teachers	Valley View, Boise
2	Teachers	Rupert
1	Teacher	Heyburn
1	Principal	Paul Elementary, Paul
1	Rem. Reading Teacher	Paul Elementary, Paul
2	Principals	Lewiston
1	I.S U Faculty	Pocatello
1	Professor	Idaho State University, Pocatello
10	Students	Idaho State University, Pocatello
1	Supt's Wife	Bancroft
1	Principal	Syringa School, Pocatello
2	Teachers	Washington School, Pocatello
4	Teachers	Syringa School, Pocatello

Totals:	5 Superintendents	117 Teachers
	29 Principals	2 Trustees
	16 Univ. Faculty	17 Misc. School Personnel
	55 College Students	3 Others
	3 Interns	

TOTAL - 247 Visitors

<u>EVENT NUMBER</u>	<u>DATE</u>	<u>DESCRIPTION OF OBJECTIVE</u>	<u>DATE COMPLETED</u>	<u>COMMENTS</u>
1	June 10, 1971	Data collected for socio-economic matching of control and Title III groups		
2	June 10, 1971	Report to Project Director on activities	6-10-71	
3	June 15, 1971	Begin revision of reading, math and development of PMU's for reading comprehension skills	6-9-71	No PMU for reading comprehension Cancelled
4	June 20, 1971	First achievement test series and self-concept tests administered and scored	6-20-71	
5	July 1, 1971	At least 3% of PMU's revised for math and reading	6-25-71	
6	July 10, 1971	Report to Project Director on Activities	7-10-71	
7	July 15, 1971	At least 10% of PMU's written for reading comprehension skills	7-15-71	
8	July 20, 1971	At least 10% of PMU's in reading and math revised	7-20-71	
9	August 1, 1971	Consultant directed workshop in application of higher level thinking skills completed	8-1-71	Dr. Rextroat was consultant
10	August 10, 1971	Initial rough draft of continuing route plan for teaching of reading comprehension skills printed		Cancelled
11	August 10, 1971	Report to Project Director on Activities	8-10-71	
12	August 10, 1971	Pre-test and post-test revision completed	8-15-71	
13	August 20, 1971	Goal of 10% of at least 10% of reading comprehension skills achieved	8-20-71	10% revision completed
14	August 20, 1971	Math pre-test administration and scoring completed		

<u>EVENT NUMBER</u>	<u>DATE</u>	<u>DESCRIPTION OF OBJECTIVE</u>	<u>DATE COMPLETED</u>	<u>COMMENTS</u>
15	August 25, 1971	Math skills sequence completed for math skills Series 300 through 600	8-25-71	Sequenced through 800's
16	September 1, 1971	Individual continuous route program established for each child	9-1-71	
17	September 3, 1971	Project open for on-the-job training of interested persons		
18	September 10, 1971	Report to Project Director on Activities	9-10-71	
19	September 20, 1971	Slide and tape narration completed and presented to State Department	10-15-71	Jack Thompson
20	September 20, 1971	Second achievement test series administered	9-15-71	S.R.A. Achievement tests
21	September 30, 1971	Math skills sequence Series 300 through 800 checked by a consultant	10-15-71	Skill sequence 000-800 sent to Dr. Tokita of B.S.C. No reply from consultant;
22	September 30, 1971	Description of reading program and samples of record keeping pages printed		
23	September 30, 1971	Scope and sequence of word recognition skills revised and printed	9-30-71	
24	October 10, 1971	Report to Project Director on Activities	10-10-71	
25	October 20, 1971	Behavioral objectives and bibliography of materials for word recognition skills printed	10-20-71	
26	October 20, 1971	Continuing route sequence of math skills which is cross-referenced with State Math Guide, printed	10-20-71	
27	October 30, 1971	Full year individual goals set in conference with each student	12-14-71	

<u>EVENT NUMBER</u>	<u>DATE</u>	<u>DESCRIPTION</u>	<u>DATE COMPLETED</u>	<u>COMMENTS</u>
28	October 30, 1971	Summary of project activities printed	10-30-71	
29	November 10, 1971	Report to Project Director on Activities	11-10-71	
30	December 10, 1971	Report to Project Director on Activities	12-10-71	
31	January 1, 1972	Behavioral objectives where written, bibliography, student assignment sheets, etc. for math program printed and available at cost	1-1-72	
32	January 10, 1972	Report to Project Director on Activities	1-10-72	
33	February 10, 1972	Report to Project Director on Activities	2-10-72	
34	March 10, 1972	Report to Project Director on Activities	3-10-72	
35	April 10, 1972	Report to Project Director on Activities	4-10-72	
36	May 10, 1972	Report to Project Director on Activities	5-10-72	
37	May 20, 1972	Tentative guide of continuing route plan for teaching of reading comprehension skills field testing completed		Cancelled
38	May 20, 1972	Third Achievement test series and self-concept tests administered	May 6-7-8	
39	June 10, 1972	Report to Project Director on Activities	6-14-72	
40	June 15, 1972	Recommendations written as to needed revisions in tentative guide of continuing route plan for teaching of comprehension skills		Cancelled
41	June 30, 1972	Data from achievement tests and self-concept tests analyzed and report printed	June	
42	June 30, 1972	Report to Project Director on Activities		
43	June 30, 1972	Final Report on Project	June	

Curriculum Change Through
 Name of project Nongraded Individualization
 Project Director Richard K. Lewis (S)
 Date August 25, 1971

B. Changes or Additions in Program Objectives

FOLLOW-UP COMMITMENT ON RECOMMENDATIONS MADE BY ON-SITE EVALUATION TEAM
 (once completed and signed, this becomes part of project proposal for fiscal year 72)

Recommendations and Numerical Check List (number and page)	Implementation		Comments Pertaining to Implementation	Priority	Target Starting Date	Target Completion Date	Person/s Responsible	Not Scored
	fully	part. rejt.						
Recom. #1 P. 2	Agree with recom.		1. Organizational structure of curr. approach is more difficult & requires more time. 2. Team planning does reduce the hours of preparation in evening (personal time) 3. Motivation of team has developed this situation					
Recom. #2 P. 3	X		Included in cont. proposal pp. 29-32					
Recom. #3 P. 3	X		1. Included in cont. proposal pp. 27-29 2. VISIT program will provide opportunities for communications with other districts					
Recom. #4 P. 3		X	1. 40 hour workshop in higher levels of thinking skills 2. Taba social studies approach will be used 3. Science process approach		8/23/71	5/27/72	Staff	



Name of Project COILINGI

Project Director _____

Date _____

FOLLOW-UP COMMITMENT ON RECOMMENDATIONS MADE BY ON-SITE EVALUATION TEAM
(once completed and signed, this becomes part of project proposal for fiscal year _____)

Recommendations and Numerical Check list (number and page)	Implementation fully part. reftd.	Comments Pertaining to Implementation	Priority	Target Starting Date	Target Completion Date	Person/s Responsible	Mon. Sci.
Recom. #5 P. 3	Agree with recom.	1. Proposed building program is designed to implement program similar to Title III program 2. Within Elem. Math workshop all elem. teachers were involved and can implement the math program					
Recom. #6 P. 4	X	Will provide cost analysis of budget of project		8/23/71	4/1/72	Proj. Dir.	

No of rec
 Project Director
 Date

FOLLOW-UP COMMITMENT ON RECOMMENDATIONS MADE BY ON-SITE EVALUATION TEAM
 (once completed and signed, this becomes part of project proposal for fiscal year)

Recommendations and Numerical Check List (number and page)	Implementation fully part. reftd.	Comments Pertaining to Implementation	Priority	Target Starting Date	Target Completion Date	Person/s Responsible	Mon Sc
NSCL I. c. P.16		Included in implementation of Recom. #2 & #6					
II. b. P.16		1. Dissemination as outlined in Recom. #3 will improve this 2. Initial year of operation & unexpected difficulties occurred to hinder meeting deadlines					
III. c. P.17		Implementation of Recom. #4 covers this. Was felt rating was lower than what actually occurred-					
III. d. P.17		Felt rating was a typographical error See Recom. #3 includes this					
IV. a. b. c. d. 1. 2. 3. 4. 6. e.							

Name of Project Director _____
 Date _____

FOLLOW-UP COMMITMENT ON RECOMMENDATIONS MADE BY ON-SITE EVALUATION TEAM
 (once completed and signed, this becomes part of project proposal for fiscal year _____)

Recommendations and Numerical Check List (number and page)	Implementation		Priority	Target Starting Date	Target Completion Date	Person/s Responsible	Mon Sc
	fully	part. reftd.					
V. a. P.18							
b. P.18							
d. P.18							
g. P.18							
h. P.18		X		8/20/71	4/1/72	Proj. Dir.	
VI. b. P.19							

Comments Pertaining to Implementation

Recom. #2 & #6
 NA
 Recom. #2
 Survey will be made
 Error in rating
 First year project
 Recom. #2 & #3 will provide impetus for this year

Achievement of Project Objectives

1. The objective of Program Element I was to develop an educational program in at least the reading and math areas of the curriculum that would enable each student to improve performance by progressing at his rate, using his own learning style, doing those educational activities that he needs as determined by pre-assessment based on behavioral objectives. A math and reading program has been developed which meets the objective of Program Element I. Individualized packets have been developed in both the math and reading areas. All students in the program have been assessed, pre-tested and placed in the continuous route. A hierarchy of skills has been developed for the word recognition skills in reading and for individual math concept areas. Behavioral objectives have been written for each of the skills and sequences have been refined. Concept tests to test the student's ability to perform a concept without doing the packets have been developed. Individual packets have been developed for all of the skills needed up to the end of the eighth grade level in the math area and for all of the word recognition skills identified in the sequence of the reading program. Careful records of each student's progress through the continuous route have been kept and plotted on skill charts.

We have refined the packets and tests for a third year's operation, Levels K-6.

2. The objective of Program Element II was to provide an organizational plan which would remove the grade level barriers for one-third of the children from the Moreland Elementary School, plus 20 five-year-olds by grouping them together into a single quad in a remodeled facility which would provide for flexible grouping and student interaction. This has been accomplished. A differentiated staff has been employed and is currently operating in a team program, each one filling different role objectives. Refinements in the operation of the differentiated staff have been carried out during the 1971-72 school year and will continue during 1972-73.

3. The objective of Program Element III was the development of a differentiated staff with detailed role descriptions and whose operation would be measured with performance objectives. It was also proposed that a pre-service (intern) training program be developed in conjunction with Idaho State University.

The objective of development of detailed role descriptions has been completed. Some progress is being made toward Performance Objectives. A new Title III Project, Curriculum Improvement by Internal Accountability, will further our work on Performance Objectives. However, it is anticipated that at least one more year would be required to build performance objectives to a degree where they would effectively be utilized for evaluation of staff member's performance.

The proposed pre-service (intern) training program containing detailed role descriptions is now in effect and will become useful as a tool in the development of performance objectives. Interns have been used in a pre-service training program in the nongraded quad for the operational years 70-71, 71-72, and are being used in the 1972-73 school year.

The in-service segment of this program element has been completed through staff visitations to schools that are "trying new things", in-service workshops in Math and Reading, consultant training in high level thinking skills, and staff members receiving college training in various areas of professional preparation.

4. Dissemination activities completed:

- a.
 - 1) Slide and tape narration of project activities. One set has been sent to Title III offices, State of Idaho, Department of Education for dissemination purposes.
 - 2) Printed summary of project activities has been completed for dissemination.
 - 3) Printed description of reading program with samples of record keeping pages has been completed.

- 4) Scope and sequence of word recognition skills has been completed.
 - 5) Printed description of math program with samples of record keeping pages has been completed for dissemination.
 - 6) Continuing route sequence of math skills which is cross-referenced with State of Idaho, Mathematics Curriculum Guide has been completed.
 - 7) Behavioral objectives, bibliography, student assignment guide sheets, pre-tests, post-tests and recall tests for each math PMU is available for dissemination.
 - 8) Final evaluation of the project will be printed and available in limited quantities after July 1, 1972.
- b. The project has been open during the 1971-1972 school year for visitation on a scheduled basis.
 - c. A training program has been available in the project where interested persons may receive on-the-job training experience at their expense, on a first-scheduled, first-served basis. Not more than four people will be scheduled at any one time and for a period of time, at their option, up to twenty days.
 - d. Other various dissemination activities will be carried out by the project staff, as they have in the past, such as conducting workshops upon special request and making presentations to college and private educational groups interested in the program. The State Department of Education is also providing interested School Districts who want the in-service workshop this opportunity during the 1972-73 school year.

PROGRAM ELEMENT IV

EVALUATION

- I. Final onsite team evaluation
- II. Internal Evaluation
 - a. Academic achievement
 - b. Self-concept
 - c. Parent survey
 - d. Staff survey
- III. Outside Agency cooperation

ON-SITE EVALUATION
TEAM USE

Project Number 70-21

16. Evaluation Team

Project _____

Chairman Dr. Gerald R. Wallace

Members Dr. Robert Shreve
Mr. William G. Quinney
Mrs. Elizabeth Coryell

17. Date of On-Site Evaluation April 4, 5, and 6, 1972

18. Length of Evaluation 3 Days

Committee Evaluation

19. Changes necessary in General Information. (Items 1-8)

Item #	Page #	Line #	New Information
			The Committee found no changes for Items 1 through 8

20. Specify differences between self-evaluation and committee evaluation. (Items 9-15) If additional space is desired, please use 8 1/2 x 11 sheet.

Item #	Page #	Line #	Differences Observed by Team
			The Committee found no differences between the project self-evaluation document and the committee evaluation. (Item 9-15)

ON-SITE EVALUATION
SDE USE - continued

21. Commendations (Strengths and achievements in the project.)
See attached sheet

22. Recommendations (Revisions needed in the project, staff, budget, etc.)
See attached sheet

23. Innovation (Cite the innovation(s) of this Project.)
See attached sheet

24. Other Comments:

Committee Chairman

Donald A. [unclear]
(signature)

Boise State College

(address)

1907 Campus Drive

Boise, Idaho 83707

Date April 10, 1972

ON-SITE EVALUATION
SDA USE - continued

21. Commendations (Strengths and achievements in the project.)

1. The committee commends the project personnel for the development and implementation of the "philosophy of the Moreland non-graded quad".
2. The committee commends the project personnel for the development of objectives and individualized learning packets in reading K-5 and mathematics K-8 which could easily be adopted by other school districts.
3. The committee commends the project personnel for the development of "role descriptions for the non-graded differentiated staff".
4. The committee commends the project personnel for the development and implementation of the "Intern Training Program".
5. The committee commends the project personnel for the learning atmosphere which they have created for the children and that this atmosphere has made a significant contribution toward the very positive attitude which these children exhibit toward learning. May they never lose it!
6. The committee commends the project personnel and the parents of the children for the creation of an atmosphere for learning and attitudes on the part of children which has eliminated most discipline problems.
7. The committee commends the project personnel for their willingness to work for a relatively low wage scale so that monies could be channeled into teaching materials and equipment.
8. The committee commends the project personnel for the creation of attitudes and desires on the part of the children which result in an optimum use of student time. These children are developing independent study habits which will be of untold value to them in future years.

21. Commendations (continued)

9. The committee commends the project personnel for their humanistic, aesthetic and supportive attitude toward children.
10. The committee commends the staff for the development of an atmosphere which gave loud and clear "learning is fun". This in turn develops within the children a genuine interest in learning.
11. The committee commends the Board of Trustees of Snake River District No. 52 for their support of the Moreland quad.
12. The committee strongly commends Dr. Darrell Loosle, Mr. David Wilson, Mr. Jack Thomp and Mrs. Frances Yamada for the strong, energetic and enthusiastic leadership which they are giving to the project.
13. The committee commends Mrs. Julia Bradshaw, Mrs. Bonita Painter, Mr. Ralph Barlow, Mrs. Lois Thomas, Mrs. Connie Selleneit, Mrs. Norma Waddoups, Mrs. Itha and 1, for their dedication, efforts, and time given to the development of and the implementation of the program and materials for this project.
14. The committee commends the development of the new dissemination program for the project. The slides and tape narration set are excellent. The program materials are well done and effectively present the purpose and learning activities of this program. The district is to be congratulated for employing a dissemination aide to serve the many on-site visitors. (300)
15. The committee commends the Board of Trustees, Snake River District #52 for their continuation of the Riverside Project after the cessation of federal funds and for their expressed intention of continuation of the Moreland Project next year when federal support is curtailed.
16. The committee commends the Board of Trustees, Snake River District #52 and the administration for utilizing the differentiated staff concept to employ a full complement of certified teachers.

21. Commendations (continued)

17. The committee commends the Board of Trustees, Snake River District #12 for their selection of administrative personnel who were interested in maintaining the same philosophy when vacancies occurred during the span of the Moreland Projects. There was no loss of direction when these personnel changes were made.

18. The committee wishes to commend this project for the intermingling of kindergarten age students with first, second and third graders in an all day activity. These pupils lost grade level identification and became busily involved in the reading, writing, language arts, and mathematics programs and various self-directed instructional experiences.

19. The committee commends this project for the similar intermingling of the learning disability students in total programs.

20. The committee commends the staff for the development of a functional and effective buddy system which provided a climate of camaraderie and gave the opportunity to develop inter-personal relationships.

21. The committee commends the staff for the organization structure which they have developed to provide for the most efficient use of their time during the day.

22. The committee commends the Board of Trustees, Snake River Valley #12 for allowing time on Monday afternoons to be used for weekly planning sessions.

23. The committee commends the district for its acceptance of the parent-teacher-pupil participation in conferencing to evaluate each child's progress. Inclusion of the child in the evaluation process is an indication of sound application of the philosophy of individualization.

24. The committee commends the staff for the development of a spirit of teamwork among all members of the team and dedication to the child centered approach to learning.

22. Recommendations (Revisions needed in the project, staff, budget, etc.)

1. The committee recommends that the project staff continue to further evaluate and refine their project evaluation package so that all possible data will be obtained in attempt to ascertain the contribution of the project toward its stated goals.

- A. "Developing children to the fullest extent of their capabilities".
- B. "Take responsibility for their progress toward educational goals".
- C. "Independence in reading".
- D. "Reading for enjoyment".

2. The committee recommends that the project staff carefully evaluate their time allocations so that they are satisfied that they are giving proper learning opportunities in music, art, social studies and science.

3. The committee strongly recommends that the district voters become well informed regarding the advantages to their children and youth of "non-graded level qualification" so that they can make decisions at the ballot box which will result in physical facilities that are necessary if all children and youth of the district are to have opportunities which are now available to only the children in the "Moreland quad".

4. The committee recommends that the State Department of Education take immediate steps to reproduce the reading and mathematics packets developed at Moreland and make them available for all districts in the State of Idaho who desire them.

5. The committee recommends that the State Department of Education encourage LEA's throughout the state to avail themselves of opportunity for LEA personnel to participate in the twenty day in-service program which is a part of this project.

6. The committee recommends that the project staff continue in its efforts to develop behavioral/performance objectives for each member of the differential staff as this could be one of the most significant contributions of this project.

7. The committee strongly recommends that each member of the State Board of Education No. 52 Board of Trustees allocates not less than two days of his or her full-length visit of the "Moreland quad". The committee does not feel that the Board can fully appreciate what this project is doing for their children without such an in-depth visit.

22. Recommendations (continued)

8. The committee recommends that the project directors continue to seek additional instruments for evaluation of individualized learning and for measurement of development of attitudes and values in the affective domain.

9. The committee recommends that the innovative and exemplary program of integration of kindergarten children into a full day program of learning activities, K-3, be continued.

10. The committee recommends that the State Department of Education prepare a brochure describing the philosophy, the program of learning, the major areas to be observed of the Moreland individualization non-graded project. This brochure should be distributed prior to the visitation for all those who participate in the VISIT in-service program.

NUMERICAL SCALE CHECK LIST

Project: Title III, ESEA
70-21

Numerical Scale

- (A) Not Applicable.
- (B) Evidence lacking for evaluation.
- (1-5) If A or B does not apply, rank the item on a five point scale with 1 = lowest and 5 = highest.

I. General Objectives:

In relation to specific program objectives:

- a. The needs of students: (To what extent have the objectives of this program met the identified needs of students?) A B 1 2 3 4 5
[] [] [] [] [] []
- b. The needs of teachers: (To what extent has the program and the stated innovative practices and approaches met the needs of teachers as identified in the objectives?) A B 1 2 3 4 5
[] [] [] [] [] []
- c. The needs of other professionals: (To what extent are statistical data emerging that will aid other professionals in making educational decisions? e.g., Administrators, Counselors, etc.) A B 1 2 3 4 5
[] [] [] [] [] []
- d. Community needs: (To what extent are community needs being met as identified in the proposal?) A B 1 2 3 4 5
[] [] [] [] [] []
- e. Current direction: (To what extent has the current direction of the project been consistent with stated program objectives?) A B 1 2 3 4 5
[] [] [] [] [] []
- f. Project activities: (To what extent have project activities been appropriate for achieving stated objectives?) A B 1 2 3 4 5
[] [] [] [] [] []

II. Program Calendar:

- a. Program deadlines: (To what extent have program objectives (12a) been met in accordance with pre-conceived deadlines?) A B 1 2 3 4 5
[] [] [] [] [] []

b. Deadline dates: (To what extent have program materials pertinent to this project been developed and distributed as indicated by schedules, PERT charts, or flow charts?)

A	B	1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

c. Staffing and special personnel: (To what extent were personnel available when needed to conduct the project? Was the project director able to recruit and hold qualified and competent personnel on the project in order to achieve a high degree of success?)

A	B	1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

III. In-Service as Specified in Project Objectives and Activities:

a. Teacher instruction: (To what extent are teachers receiving professional training on new approaches to teaching as one result of the ESEA, Title III program?)

A	B	1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

b. In-service program(s): (To what extent do the program(s) meet the identified needs of the staff?)

A	B	1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

c. Administrator and board member involvement: (To what extent have the administrators and board members of the L.E.A. been involved in project programs, policies, and procedures?)

A	B	1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

IV. Dissemination:

a. Clarity: (To what extent is the information clearly stated with a particular audience in mind? Consider Board of Education, Professional Staff, the lay public, pupils, civic organizations, etc.)

A	B	1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

b. Validity. (To what extent does the information present a true picture? Honest coverage should be given in the program.)

A	B	1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

c. Techniques: (To what extent is the method(s) used to dissemination information within the project area adequate and appropriate? i.e., news media, reports, conferences, etc.)

A	B	1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

V. Evaluation:

a. Numbers of people being served: (To what extent is the amount of money being spent justified by the number of people involved?)

A	B	1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

b. Use of facilities: (To what extent is there any evidenced increase use of libraries, museums, etc.?)

A	B	1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

c. Community activities: (To what extent has community interest and involvement increased as a result of the project?)

A	B	1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

d. Student performance: (To what extent is the participating student(s) performing significantly higher than before the project?)

A	B	1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

e. Student involvement: (The extent to which students are actively involved in the project and show a positive attitude toward it.)

A	B	1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

f. Teacher attitude: (The extent to which teachers who have been actively involved in the project, show a positive attitude toward it.)

A	B	1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

g. Teacher attitude: (The extent to which teachers within the project area who have not been actively involved in the project, show a positive attitude toward it.)

A	B	1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

h. Administrator and Board Member attitude: (To what extent do administrators and Board Members of the project area show a positive attitude toward the project?)

A	B	1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

i. Testing, achievement and diagnostic data: (To what extent have data been collected relative to the project?)

A	B	1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

j. Cumulative information: (To what extent is there physical evidence of efficient record keeping on the participants involved in this project?)

A	B	1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

k. Cumulative information on process and procedures: (To what extent is there physical evidence of efficient record keeping on project processes, procedures and programs?)

A	B	1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

l. The effect of the project on the L.E.A: (To what extent has the project contributed to a change in philosophy of the L.E.A. and a pronounced desire to upgrade other areas of the educational program?)

A	B	1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

m. Effectiveness: (To what extent has the project made reasonable progress toward the achievement of its objectives?)

A	B	1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

n. Money expended: (To what extent is the budget appropriate for the current operation of the project?)

A	B	1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VI. Change Impetus:

a. Internal impetus: (To what extent are provisions being made for the integration of successful project activities into the regular school program?)

A	B	1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

b. External impetus: (To what extent is there evidence to show that other districts are adopting or adapting this project into their educational programs?)

A	B	1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Evaluation Design

1. A careful evaluation designed by Dr. William Baller, Idaho State University, was utilized to measure achievement gain and self-concept gain of the Title III group compared to a control group of similar socio-economic status. The following is a detailed description of the design.

The students in the Title III Nongrading Program were matched on a socio-economic basis with a control group from another school district. The criteria used in establishing comparable socio-economic status groups was (1) Occupation of father as defined by the "Revised Scale for Rating Occupation", (2) Educational level of father and (3) Educational level of mother.

Data for the matching was gathered from the parents of the students involved by questionnaire. Statistical formulae was used to assure matchability of the Title III group and the control group.

In order to test the academic achievement of the students in the continuous progress, nongraded program, as compared to a traditional program, an SRA Achievement Series was used. Forms of the achievement series were used to insure adequate testing range. The SRA Achievement Series tested students in the reading, language arts and math areas.

The SRA Achievement batteries were administered to the students in the Spring of 1971, the Fall of 1971 and the Spring of 1972. A "t-test for independent samples" was used to test differences in achievement between the students in the nongraded program and students in the control group. The same "t-test" was used to determine statistical differences from the test administered in the Spring of 1972, as compared to the tests administered in the Fall of 1971 and the Spring of 1971. The purpose of these tests was to test the students for loss of retention after one year.

and achievement gained after one full year, as well as achievement at the end of the first year of non-grading - Spring of 1971.

Achievement tests were administered to both groups in the Spring of 1971 at the end of the first year of the Title III Project. Achievement tests were administered to both groups in the Fall of 1971, and have been administered again to both groups in the Spring of 1972, to test for differences in achievement and for gain in achievement.

The second phase of the research design was testing the self-concept of the students in the Title III program as compared to students in a traditional program to determine if the self-concept of the students in the Title III program is improved or maintained as a result of the individualized, continuous progress, nongraded program. The same control group matched with the Title III students in the achievement testing was used. The Anderson Rating Scale was used to determine the self-concept of students in the non-graded program compared to the control group. The results of the test will follow.

2. Methods and Procedures for Evaluating Objectives.

- a. The method used for evaluating the major objective is described under the evaluation segment of the activities carried out. Results of this evaluation are contained in this final report, June, 1972.
- b. Other objectives and activities are of a nature that completion of the activity at a level acceptable to the team, team leader and project director would indicate an acceptable level of achievement. An exception to this is the math sequence of skills which was checked by a consultant before it was labeled as successfully completed. Other activities were checked by the team leader reviewing each item as it

was completed with the entire team and the project director. When the event completed was acceptable at this level and did not require checking by a curriculum consultant, it was deemed successfully completed. Reports were made by the team leader by the 10th of each month to the project director concerning the activities and assignments that were completed, the activities that were planned for completion during the next month, and any change of assignments, activities, or staff directions needed to accomplish the objectives by the times indicated.

- c. A date check sheet has been kept to show that the events listed in the activities are completed with a column designated in which the date of completion is written. There is also a column for comments which indicated any future direction for these activities, whether completed or whether there is need for events and/or activities to be re-routed.
3. One phase of the internal evaluation was to send a questionnaire to the parents of the students in the Nongraded Quad. A copy of the questionnaire is included.

SRA ACHIEVEMENT TEST SUMMARY REPORT OF SCORES FROM RANDOM SELECTION OF STUDENTS IN NONGRADED QUAD AND CONTROL :
 OF SIMILAR SOCIO-ECONOMIC STATUS, MAY, 1971--(RAW SCORE AVERAGES AND GRADE EQUIVALENT AVERAGES GIVEN)

NONGRADED QUAD GROUPS	TEST BATTERY NUMBER	LANG. ARTS		MODERN MATH		COMPREHENSION		VOCABULARY		TOTAL READING		COMPOSITE SCORES	
		RAW SCORE AVE	GRADE EQUIV AVE	RAW SCORE AVE	GRADE EQUIV AVE	RAW SCORE AVE	GRADE EQUIV AVE	RAW SCORE AVE	GRADE EQUIV AVE	RAW SCORE AVE	GRADE EQUIV AVE	RAW SCORE AVE	GRADE EQUIV AVE
EQUIV. OF 1st	18 Form D	Not Tested		16.8	1-9	15.7	1-7	9.6	1-7	123.8	1-7	149.6	1-7
		Not Tested		17.6	2-1	16.5	1-9	11.0	1-9	140.7	2-1	158.5	2-1
		70.2	3-3	16.5	3-6	23.2	3-5	17.8	3-3	41.1	3-4	127.8	3-5
EQUIV. OF 2nd	13 Form D	89.7	4-6	28.5	4-9	28.9	5-2	23.5	4-7	52.5	4-9	170.7	4-9
EQUIV. OF 3rd	15 Form D												
CONTROL SCHOOL GROUPS													
NON-CONTROL AND COMPARABLE GROUP AVAILABLE FOR TESTING													
EQUIV. OF 1st	18 Form D	Not Tested		10.8	2-2	15.5	1-3	11.4	1-9	159.2	1-9	137.3	2-1
		79.0	3-3	10.4	2-5	11.2	2-7	11.5	2-5	31.5	2-6	112.5	2-7
EQUIV. OF 2nd	15 Form D	77.1	3-7	10.2	1-3	12.2	5-7	11.2	5-9	41.1	3-7	116.4	2-8



SRA ACHIEVEMENT TEST SUMMARY REPORT OF SCORES FROM RANDOM SELECTION OF STUDENTS IN NONGRADED QUAD AND CONTROL SCHOOL OF SIMILAR SOCIO-ECONOMIC STATUS, MAY 1972, (RAW SCORE AVERAGES AND GRADE EQUIVALENT AVERAGES GIVEN)

	TEST BATTERY	NUMBER	LANG. ARTS			MODERN MATH			R-E-A-D-I-N-G			COMPOSITE SCORES		
			RAW SCORE AVE	GRADE EQUIV AVE	RAW SCORE AVE	GRADE EQUIV AVE	RAW SCORE AVE	GRADE EQUIV AVE	COMPREHENSION	VOCABULARY	TOTAL	READING	RAW SCORE AVE	GRADE EQUIV AVE
NON GRADED QUAD GROUPS														
EQUIV. OF "K"	PRIMARY 1-2 Form D	20	Not Tested	16	1-7	13	1-5	10	1-7	136	1-9	152	1-7	
EQUIV. OF 1st	PRIMARY 1-2 Form D	13	Not Tested	29	3-2	27	2-8	11	2-9	190	3-0	220	3-0	
EQUIV. OF 2nd	INTER. 3-4 Form D	13	61	2-8	3-6	22	3-6	16	3-4	39	3-6	116	3-4	
EQUIV. OF 3rd	INTER. 3-4 Form D	13	87	4-3	5-9	33	5-8	25	5-1	57	5-4	175	5-6	
CONTROL SCHOOL GROUPS														
KINDERGARTEN (NO COMPARABLE GROUP AVAILABLE FOR TESTING)														
1st GRADE	PRIMARY 1-2 Form D	13	Not Tested	17	1-8	15	1-6	10	1-3	120	1-6	147	1-7	

STUDENT SELF CONCEPT

The Anderson Behavior Rating Scale was used to determine how children felt about themselves in the Non-Graded Program. The main project objective concerning students was that of self-concept of the Moreland Non-Graded Student versus the control group.

The Moreland and the control elementary schools are not in the same school district. The students from both schools are apparently the same in socio-economic and religious backgrounds. The parents are comparable with similarity in ethnic backgrounds.

The statistical test used in comparing the result of the instrument was the Kolmogorov-Smirnov Two-sample test. An explanation of this test is found in the text, Non-Parametric Statistics, New York: McGraw-Hill Book Company, Sidney Siegel, 1956, pp. 127-136.

The procedure used was to tabulate the responses of the students in the Moreland and control Elementary School and compare the results. The comparisons that were made were composite comparisons including all of the students in grades K, First, Second and Third of both schools.

There were twenty-five word pairs that each child checked on a continuing scale indicating his attitude toward self. The premise of this investigation is that any significant differences found between the students in the two schools will be the result of the school, teachers and the program.

Of the 25 paired responses the experimental school, Moreland was found to have five (5) significant differences and the control school none. Indeed, of the remaining 20 paired responses, while none were judged significant at the .05 level of significance, 20 were in favor of the experimental school at Moreland and none were in favor of the control school.

For a general over-all explanation of the scale, the following table gives the paired response, the D as measured by the K-S test, the level it would need to be significant, the indication of whether it was significant or not and whether the direction of the result was in favor of the control school or the Moreland Non-Graded School.

ANDERSON BEHAVIOR RATING SCALE

Moreland Non-Graded Versus Control Group - 1972

<u>Scale Ran From</u>	<u>Significant</u>	<u>In Favor Of</u>	<u>D of on K-S</u>	<u>.05 Level</u>
Good to Bad	No	Moreland	.073	.136
Mean to Nice	Yes	Moreland	.183	.136
Friendly to Unfriendly	No	Moreland	.09	.136
Hardworker to Lazy	No	Moreland	.010	.136
Sloppy to Neat	No	Moreland	.075	.136
Clean to Dirty	No	Moreland	.05	.136
Play to Frightful	No	Moreland	.033	.136
Sad to Joyful	No	Moreland	.015	.136
Unfriendly to Grouchy	No	Moreland	.09	.136
Bully to Nice Guy	No	Moreland	.065	.136
Noisy to Quite	Yes	Moreland	.066	.136
Interesting to Dull	No	Moreland	.083	.136
Pleasant to Unpleasant	No	Moreland	.065	.136
Selfish to Generous	No	Moreland	.112	.136
Mannerly to Show Off	No	Moreland	.07	.136
Bossy to Helpful	No	Moreland	.119	.136
Happy to Mad	No	Moreland	.045	.136
Smart to Stupid	Yes	Moreland	.165	.136
Unkind to Smart	No	Moreland	.028	.136
Cooperative to Goof-Off	Yes	Moreland	.141	.136
Messy to Careful	No	Moreland	.029	.136
Cheater to Fair	No	Moreland	.10	.136
Polite to Awful	No	Moreland	.125	.136
Smiling to Grumpy	No	Moreland	.03	.136
Obedient to naughty	Yes	Moreland	.145	.136

Explanation: When an item is said to be in favor of Moreland or the control group it means that students have a more positive feeling rather than a negative on that particular item. For example, on the very first item it indicates that the Moreland students felt themselves as more "good" than the control students and on the second item it indicates that the Moreland student sees himself as more "nice" than the control student.

ANDERSON BEHAVIOR RATING SCALE

GOOD.....!.....!.....!.....!.....BAD
MEAN.....!.....!.....!.....!.....NICE
FRIENDLY.....!.....!.....!.....!.....UNFRIENDLY
HARDWORKER.....!.....!.....!.....!.....LAZY
SLOPPY.....!.....!.....!.....!.....NEAT
CLEAN.....!.....!.....!.....!.....DIRTY
PLAYFUL.....!.....!.....!.....!.....FEARFUL
SAD.....!.....!.....!.....!.....JOYFUL
CHEERFUL.....!.....!.....!.....!.....GRUMPY
BULLY.....!.....!.....!.....!.....NICE GUY
NOISY.....!.....!.....!.....!.....QUIET
INTERESTING.....!.....!.....!.....!.....DULL
PLEASANT.....!.....!.....!.....!.....UNPLEASANT
SELFISH.....!.....!.....!.....!.....GENEROUS
MANNERLY.....!.....!.....!.....!.....SHOW-OFF
BOSSY.....!.....!.....!.....!.....HELPFUL
HAPPY.....!.....!.....!.....!.....MAD
SMART.....!.....!.....!.....!.....STUPID
UNKIND.....!.....!.....!.....!.....KIND
COOPERATIVE.....!.....!.....!.....!.....GOOF-OFF
MESSY.....!.....!.....!.....!.....CAREFUL
OBEDIENT.....!.....!.....!.....!.....NAUGHTY
CHEATER.....!.....!.....!.....!.....FAIR
POLITE.....!.....!.....!.....!.....AWFUL
SMILING.....!.....!.....!.....!.....GRUMPY

TABLE IV

SUMMARY OF SURVEY TO TEACHERS AND AIDES--MORELAND NONGRADED QUAD--March, 1971

CHARACTERISTIC COMPARED TO WHAT REGULAR PROGRAM WOULD BE	NUMBER OF RESPONSES FOR EACH COMPARATIVE RATING				
	1	2	3	4	5 DON'T KNOW
1. Attitude toward school	7	1	0	0	0
2. Improvement in overall learning	4	4	0	0	0
3. Acceptance of responsibility for learning	7	1	0	0	0
4. His general happiness	6	2	0	0	0
5. His study habits	5	2	1	0	0
6. Number of friends	6	2	0	0	0
7. Amount of reading done at home	4	3	1	0	0
8. Development of leadership qualities	6	2	0	0	0
9. Learning to work independently	7	1	0	0	0
10. His self control	4	4	0	0	0
11. His feelings about school	6	2	0	0	0
12. Amount of time spent talking about school	2	4	0	0	2
13. His self-esteem--How he feels about himself	8	0	0	0	0
TOTAL (in per cent of all responses)	69%	27%	2%	0	2%

All recommended that the program be continued.

Teachers and aides were asked to indicate the effectiveness of the non-graded program in helping children develop in the listed characteristics by circling the number which best described their feelings.

- *KEY 1--Extremely helpful--much better than regular program would be.
 2--Helpful--some better than regular program would be.
 3--About the same as regular program would be.
 4--Not as good as regular program would be.
 5--Don't know.

TABLE II.
SUMMARY OF SURVEY TO STAFF MEMBERS--MORELAND NONGRADED QUAD--MARCH, 1972

CHARACTERISTIC COMPARED TO WHAT REGULAR PROGRAM WOULD BE	NUMBER OF RESPONSES FOR EACH COMPARATIVE RATING				
	1	2	3	4	Don't Know
1. Attitude toward school	10	0	0	0	0
2. Improvement in overall learning	9	1	0	0	0
3. Acceptance for responsibility for learning	9	1	0	0	0
4. His general happiness	8	2	0	0	0
5. His study habits	8	2	0	0	0
6. Number of friends	5	4	1	0	0
7. Amount of reading done at home	10	0	0	0	0
8. Development of leadership qualities	9	1	0	0	0
9. Learning to work independently	10	0	0	0	0
10. His self control	8	2	0	0	0
11. His feelings about school	10	0	0	0	0
12. Amount of time spent talking about school	6	1	0	0	3
13. His self-esteem--how he feels about himself	10	0	0	0	0
TOTAL ALL RESPONSES	112	14	1	0	3

I would recommend that the nongraded program be:

Continued	10
Stopped	0
No opinion	0

SUMMARY OF SURVEY TO PARENTS--MORELAND NONGRADED QUAB--MARCH, 1971

CHARACTERISTIC COMPARED TO WHAT
REGULAR PROGRAM WOULD BE

PER CENT OF RESPONSES*
FOR EACH COMPARATIVE RATING

	1	2	3	4	5 Don't Know	6 No Answer
1. Attitude toward school	45	35	11	0	7	2
2. Improvement in overall learning	37	38	13	4	4	4
3. Acceptance of responsibility for learning	50	24	16	6	2	2
4. His general happiness	35	40	15	2	6	2
5. His study habits	37	25	29	6	0	2
6. Number of friends	16	37	34	4	7	2
7. Amount of reading done at home	46	20	19	6	4	6
8. Development of leadership qualities	16	48	19	4	11	2
9. Learning to work independently	43	31	11	7	6	2
10. His self control	13	41	29	11	4	2
11. His feelings about school	40	37	13	4	4	2
12. Amount of time spent talking about school	24	35	26	7	4	4
13. His self-esteem--how he feels about himself	22	41	26	2	7	2
TOTAL (in per cent of all responses)	33%	35%	20%	5%	5%	2%

I would recommend that the nongraded program be: Continued 81%
Stopped 2%
No opinion 17%

Parents were asked to indicate the effectiveness of the nongraded program in helping their child develop in the listed characteristics by circling the number which best described their feelings:

- * KEY
- 1--Extremely helpful--much better than regular program would be.
 - 2--Helpful--some better than regular program would be.
 - 3--About the same as regular program would be.
 - 4--Not as good as regular program would be.
 - 5--Don't know.
 - 6--The last column indicates those not answering the item.

SUMMARY OF SURVEY TO PARENTS--MORELAND NONGRADED QUAD--MARCH, 1972

<u>CHARACTERISTIC COMPARED TO WHAT REGULAR PROGRAM WOULD BE</u>	<u>NUMBER OF RESPONSES FOR EACH COMPARATIVE RATING</u>				
	1	2	3	4	^a Don't know
1. Attitude toward school	26	15	3	0	0
2. Improvement in overall learning	27	15	3	1	0
3. Acceptance for responsibility for learning	27	10	5	2	1
4. His general happiness	23	14	6	0	0
5. His study habits	13	19	7	3	2
6. Number of friends	20	9	12	2	1
7. Amount of reading done at home	19	16	5	3	0
8. Development of leadership qualities	9	24	8	1	3
9. Learning to work independently	18	17	5	2	1
10. His self control	15	18	9	2	1
11. His feelings about school	26	14	1	2	1
12. Amount of time spent talking about school	22	12	8	1	1
13. His self-esteem--how he feels about himself	23	12	9	1	0
TOTAL ALL RESPONSES	268	195	81	21	12

I would recommend that the nongraded program be:

Continued	42
Stopped	2
No opinion	3

SURVEY OF MORELAND NONGRADED QUAD - February 16, 1972

Dear Parent: (Aide or teacher)

Your help in evaluating the effectiveness of the nongraded program in the Moreland School would be appreciated. It is important that all surveys be returned. Please place this survey in the addressed envelope and mail it or send it with your child.

Do not put your name or your child's name on this form. Please do answer all the questions, even if some of them appear to be personal. If you have more than one child in the Quad please fill out one form for each child.

1. Indicate the placement of your child during the previous year by checking the appropriate square

<input type="checkbox"/>	Not in School
<input type="checkbox"/>	In Private Kindergarten
<input type="checkbox"/>	In School Sponsored Kindergarten
<input type="checkbox"/>	In Transition
<input type="checkbox"/>	In Grade 1
<input type="checkbox"/>	In Grade 2
2. Please state the occupation of father/guardian _____
3. Highest level of education completed by mother _____
4. Highest level of education completed by father _____

Please indicate how effective the nongraded program has been in helping your child develop in each of the numbered items by circling the number which best describes your feelings:

- 1--Extremely helpful--much better than regular program would be.
- 2--Helpful--some better than regular program would be.
- 3-- About the same as regular program would be.
- 4--Not as good as regular program would be.
- 5--Don't know.

CIRCLE ONE FOR EACH ITEM

- | | | | | | |
|---|---|---|---|---|---|
| 5. Attitude toward school | 1 | 2 | 3 | 4 | 5 |
| 6. Improvement in overall learning | 1 | 2 | 3 | 4 | 5 |
| 7. Acceptance of responsibility for learning | 1 | 2 | 3 | 4 | 5 |
| 8. His general happiness | 1 | 2 | 3 | 4 | 5 |
| 9. His study habits | 1 | 2 | 3 | 4 | 5 |
| 10. Number of friends | 1 | 2 | 3 | 4 | 5 |
| 11. Amount of reading done at home | 1 | 2 | 3 | 4 | 5 |
| 12. Development of leadership qualities | 1 | 2 | 3 | 4 | 5 |
| 13. Learning to work independently | 1 | 2 | 3 | 4 | 5 |
| 14. His self control | 1 | 2 | 3 | 4 | 5 |
| 15. His feelings about school | 1 | 2 | 3 | 4 | 5 |
| 16. Amount of time spent talking about school | 1 | 2 | 3 | 4 | 5 |
| 17. His self-esteem--how he feels about himself | 1 | 2 | 3 | 4 | 5 |

18. I would recommend that the nongraded program be: (check one)
- | | |
|--------------------------|--------------|
| <input type="checkbox"/> | Be continued |
| <input type="checkbox"/> | Be stopped |
| <input type="checkbox"/> | Be optional |

SURVEY OF MORELAND NONGRADED QUAD - FEBRUARY, 1972

19. What do you think are the greatest advantages of the program?

20. Which subject or area has been strengthened by this program?

21. What do you think are the greatest disadvantages of the program?

22. Which subject or area has been weakened by this program?

23. Make any comments which you desire:

Outside Agency Cooperation

- A. Some factors of the program have been planned in conjunction with Idaho State University.
 1. Dr. Gilliland, Special Education, ISU, reviewed the special education involvement of children in the quad who have special learning disabilities and/or mentally retarded children.
 2. An intern program (pre-service training) is presently operating. Guidelines have been developed for the pre-service training of teachers in the nongrading, team teaching, differentiated staff program. Dr. Loren Scott, Dr. Arthur C. Judd, Dr. R. Laverne Marcum, and Dean Richard Willey of the College of Education, Idaho State University, have been instrumental in the establishment of the intern program.
- B. A number of private schools have visited the project.
- C. One administrator from the Boise Diocese participated in the summer workshop and assisted in the development of the individualized non-graded math packets.
- D. Dr. Melvin C. Rexroat, College of Education, Idaho State University, served as a consultant in training the Project staff with "Higher-level" thinking skills.
- E. Requests have been received from many private schools, as well as twelve State Departments of Education regarding the individualized nongraded math program.
- F. A number of requests have been received from textbook companies regarding the availability of the individualized nongraded math program.

POST VISIT REPORT ON SNAKE RIVER DISTRICT NO. 52

The title III Project has established the primary goal of developing and adapting the curriculum to the individual needs and capacities of children and that of helping them make continuous, consistent progress toward goals established through assessment process.

Moreland School was set up so that, around the main classroom where children seemed to be moving along at their own pace, there were three or four self-contained classrooms. As I moved from the large open room into the self-contained classroom, I became aware of the differences. In talking with the teacher from the small room, I could sense some hostility toward those in the open classroom. The children responded differently to the visitors too. The children in the open classroom were not as aware of the intruders even though there were many of us. The children in the self-contained, however, became noisier when just two of us came into the room.

On the whole, except for the problem above, I was impressed with the school system. The children in both the primary and intermediate schools seemed to be working at their own pace and not giving the person next to him a second thought.

The applicability of the project practices could work in my home district, although at the present time I do not believe that financially the district could make such a complete about face in the educational system. However, individual teachers might be able to make some of the necessary changes needed for individualization. A teacher could not possibly individualize everything at once, but she could start with reading or an area in reading such as spelling. I do not believe that a teacher could individualize by herself. She would need the approval and cooperation of the principal and superintendent. In my home district, this approval and cooperation would be hard to obtain.

I would recommend that the administrators of my home district look closely at the practices of the Snake River Project. There would have to be a drastic change in the system and the thinking of the officials of my home district, but I believe that a non-graded, individualized program would work.

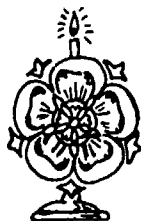
by Florene Gehrke

IMMANUEL LUTHERAN CHURCH AND SCHOOL

OFFICE: 272 SHOUP AVENUE WEST
TWIN FALLS, IDAHO 83301
TELEPHONE: 733-7820

REVEREND HAROLD A. IBEN, PASTOR
1959 GRANADA DRIVE
HOME TELEPHONE 733-7114
STUDY TELEPHONE 733-3428

MR LAWRENCE BROSE
DIRECTOR OF CHRISTIAN EDUCATION
235 CARNEY
TELEPHONE 734-3873



March 15, 1972

Principal
Riverside Elementary School
Riverside, Idaho

Dear Mr. David Wilson,

I wish to thank you and Mrs. Ida Hansen for devoting your time to guiding us through your innovative schools and explaining the philosophy and procedures utilized in your programs.

Since several of my teachers have expressed an interest in observing your programs, I would like to schedule a visit for them on Thursday of next week (March 23). If this time is not suitable for you, please drop us a card and suggest an alternate date.

As I mentioned on Monday, we would be very much interested in obtaining single copies of your Skills Packets. We are interested particularly in the reading skills packets at the K - 3 level. We would be most happy to reimburse you for single copies of each of the 194 packets at this level. Would it be possible to obtain these materials next week when the teachers make their visit? If not, would it be feasible for you to send them sometime during the month of April?

Thank you again for your time and effort.

Sincerely yours,

Larry C. Brose
Larry C. Brose
Principal

LB/dr

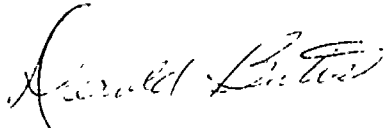
Washington School
226 South 10th
February 22, 1972

Dave Wilson
Principal
Riverside Elementary
Blackfoot, Idaho

Dear Mr. Wilson,

We appreciate the time you were able to spend with us as we visited your school on January 10th and were impressed with the things that are being done. We would like all of the people on our Open School committee to have a chance to see your school in operation and would, therefore, like to visit on February 29th and March 7th with about 4 to 6 visitors each time. I would like to spend at least a half a day with you and see both Moreland and Riverside during your a.m. schedule.

If there is a better time to visit or if this doesn't fit well with your schedule, please let us know. Our sincere thanks.



Derold Bates
Chairman
Open School Committee

DB/np

Visit to Snake River School District
November 18, 1971

----Dr. Fred Knight
Professor of Education, NNC

As a professor of Education, I was highly impressed by the entire project. It appears to me that through this type of program we are finally beginning to reach the full potential of every youngster. The excitement, wholehearted cooperation, and the apparent self-motivating factors were most unique. As I observed it, a far higher percentage of the students are catching the challenge of real education than is found in the conventional classroom.

I was impressed by the high level administration-faculty-staff enthusiasm and cooperation. Even the cooks seemed to feel they were a part of the experiment.

Many of the practices, methods and materials could definitely be used in the so called "average" classroom with only a minimal retraining of teachers. As I see it one of the most difficult aspects would be the psychological reshaping of teacher and administrator attitudes and acceptance of some of the innovative practices. Such visits as ours could do much to accomplish this purpose.

My general impression is that though not free from objectionable elements which are inherent in any new program of this type, the experiment is helping us take significant steps to find a way of achieving a meaningful educational experience for every child.

MOSCOW SCHOOL DISTRICT NO. 281

Box 490

MOSCOW, IDAHO 83843

SUBJECT: Title III Visitations (V I S I T Program) April 14, 1972
TO: Charles Brown, State Director ESEA
FROM: Dr. Marshal T. Keating, Superintendent, Moscow School District 281

The concensus of the group seemed to center on the team effort and the utilization of para-professionals. Many of the staff felt that the activities they observed could be incorporated into their present building. The use of learning packets was also commented upon as a strong aspect of individualizing instruction. The concept of continuous growth was another key impression reported in the observers' visitation writeups.

In general the staff's comments were one of acceptance, and several felt that with the use of aides and smaller class sizes it would be possible to incorporate many of the non-graded features into their building (McDonald).

I am sure the impressions gained from the visitation will prove beneficial to the visiting staff members. In that an administrator was also in the group, I'm sure the theme of individualization will be part of our in-service topics in the coming year. One of the stumbling blocks currently is our present high teacher-pupil ratio, but the learning packet concept offers some solution to this problem as far as flexibility and continuous progress format is concerned.

Once again, I want to thank you and the staffs at Moreland and especially to Mrs. Hansen and Mrs. Yamada for their courtesy and hospitality.

Post Visit Report
Eric Dorsey
Principal
Kuna Jr. High

On the day of November 19th two schools in the Snake River District No. 52 at Moreland, Idaho were visited by our visitation team from Kuna.

The first school visited was the nongraded Kindergarten through 3rd grade at Moreland.

This school is probably a very unique situation in that it contains not only graded, self contained classrooms but also the nongraded section.

The nongraded section is physically contained in what was once four separate classrooms. The partitions have been removed and one large classroom is the result and at this present time contains approximately 100 students.

These students are advancing at their own rate in an ungraded individualized program. The beauty of this program seems to be that the slower students feel no disgrace in doing work that younger students are doing.

The program at Moreland is overseen by 3 teachers, 1 instructional intern, 2 instructional aides and 1 clerical aide.

A very close clerical record is kept of each students

progress and the areas he needs expansion or more work in are kept in close check.

The Riverside school is an individualized program but in a graded situation and each grade was contained in one large classroom. The grades in the school were 4th, 5th, and 6th.

One of the advantages of this program is teachers can be used to teach a subject area in which they have their greatest ability or background. Three types of instruction can take place in this situation; large group, small group and individual learning.

During the observation I was very much impressed by the K-3 program at Moreland. This seems to be an ideal situation for youngsters to progress at their own rate and with very little feeling of failure.

I believe that these practices could be readily adapted to our school district. It would however take quite an extensive remodeling project or a complete new building in which the program could be housed.

I would recommend that our school district take a very close look at these types of programs when new building or remodeling is planned.

Visit to Snake River School District
November 18, 1971

---Dr. Paul M. B.
Dept. of Education
Northwest State

It was my pleasure to visit the Snake River schools on November 18, 1971. I particularly visit your Title III project entitled "Curriculum for Non Graded Instruction". I was particularly impressed as I observed the project by the gains being made in the affective domains of learning. The students seem to have an excellent self concept, are able to deal with various types of situations with little difficulty. I would think that closer to the beginning of the year things would not have gone so smoothly as they did the particular day we were there, but the staff involved in the program were very positive in their assessment of the learning program.

They seemed to have few inhibitions in performing the various projects which we observed them. I was impressed with the way that they were making use of various types of materials and resources and not upon one source of subject matter information in the different areas covered.

All of the instructional program observed could be adapted with creativity and enthusiasm to almost any elementary school. The arrangement of the adjoining rooms made possible the implementation of this program which would have been extremely difficult or unworkable without the open areas. Any school that would attempt this should first of all give serious consideration to having an open type building in which to apply the ideas that were being implemented in this school.

It may be more advantageous to have an entire K through 6 elementary school or higher entire elementary school in this type of situation.

the primary grades. It was obvious to me that a non graded instructional project like this would have been unworkable unless a strong committment had been made to individualized instruction. These two must go together if one is going to have an effective non graded instructional program.

Thanks for making it possible for me along with a number of others from the college and the community to visit this Title III project.

DISSEMINATION MATERIAL

PHILOSOPHY and SUMMARY REPORT
of
MORELAND NONGRADING

TITLE III ESEA PROJECT

TITLE I, IDEA PROJECT
CURRICULUM CHANGE THROUGH NONGRADED INDIVIDUALIZATION
Operated by Snake River School District #52 in the Moreland School

PHILOSOPHY OF MORELAND NONGRADED QUAD

Our goal in this project is to overcome the shackles of subject centered curriculum, self-contained classrooms planned for average students, and incompatibility of chronological age as a direct correlation to mental age or conventional grouping. From the time he enters school EACH CHILD may progress through the learning experiences available to him at a rate consistent with his ability without detrimental consequences to or from those about him

Two premises underlie the philosophy of individualization. They are (1) students learn at different rates and (2) learning is incremental. Even though the constitution declares "that all men are created equal," educators have found that no two students are endowed with the same abilities and learning skills. A task that is right for one child will not be needed by another or at least not to the same degree. The educators have also established the fact that some learnings act as a foundation for other learning. Children learn bit upon bit, word upon word, line upon line, and precept upon precept.

The student has his own personality, growth patterns, learning abilities, and ability rates. The most crucial learning he does is learning how to solve his own problems. The student must gradually become responsible for his own growth and progress. He needs to be accepted at his own level and helped to progress to his own capacity whether it be great or small. We feel he can best accomplish this through individualization, and nongrading.

Individualization does not mean that certain students are allowed to get by with doing less work than they are capable of doing in a regular classroom situation. It means that a student is started where he is able to perform and move systematically toward a better academic performance. Individualization is the teaching-learning process in which a child receives instruction, participates in various learning activities, and investigates. It is any learning process which is based upon a child's achievement, capacity and needs (ability rate) and for which he assumes at least part of the responsibility for direction. Individualization does not imply that the child always works by himself or solely in a one-to-one relationship. Neither does it mean that he works exclusively in packets. He is often participating in learning activities in small or large groups based upon his needs and/or interests.

The rate of progress of each individual student should be determined by what is appropriate for that individual at that time through an assessment process. Social, emotional, physical and academic factors will be considered. Chronological age will become less important in the application of skill development programs. Even the weakest student has some areas in which he excels. It is difficult for a child with low aptitude in reading, writing, and math not to feel self pity, impatience, or even contempt because he is unable to proceed at the same rate as his classmates when group instruction prevails. Individualized instruction must provide areas in which he can excel so that he can build his self-esteem.

The human value and potential of each child should be paramount in providing satisfying and worthwhile educational experience for all of the children of all of the people. Consistent and successful continuous learning experiences for all children require that individual differences be recognized and that subject matter be adapted to the needs and abilities of each learner. A learning experience may be considered successful if it has contributed to the overall development of the learner and he has assumed part of the responsibility for learning and will seek further learning experiences.

The competence and worth of staff members working in the project must be recognized. The unique contributions of each person should become an integral part of the program development of the school. As teachers become involved in planning and development processes, they must accept a share in certain major responsibilities. This will be accomplished through a shared decision making process. No one person will determine policy of operation of the nongraded program, but all team members will share in the decision making process, with the administration, so that decisions are made "where the action is" and responsibility is assumed with accountability. Teachers are expected to keep up-to-date and abreast of current thinking in areas of learning theory, curriculum development, school organization, and teacher-student relationships.

SUMMARY REPORT

C.

TITLE III, E S E A. PROJECT Revd July, 1971 CURRICULUM CHANGE THROUGH NONGRADED INDIVIDUALIZATION Operated by Snake River District No. 52 in the Moreland School

I. Project Overview

A staff of seven people was selected to work in a summer workshop in curriculum and materials development--one team leader with total responsibility for team operation, 3 teachers, an instructional intern, 1 instructional aide, and 1 clerical aide. One instructional aide was later added to assist with the kindergarten phase of the program when school started.

One-third of the students from the Moreland Elementary School, grades one through three, were selected (every third child as listed on alphabetized rolls) to work in the quad. In addition, 20 five-year-olds were registered on a first come basis and payment of tuition. In an open area called a quad are the equivalent of four classrooms--grades 1, 2, and 3, plus the kindergarten. This would ordinarily be staffed with 4 teachers and 2 aides. The project has a team leader, 3 teachers, an instructional intern, 2 instructional aides, and 1 clerical aide for a total of 8 staff members. (Our traditional program would have 6)

Children are grouped for home rooms in a heterogeneous manner with each home room containing an equal share of 5, 6, 7 and 8-year-olds. Grouping is according to specific needs, with individualizing being the central key.

II. Background of Project

The following needs were identified in the project application:

- A. Curriculum development and application in terms of the individual needs of children utilizing individual diagnosis.
- B. Development of curriculum materials which are suited to individual use and which provide for independent activity based on the students learning style.
- C. Implementation of developmental skills and readiness activities for students, regardless of the chronological age of the child, and which makes provisions for continuous progress starting at the time of entry into school.
- D. Development of a child's self concept.
- E. Growth and development of educationally handicapped children in a social setting with "normal" children while providing for their regular and special needs.

- F. Need to be able to identify different strengths of teachers and provide the best one available to each child.
- G. Need to develop a pre-service training program in terms of operational objectives rather than a mission of credentials.

III. Goals of Project as Identified in the Application:

- A. Change curriculum in reading and math so that the school program is geared to needs and capacities of individual children, and helps them make continuous progress during their primary years toward individual goals established through assessment processes.
- B. Disseminate curricular materials developed in project to interested districts. (Budget request for application of this segment of the program was not approved and dissemination has been curtailed. Some curricular materials will be available from the project. The State Department will also disseminate some materials.)

IV. Activities of Project

The basic thrust of the program was to develop individualized materials in math and reading.

- A. In summer workshop the staff developed objectives, a skill sequence and skill packets for implementation of objectives.
- B. Reading Curriculum Development
 - 1. Behavioral objectives were written for each word recognition skill. (printed copies available)
 - 2. At least 3 routes were developed for each skill to implement learning through different routes.
 - 3. The total reading program which operated was highly individualized through an eclectic approach.
 - 4. All skills were written into scope and sequence charts which closely aligned with state reading guide. They will show point of introduction of skills, extension and maintenance. (printed copies available)
 - 5. Reading skill record sheets were developed for teacher use in managing individual children through program.
- C. Math
 - 1. Behavioral objectives were written for skills to be developed in math and were arranged into a sequence.
 - 2. A scope and sequence chart has been developed by the State Department which will be adopted as our scope and sequence chart and used in the numbering system of the skill packets.

3. Packets of learned materials were organized for each skill up to third grade level. During the summer of 1971, materials from grades 4 through 8 were organized into similar packets with different route alternatives.
 4. Pre-tests and post tests were developed for each packet, recall tests to test a program segment, and KIT tests to test cumulative math skills.
 5. An individual record keeping system was used to keep track of students enroute according to individual skill development.
- D. Differentiation of staff and team teaching were organizational tools used to implement the individualized curriculum. A description of the role of each member of the team was written.

A plan was written for the intern training of those entering the teaching profession. Idaho State University has approved the guidelines developed by the project as acceptable intern training guidelines.

- E. Nongrading is a vertical management tool used for the purpose of destroying psychological goals and barriers related to age/grade level groupings and expectations. Children are grouped according to need, largely disregarding age (not ability grouping). This is a facilitating activity and not an end within itself.

V. Continuous Progress

Each year the child is in the Moreland Nongraded Project he will continue his learning from where he left off the previous year. The program will be applied to each individual based on his learning needs and aptitudes with provision for him to make optimal learning progress without regard to age or grade level.

Each child will continue in the project until he reaches approximately 9 years of age. He will then transfer to the Riverside Team Teaching School into the fourth grade.

INDIVIDUALIZED MATH

A OVERVIEW OF INDIVIDUALIZED MATH

The math program is highly individualized. In 1970-71, the program functioned very successfully with children 5 through 9 years of age in the nongraded program. For the 1971-72 year it has been expanded to include skills through the 8th grade level. The program consists of a sequence of skills 001 through 834 (approximately K-8), a behavioral objective for each skill and a packet of learner materials which provides various routes a student can follow to achieve proficiency in each skill.

Each student is first tested to determine where he will begin in the continuous route sequence. The student then takes a pre-test on the skill packet where he starts the sequence. If he cannot pass the test he then proceeds to Route two which is a general review and practice of that skill.

At this point the teacher and student conference. Together they fill out the assignment sheet for the packet, establish goals and set a timeline for completion. Each packet contains worksheets about a single concept which were selected or developed by the staff.

If the student passes the pre-test he then takes the post test as an additional check of his mastery of the skill. If the post test is passed with approximately 90% correct, he proceeds to the next sequential skill where he is pre-tested on the next skill.

The student who is unable to pass the pre-test and is now working in Route 2 may, if the teacher sees the need, do all or some of the remaining routes: Route 3--additional practice, Route 4--media route, tapes, games, etc.; Route 5--quest routes; Routes 6-9--additional learning routes, and Route 10--the post test. After passing the post test the student will proceed to the next skill packet pre-test.

Built into the program is a series of recall tests to check the student's proficiency over a small unit or block of previously learned skills.

A second test, called a K.I.T. or "keeping-in-touch" is, in essence, a recall of all the concepts learned in previous packets. It is used as a cumulative review of basic skills. All tests are checked by the teacher or aide.

Proficiency testing is also done to help students develop speed as well as accuracy.

The real strengths of the program are:

- (1) The teacher becomes a diagnostician, a prescriber and an evaluator of each student's progress in Math.
- (2) A variety of routes are available to help the student gain an understanding of basic math skills. Included in these routes is a large selection of media both teacher and commercially prepared.
- (3) Built into the program are a variety of teacher inputs: one-to-one teaching, small needs grouping, teacher-made media, video tape, audio-tapes, etc.

- (4) Each packet or skill has material in it which develops the skill from easy to difficult.
- (5) Each student progresses at a rate which is consistent with his skill and ability.

B. RECOMMENDED REQUISITES FOR ESTABLISHING INDIVIDUALIZED MATH PROGRAM

OBJECTIVE: Each student should make consistent progress in math concept development and skill development, based upon his ability and past achievement. Each should master the concepts and skills well enough to pass the post tests with not less than about 90% accuracy.

1. Provision must be made for each student to progress in a continuous progress program, separate from every other student, at a rate which is consistent with his ability and achievement to this point.
2. The math materials allow for greater motivation when organized into small packets. Discouragement can occur when large blocks of material are used.
3. Skills must be sequenced (standard textbook may be used to do this.)
4. Each student should be pre-tested for placement in the sequence and generally for each new concept, or review area in the sequence as he comes to it. If he passes the pre-test with about 90% accuracy, he may proceed directly to the specific concepts that he missed, then to the Recall and post tests without completing the entire unit.
5. Establish one main route for accomplishing sequence.
6. Establish additional methods of concept development by use of varied media and routes in addition to the main route.
7. Provide a system in which students can check their own work.
8. Provide for teacher check and feedback on enroute concept development and skill development. This can be accomplished through using teacher-checked tests over a concept or small units of skills.
9. Provide a system for students to request individual help when needed and a system to give the help when requested.
10. A post test should be used to test each skill or concept area.
11. Students must correct all errors before proceeding to additional work.
12. Provide for the re-routing of students achieving below about 90%. This could be done through an additional route (routes 3 through 9).
13. Student-teacher conferences should be conducted periodically with each student in which praise should be given, goals should be set by the student, and goals should be compared to achievement and new goals set.
14. Constant checking must occur to determine if each student is accomplishing the daily steps necessary to reach long range goals, and is not goofing off. Some students adjust more quickly than others and accept greater responsibility for goals. A copy of a daily check sheet (included in this packet) can be used by the teacher to check on this.

C. NARRATION OF INDIVIDUALIZED MATH PROGRAM

A pre-test is used to determine where the student will be placed in the work-route being used. More specifically, it is also used to adapt assignments to meet the needs of the individual student.

The teacher holds a conference with each student in which they jointly set a date for completion for the unit or chapter and a daily goal of a certain number of pages per day. The goals are recorded on the Student Assignment Sheets.

The teacher fills in the Student Assignment Sheet based on the information from the pre-test and the conference. Only those problems are assigned that meet the child's needs. Normally all problems need not be assigned. Games and concrete media for concept development are also part of "assigned" route. The teacher may make assignments from any of the routes 2-9.

The student can usually complete work by studying examples in packets and following the progression of easy to hard examples used. Teachers should be aware of difficult areas and channel students to some branching resource which provides instruction, according to need. The teacher must put her trust in the student. If he does cheat, it will show up on the Recall Test. Errors on each page must be corrected by the student before he moves on to the next work.

The students should be taught to be as independent as possible. They should follow the steps on the "Steps, How to Solve a Problem" sheet in their folder before seeking teacher help. (See example on page 4.)

Each day the teacher checks student progress by writing the page or assignment notation in a square by the student's name and under the current date. (Note the "Daily Check Sheet") When the recall test has been completed, the score is recorded in red on the Daily Check Sheet. This daily check enables the teacher to be cognizant of what the child is doing and how fast he is progressing. (This is one of the most important records that is kept.) The daily check is made by the teacher reviewing the student's packet with its assignment sheet, and denoting the page on the "Daily Check Sheet" with any coded comment which might be appropriate.

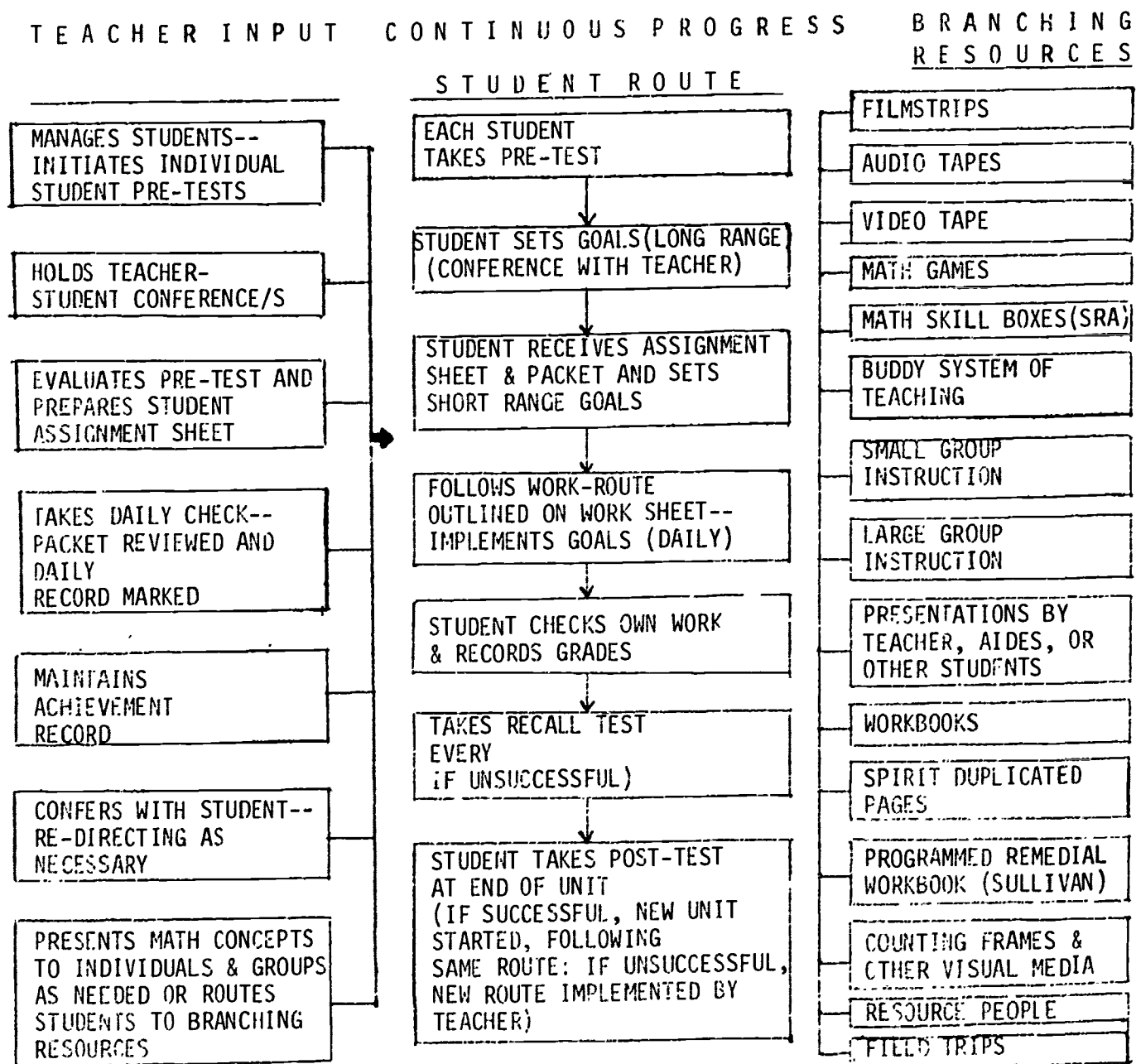
The recall test is a check to determine if the child understands the concepts that have been presented in the previous packets. If the child has made "little" mistakes he may correct wrong problems for partial credit. If the concept is not understood the student will be assigned more work from the "Branching Resources" or "Media", in the additional routes, until the concept is mastered.

If the child passes the recall test he should continue with the assignments on the assignment sheet until he reaches the next recall test.

The cycle now starts over with a new packet.

NOTE: A careful check on many students is necessary to see that they are assuming proper responsibility for daily work and unit goals, and to see that shy, retiring students get help when they need it.

D. STUDENT PROFILE DESCRIPTION



E STEPS -- HOW SOLVE A PROBLEM*

Math rules

How to Solve a Problem

1. Read title and directions on each page
2. Read the example
3. Study the example
4. Look back in book
5. Put up "Marker" for help
6. Try working next few problems

Things to Remember

1. You are important--so help yourself in doing the best you can.
2. Check your assignment sheet--did you record the date and score?
3. When testing you are on YOUR OWN.
4. Did you correct your mistakes?

Things to do if you're waiting for an assignment

1. Put up your 'marker'
2. Help other students if possible
3. Study for another class, or read

*A set of rules such as this should be available to each student, attached to his folder or on the cover of his notebook.

MATH SKILL SEQUENCE AND BEHAVIORAL OBJECTIVES

File III Nongraded Project
Curriculum Change Through Nongraded Individualization
Revised June 1971
Sponsored by Snake River District No. 52
Moreland School, Moreland, Idaho

- Skill 001 COUNTING OBJECTS TO TEN
B.O.: The student will count members of sets in their proper order through 10.
- Skill 002 SETS-Identifying members of
B.O.: Given a verbal description of a set, the student can distinguish between members of the set and things which are not members.
- Skill 003 NUMBERS-One more pattern 1-10
B.O.: Given ten non-equivalent sets, the student can arrange the sets in order (x xx xxx)
- Skill 004 NUMBER-Order, relations 0-10
B.O.: Given two numbers (verbal or sets of objects or pictures) such as seven and three, the student can order them by saying "Seven is greater than three" or "Three is less than seven."
- Skill 005 ORDINAL NUMBERS THROUGH FIFTH
B.O.: Given a sequence of objects, people, etc., the student can identify the ordinal number in the sequence.
- Skill 006 SET UNION-Readiness for addition
B.O.: Given two sets, the student will join the two sets and get a third set.
- Skill 007 SET UNION-Readiness for subtraction
B.O.: Given a set of elements, the student will remove a set and get a remaining set.
- Skill 008 SETS-Commutative principle
B.O.: The student will be able to demonstrate if you join a set of one element to a set containing two elements, it is the same as joining a set of two elements with a set of one element.
- Skill 009 COMPARISONS-Size of objects
B.O.: Given sets or pictures depicting differences in size as longer, shorter, taller, larger, smaller, the student will mark the picture according to directions given by the teacher.
- Skill 010 RELATIVE POSITION OF OBJECTS
B.O.: Given an object, the student can identify its position in relation to another object (ex: in, on, over, under, beside) and will mark pictures according to directions given by the teacher.
- Skill 011 WEIGHT-heavy, light
B.O.: Given a set of objects, the student can compare them and identify and name the heaviest and lightest.
- Skill 012 RECOGNITION OF SHAPE
B.O.: Given a model of a shape, the student will identify and name this geometric figure.

- Skill 012** POINTS & LINES-Open and closed curves
 B.0.: Shown points, lines, and open and closed curves on the blackboard, the student will identify and name them as such.
- Skill 014** RECOGNITION OF A SQUARE
 B.0.: Given a model of a square, the student will identify and name this geometric figure.
- Skill 015** RECOGNITION OF A RECTANGLE
 B.0.: Given a model of a rectangle, the student will identify and name this geometric figure.
- Skill 016** RECOGNITION OF A TRIANGLE
 B.0.: Given a model of a triangle, the student will identify and name this geometric figure.
- Skill 017** DISTINCTION BETWEEN A CIRCLE, SQUARE, RECTANGLE & TRIANGLE
 B.0.: Given models of circles, squares, triangles, & rectangles, the student will identify, name and distinguish among these geometric figures.
- Skill 018** SOLID SHAPES
 B.0.: Given a set of solid shapes of cubes, spheres and cylinders, the student will name and sort them according to their categories.
- Skill 019** RECOGNITION & EXTENSION OF SIMPLE PATTERNS
 B.0.: Given a simple pattern, such as a triangle, a square, and a triangle, the student will extend the pattern.
- Skill 020** CALENDAR-Orientation - day, week, month
 B.0.: The student can tell the name of the month and the day of the week.
- Skill 021** QUANTITATIVE RELATIONSHIP BETWEEN SETS
 B.0.: Given pairs of sets, the student will compare the sets by visual inspection and find the larger or smaller set according to directions given by the teacher.
- Skill 022** EQUIVALENT SETS
 B.0.: Given two equivalent sets (objects or pictures) the student will, through one-to-one matching, identify the sets as equivalent.
- Skill 023** NON-EQUIVALENT SETS
 B.0.: Given two non-equivalent sets (objects or pictures) the student will, through one-to-one matching, identify the sets as non-equivalent.
- Skill 024** CARDINAL NUMBER ONE AND NUMERAL 1
 B.0.: Given sets of elements (pictures or concrete) some of which have the cardinal number of one, the student will locate the sets which contain one member and identify the numeral 1 as representing the member of the set.
- Skill 025** CARDINAL NUMBER TWO AND NUMERAL 2
 B.0.: Given sets of elements (picture or concrete), some of which have the cardinal number of two, the student will locate the sets which contain two members and identify the numeral 2 as representing the number of the set.

- Skill 026 CARDINAL NUMBER THREE AND NUMERAL 3
 B.O.: Given sets of elements (picture or concrete), some of which have the cardinal number of three, the student will locate the sets which contain three members each and identify numeral 3 as representing the number of the set.
- Skill 027 CARDINAL NUMBER FOUR AND NUMERAL 4
 B.O.: Given sets of elements (picture or concrete), some of which have the cardinal number of four, the student will locate the sets which contain four members each and identify numeral 4 as representing the number of the sets.
- Skill 028 EMPTY SET-Number zero and numeral 0
 B.O.: Given sets of elements (picture or concrete), some of which are empty sets, the student will locate the empty sets and identify numeral 0 as representing the number of the set.
- Skill 029 CARDINAL NUMBER FIVE AND NUMERAL 5
 B.O.: Given sets of elements (picture or concrete), some of which have the cardinal number of five, the student will locate the set which contains five members each and identify numeral 5 as representing the number of the set.
- Skill 030 CARDINAL NUMBER SIX AND NUMERAL 6
 B.O.: Given sets of elements (picture or concrete), some of which have the cardinal number of six, the student will locate the sets which contain six members each and identify numeral 6 as representing the number of the set.
- Skill 031 GEOMETRY-Identify cones, pyramids
 B.O.: Given a set of solid shapes (cones, pyramids), the student will name and sort them according to their categories.
- Skill 032 CARDINAL NUMBER SEVEN AND NUMERAL 7
 B.O.: Given sets of elements (picture or concrete), some of which have the cardinal number of seven, the student will locate the sets which contain seven members each and identify numeral 7 as representing the number of the set.
- Skill 033 CARDINAL NUMBER EIGHT AND NUMERAL 8
 B.O.: Given sets of elements (picture or concrete), some of which have the cardinal number of eight, the student will locate the sets which contain eight members each and identify numeral 8 as representing the number of the set.
- Skill 034 CARDINAL NUMBER NINE AND NUMERAL 9
 B.O.: Given sets of elements (picture or concrete), some of which have the cardinal number of nine, the student will locate the sets which contain nine members each and identify numeral 9 as representing the number of the set.
- Skill 035 CARDINAL NUMBER TEN AND NUMERAL 10
 B.O.: Given sets of elements (picture or concrete), some of which have the cardinal number of ten, the student will locate the sets which contain ten members each and identify numeral 10 as representing the number of the set.

- Skill 036 MONEY-Pennies, counting to 10¢
 B.O.: Given sets of pennies, the value of each set 10¢ or under, the student will determine and name the total value, in cents, of the coins.
- Skill 037 WRITING NUMERALS 0 THROUGH 10
 B.O.: Provided with proper materials, such as pencil, paper or chalk, the student will correctly write the numerals 0 through 10.
- Skill 038 ORDER OF NUMBERS 0 THROUGH 10
 B.O.: Given a set of numeral flash cards, 0 through 10, the student will arrange them in the correct sequence.
- Skill 101 ORDINAL NUMBERS THROUGH TENTH
 B.O.: Given a sequence of objects, people, etc., the student will identify the third, fifth, eighth, etc. object in the sequence.
- Skill 102 INEQUALITIES
 B.O.: When given a number sentence, as $5 > 3$, the student will complete the sentence by writing the correct inequality symbol ($>$)
- Skill 103 ADDITION-Combinations through 5
 B.O.: Given a written mathematical sentence such as $2 + 2 = \underline{\quad}$, the student will identify and write missing sums, addends, or operational signs in problems dealing with basic addition facts through 5.
- Skill 104 IDENTITY ELEMENT FOR ADDITION-0 through 5
 B.O.: Given problems such as $0 + 3 = \underline{\quad}$ or $3 + \underline{\quad} = 3$, the student will name the sums and missing addends.
- Skill 105 SUBTRACTION-Combinations through 5
 B.O.: Given a written mathematical sentence such as $5 - 2 = \underline{\quad}$, the student will identify and write missing sums, addends, or operational signs in problems dealing with basic subtraction facts through 5.
- Skill 106 INVERSE RELATION BETWEEN ADDITION & SUBTRACTION
 B.O.: Given written mathematical sentences such as $4 + 1 = \underline{\quad}$, the student will identify and write missing sums or addends to show that subtraction "undoes" addition.
- Skill 107 COMMUTATIVE (ORDER) PRINCIPLE OF ADDITION THROUGH 5
 B.O.: Given addition equations with 2 addends, the student will reverse the order of the addends and find the sum.
- Skill 108 WHOLE NUMBERS-Order of to 20
 B.O.: The student will identify by reading and writing the numeral for the whole numbers 0-20.
- Skill 109 WHOLE NUMBERS-Order of to 30
 B.O.: The student will identify by reading and writing the numerals for the whole numbers 0-30.
- Skill 110 WHOLE NUMBERS-Order of to 40
 B.O.: The student will identify by reading and writing the numerals for the whole numbers 0-40.

- Skill 111 RELATIONSHIP BETWEEN SETS-Order of
 B.O.: Given a set with 3 or less elements clearly divided into subsets, the student will write two addition equations and two subtraction equations for this set
- Skill 112 WHOLE NUMBERS-Order of to 50
 B.O.: The student will identify by reading and writing the numerals for the whole numbers 0-50.
- Skill 113 ADDITION-combinations through 6
 B.O.: Given a written mathematical sentence such as $4 + 2 = \underline{\quad}$, the student will identify and write missing sums, addends or operational signs in problems dealing with basic addition facts through 6.
- Skill 114 SUBTRACTION-Combinations through 6
 B.O.: Given a written mathematical sentence such as $6 - 4 = \underline{\quad}$, the student will identify and write missing sums, addends or operational signs in problems dealing with basic subtraction facts through 6.
- Skill 115 WHOLE NUMBERS-Order of to 60
 B.O.: The student will identify by reading and writing the numerals for the whole numbers 0-60.
- Skill 116 ADDITION-combinations through 7
 B.O.: Given a written mathematical sentence such as $3 + 4 = \underline{\quad}$, the student will identify and write missing sums, addends or operational signs in problems dealing with basic addition facts through 7.
- Skill 117 SUBTRACTION-Combinations through 7
 B.O.: Given a written mathematical sentence such as $7 - 4 = \underline{\quad}$, the student will identify and write missing sums, addends or operational signs in problems dealing with basic subtraction facts through 7.
- Skill 118 WHOLE NUMBERS-Order of to 70
 B.O.: The student will identify by reading and writing the numerals for the whole numbers 0-70
- Skill 119 MONEY-Pennies & Nickels to 10¢
 B.O.: Given sets of pennies and nickels, the value of each set to 10¢, the student will determine and name the total value, in cents, of the coins.
- Skill 120 ADDITION-Combinations through 8
 B.O.: Given a written mathematical sentence such as $3 + 5 = \underline{\quad}$, the student will identify and write missing sums, addends or operational signs in problems dealing with basic addition facts through 8.
- Skill 121 FUNCTIONS-Addition and subtraction through ten
 B.O.: Given the game "Subtraction, Example "What's My Rule?", the student will be able to determine the number that matches the question mark.
- Skill 122 SUBTRACTION-Combinations through 8
 B.O.: Given a written mathematical sentence such as $8 - 3 = \underline{\quad}$, the student will identify and write missing sums, addends or operational signs in problems dealing with basic subtraction facts through 8

- Skill 123 WHOLE NUMBERS-Order of 0 to 80
B.O.: The student will identify by reading and writing the numerals for the whole numbers 0-80.
- Skill 124 ADDITION-Combinations through 9
B.O.: Given a written mathematical sentence such as $4 + 5 = \underline{\quad}$, the student will identify and write missing sums, addends or operational signs in problems dealing with basic addition facts through 9.
- Skill 125 SUBTRACTION-Combinations through 9
B.O.: Given a written mathematical sentence such as $9 - 4 = \underline{\quad}$, the student will identify and write missing sums, addends or operational signs in problems dealing with basic subtraction facts through 9.
- Skill 126 WHOLE NUMBERS-Order of 0 to 90
B.O.: The student will identify by reading and writing the numerals for the whole numbers 0-90.
- Skill 127 NUMBER LINE (ADD.)-Through 10
B.O.: Given an addition problem such as $2 + 3$, the student will demonstrate the union of its two disjoint sets on the number line.
- Skill 128 NUMBER LINE (SUB.)-Through 10
B.O.: Given a single digit subtraction problem, the student will find the difference using a number line.
- Skill 129 WHOLE NUMBERS-Order of 0 to 100
B.O.: The student will identify by reading and writing the numerals for the whole numbers 0-100.
- Skill 130 PLACE VALUE-10 to 19
B.O.: Given a numeral between 10 and 19, the student will identify, name and distinguish the numerals that are in the ones and tens places and will read and write the numerals in proper order from 1 to 19.
- Skill 131 PLACE VALUE-20 to 29
B.O.: Given a numeral between 20 and 29, the student will identify, name and distinguish the numerals that are in the ones and tens places and will read and write the numerals in proper order from 1 to 29.
- Skill 132 PLACE VALUE-30 to 39
B.O.: Given a numeral between 30 and 39, the student will identify, name and distinguish the numerals that are in the ones and tens places and will read and write the numerals in proper order from 1 to 39.
- Skill 133 PLACE VALUE-40 to 49
B.O.: Given a numeral between 40 and 49, the student will identify, name and distinguish the numerals that are in the ones and tens places and will read and write the numerals in proper order from 1 to 49.
- Skill 134 PLACE VALUE-50 to 59
B.O.: Given a numeral between 50 and 59, the student will identify, name and distinguish the numerals that are in the ones and tens places and will read and write numerals in proper order from 1 to 59.

- Skill 135 PLACE VALUE-60 to 69
 B.O.: Given a numeral between 60 and 69, the student will identify, name and distinguish the numerals that are in the ones and tens places and will read and write numerals in proper order from 1 to 69.
- Skill 136 PLACE VALUE-70 to 79
 B.O.: Given a numeral between 70 and 79, the student will identify, name and distinguish the numerals that are in the ones and tens places and will read and write numerals in proper order from 1 to 79.
- Skill 137 PLACE VALUE-80 to 89
 B.O.: Given a numeral between 80 and 89, the student will identify, name and distinguish the numerals that are in the ones and tens places and will read and write numerals in proper order from 1 to 89.
- Skill 138 PLACE VALUE-90 to 99
 B.O.: Given a numeral between 90 and 99, the student will identify, name and distinguish the numerals that are in the ones and tens places and will read and write numerals in proper order from 1 to 99.
- Skill 139 EXPANDED NOTATION-Through 99
 B.O.: Given a numeral such as 34, the student will write the expanded numeral as $30 + 4$.
- Skill 140 ORDER OF WHOLE NUMBERS 0-100
 B.O.: The student will identify, name, read and write numerals for the whole numbers 0-100.
- Skill 141 MONEY-Drawings of coins and value of coins
 B.O.: Given a drawing of dimes and pennies, the student will relate and write the place value of each coin and the total value of the set.
- Skill 142 INEQUALITIES-Compare two numbers
 B.O.: Given a number sentence such as $40 > 30$, the student will complete the sentence by writing the correct inequality symbol ($<$ or $>$).
- Skill 143 TIME-Hour
 B.O.: Given pictures of analog and digital clocks to the hour, the student will write the time. (Example: 1:00).
- Skill 144 ADDITION-Word problems involving unknowns in all positions
 B.O.: Given a word problem such as "John has 3 apples and Mary has 4 apples. How many apples do they have in all?", the student will identify the unknowns, underline the numbers and operational signs in the problem, and solve the problem using facts through 10.
- Skill 145 SUBTRACTION-Word problems involving unknowns in all positions
 B.O.: Given a word problem such as "John has 10 apples and Mary has 3 apples. How many apples does John have left?", the student will identify the unknowns, underline the numbers and operational signs in the problem, and solve the problem using facts through 10.
- Skill 146 MONEY-Comparing the value of coins
 B.O.: Given sets of pennies, nickels and dimes, the value of each 10¢ or under, the student will determine and name the total value in cents of the coins. The student will identify and solve simple addition and subtraction problems involving money through 10¢.

- Skill 147 COMMUTATIVE PRINCIPLE-Addition through 10
B.0.: Given addition equations with two addends, the student will reverse the order of the addends and find the sum.
- Skill 148 ASSOCIATIVE PRINCIPLE-Addition through 10
B.0.: Given an addition problem with 3 addends with a sum of 10 or less, the student will solve the equation by combining 2 of the addends in parentheses & adding their sum to the remaining addend. The student will then solve the same problem with the parentheses in another location to show that the grouping does not change the sums.
- Skill 149 TEMPERATURE-Noting increase and decrease
B.0.: Based on experiences with reading scales on a thermometer, the student will record temperatures inside and outside the classroom and answer questions such as: "Is it warmer inside or outside the classroom?"
- Skill 150 COLUMN: ADDITION-7 or less, sum of 10
B.0.: Given addition problems using three or more addends in vertical position, the sum 10 or under, the student will identify and write the sum.
- Skill 151 SKIP COUNTING-By 2's
B.0.: Given a series of numbers such as 1, 3, 5, __, and 5, 10, 15, __, __, __, the student will correctly write the missing numbers.
- Skill 152 FRACTIONS-Identifying objects and sets that divide into halves
B.0.: Given pictures of objects or collections some of which are divided into one-half, the student will find the pictures which show division into one-half.
- Skill 153 FRACTIONS-Identifying objects and sets into thirds
B.0.: Given pictures of objects or collections some of which are divided into one-third, the student will find the pictures which show division into one-third.
- Skill 154 LINEAR MEASUREMENT-Inches and centimeters
B.0.: Given pictures of objects or a line segment, the student will measure it to the nearest inch or centimeter.
- Skill 155 LIQUID MEASUREMENT-Cups and pints
B.0.: Using a measuring cup of 1 cup capacity and a pint container, the student will demonstrate the capacity of the container.
- Skill 156 GROUPING-Using objects to represent multiplication
B.0.: Given a number sentence such as $4 \times 3 = 12$, the student will by regrouping objects to show the multiplication using addends and sums.
- Skill 201 ADDITION AND SUBTRACTION-Word problems
B.0.: The student will identify and name word problems, differences, missing addends and missing operation problems to problems dealing with the basic facts up to and including 100.
- Skill 202 ADDITION AND SUBTRACTION-Word problems
B.0.: The student will identify and name word problems, differences, missing addends and missing operation problems to problems dealing with the basic facts up to and including 100.
- Skill 202.1 DOUBLE-DIGIT ADDITION AND SUBTRACTION-Word problems
B.0.: The student will identify and name word problems, differences, missing addends and missing operation problems to problems dealing with the basic facts up to and including 100.

- Skill 203 ADDITION AND SUBTRACTION-Through 13
 B.O.: The student will identify and name sums, differences, missing addends and missing operational signs in problems dealing with the basic facts 0 to and including 13.
- Skill 204 ADDITION AND SUBTRACTION-Through 14
 B.O.: The student will identify and name sums, differences, missing addends and missing operational signs in problems dealing with the basic facts up to and including 14.
- Skill 205 TELLING TIME TO $\frac{1}{2}$ HOUR
 B.O.: Given pictures of clocks telling time to the hour and half hour, the student will correctly identify the time.
- Skill 206 ADDITION AND SUBTRACTION-Through 15
 B.O.: The student will identify and name sums, differences, missing addends and missing operational signs in problems dealing with the basic facts up to and including 15.
- Skill 207 ADDITION AND SUBTRACTION-Through 16
 B.O.: The student will identify and name sums, differences, missing addends and missing operational signs in problems dealing with the basic facts up to and including 16.
- Skill 208 ADDITION AND SUBTRACTION-Through 17
 B.O.: The student will identify and name sums, differences, missing addends and missing operational signs in problems dealing with the basic facts up to and including 17.
- Skill 209 ADDITION AND SUBTRACTION-Through 18
 B.O.: The student will identify and name sums, differences, missing addends and missing operational signs in problems dealing with the basic facts up to and including 18.
- Skill 210 COMMUTATIVE PROPERTY OF ADDITION-Through 18
 B.O.: Given problems such as $2 + 6 = ___ + 2$, and $4 + 3 = ___ + ___$, the student will write the answers.
- Skill 211 ASSOCIATIVE PROPERTY OF ADDITION-Through 18
 B.O.: Given an addition problem with three addends and a sum of 18 or less, the student will solve the equation by combining two of the addends in parentheses and adding this sum to the remaining addend. The student will then solve the same problem with the parentheses in another location to show that the grouping does not affect the sum.
- Skill 212 IDENTITY ELEMENT FOR ADDITION-Through 18
 B.O.: The student will understand the function of zero by writing correct answers to problems such as $0 + 9 = ___$, $16 + ___ = 16$, and $___ + 3 = 3$.
- Skill 213 ROMAN NUMERALS-Through 12
 B.O.: Given Arabic numerals up to 12, the student will write the corresponding Roman numerals.
- Skill 214 GROUPING INTO TENS PLUS ONES
 B.O.: Given problems which have sums less than 10, the student will use the grouping principle to rewrite the problems & name the sums.

- Skill 215 ADDITION AND SUBTRACTION-2 digit without regrouping
 B.O.: Given two place addition and subtraction problems which do not require regrouping, the student will write the correct answer.
- Skill 216 COLUMN ADDITION-Sum over 10
 B.O.: Given a problem in column addition with three or more addends, the student will solve the problem.
- Skill 217 WRITING NUMERALS FROM 100-1000
 B.O.: The student will be able to name, read and write the numerals to 1000.
- Skill 218 SKIP COUNTING BY 100's AND 1000's
 B.O.: When given two consecutive multiples of 100, such as 700 and 800, the student will give the next 2 multiples in that sequence. When given two consecutive multiples of 1000, such as 7000 and 8000, the student will give the next two multiples in that sequence.
- Skill 219 INEQUALITIES-100's
 B.O.: When given a number sentence such as $800 \bigcirc 798$, the child will add the correct symbol $<$ or $>$.
- Skill 220 INEQUALITIES-1000's
 B.O.: When given a number sentence using 4 digit numbers, such as $7981 \bigcirc$, the child will add the correct symbol, $<$ or $>$.
- Skill 221 EXPANDED NOTATION-Place value for 3 digit numbers
 B.O.: Given a 3-digit numeral, the student will distinguish between its digits by writing each digit in the correct column in a place value table and will write it in expanded form.
- Skill 222 EXPANDED NOTATION-Place value for 4 digit numbers
 B.O.: Given a 4-digit numeral, the student will distinguish between its digits by writing each digit in the correct place column.
- Skill 223 ADDITION-2-digit number with regrouping (carrying)
 B.O.: Given a 2-digit addition problem of 2 addends with regrouping, such as 49, the student will write the sum.

$$\begin{array}{r} 49 \\ +50 \\ \hline \end{array}$$
- Skill 224 SUBTRACTION-2-digit numbers with regrouping (borrowing)
 B.O.: Given a 2-digit subtraction problem which involves regrouping (borrowing), such as 76, the student will write the answer.

$$\begin{array}{r} 76 \\ -17 \\ \hline \end{array}$$
- Skill 225 MONEY-Computing to 100 cents
 B.O.: Given picture of various combinations of coins, the student will determine the total value of the coins.
- Skill 226 ORDINAL NUMBERS TO TWENTIETH
 B.O.: Given pictures of 20 objects and 20 ordinal number names, the student will write the correct ordinal number name by each picture.
- Skill 227 ODD AND EVEN NUMBERS
 B.O.: Given 10 carefully selected numbers from 1-100, the student will correctly determine the odd and even numbers.

- Skill 228 NUMBERS-Addition, 2 + 4 =
 B.O.: Given a series of numbers such as 3, 6, 9, 12, ____, ____, and 4, 8, 12, 16, ____, ____, the child will correctly supply the missing numbers.
- Skill 229 FRACTIONS-Recognizing symbol $\frac{1}{2}$
 B.O.: Given several objects divided into various fractional parts, the student will circle those that are divided into $\frac{1}{2}$.
- Skill 230 CALENDAR-day, week, month (Use)
 B.O.: When given an outline of a calendar, the student will fill in the month, weeks, and days for the current month.
- Skill 231 FRACTIONS-Recognizing symbol $\frac{1}{3}$, $\frac{2}{3}$
 B.O.: Given several objects divided into various fractional parts, the student will circle those that are divided into thirds.
- Skill 232 FRACTIONS-Recognizing symbols $\frac{1}{4}$, $\frac{2}{4}$, $\frac{3}{4}$
 B.O.: Given several objects divided into various fractional parts, the student will circle those that are divided into fourths.
- Skill 233 MEASURE-Inches and centimeters - ruler
 B.O.: Given pictures of real objects, the student, by measuring with a ruler will tell its length in inches and centimeters.
- Skill 234 MEASURE-Quarts
 B.O.: Given a problem such as ____ pints = 1 quart, ____ cups = 1 pint
 ____ cups = 1 quart, the child will fill the blanks with the correct answer.
- Skill 235 GEOMETRY-Line segments, points
 B.O.: Given a set of points, the student will draw the line segment and identify a line segment as a part of a line with two end points.
- Skill 236 GEOMETRY-Open and closed figures
 B.O.: The student will identify a simple curve as one that does not cross itself and will name and identify closed and open simple curves.
- Skill 237 FUNCTIONS AND PATTERNS
 B.O.: Given a number pattern with missing numerals, such as 4, 9, 14, ____, ____, ____, the student will write the missing numerals and state the rule of the game.
- Skill 238 TEMPERATURE-F, degrees
 B.O.: The student will record temperatures and answer such questions as: Is it colder or hotter today than yesterday?

- Skill 301 ADDITION 3 DIGITS - 2 ADDENDS
 B.O.: Given a 3 digit addition problem with regrouping (2 addends), the student will solve it.
- Skill 301-1 ADDITION-COMMUTATIVE PRINCIPLE BEYOND 20
 B.O.: Given a problem, such as $52 + 56 = 108$, the student will demonstrate that $52 + 56 = 56 + 52$.
- Skill 301-2 ADDITION ASSOCIATIVE PRINCIPLE BEYOND 20
 B.O.: Given a group of addition problems, the student will use the associative property to regroup the addends and then state the sum.
- Skill 302 SUBTRACTION 3 DIGIT
 B.O.: Given a 3 digit subtraction problem with regrouping, the student will solve it.
- Skill 303 REGROUPING-SUBTRACTION WITH ZERO
 B.O.: Given a subtraction problem with zero as the subtrahend or with a missing subtrahend and the difference of zero, the student will solve it.
- Skill 303-1 RELATIONSHIP BETWEEN ADDITION AND SUBTRACTION
 B.O.: Given a addition or subtraction equation the student will solve the problem showing the inverse relationship.
- Skill 304 MONEY-SYMBOL CONCEPTS
 B.O.: Given a set of coins (pennies, nickels, dimes, quarters, half-dollars), the student will determine the total value of the set.
- Skill 305 MONEY-COMPUTING TO \$20.00
 B.O.: Given a group of numerals used as cents, or dollars and cents, the student will find the sum or difference as required by each problem.
- Skill 306 ADDITION-2DIGIT COLUMN CARRYING
 B.O.: Given 2 digit addition problems with regrouping, the student will compute the sum for each problem.
- Skill 307 ORDINAL NUMBERS-ABOVE TWENTIETH
 B.O.: Given a sequence of objects, events, etc., the student will identify the position in space or time of a particular object or event by saying: "This object, is Fourth" or "This (event) happened Second"
- Skill 308 MULTIPLICATION AS REPEATED ADDITION
 B.O.: Given an equation such as $7 \times 7 = 7 + 7 + \underline{\quad}$ and $8 + 8 + 8 + 8 = \underline{\quad} \times 8$, the student will solve the equation and use sets or skip count to prove his results.
- Skill 309 MULTIPLICATION-FACTORS (single multiplier)
 B.O.: Given a multiplication combination of two factors, the student will name the product.

- Skill 310 MULTIPLICATION-INTRODUCE MULTIPLICATIVE IDENTITY AND ADDITIVE IDENTITY
 B.O.: Given a multiplication problem where one of the factors is the multiplicative identity element or the additive identity element, the student will find the product.
- Skill 311 MULTIPLICATION-INTRODUCE COMMUTATIVE PRINCIPLE
 B.O.: Given a problem such as $6 \times 4 = 24$, the student will demonstrate that $6 \times 4 = 24$ and $4 \times 6 = 24$.
- Skill 312 MULTIPLICATION-INTRODUCE ASSOCIATIVE PRINCIPLE
 B.O.: Given a group of multiplication problems, the student will use the associative property to regroup the factors and then state the product.
- Skill 313 MULTIPLICATION-INTRODUCE DISTRIBUTIVE PRINCIPLE(1 digit)
 B.O.: Given a multiplication equation with distributive property of multiplication over addition such as $3 \times (5 + 3) = (3 \times 5) + (3 \times 3) = \underline{\quad}$ the student will solve the equation.
- Skill 314 DIVISION-REPEATED SUBTRACTION
 B.O.: Given an equation such as $20 \div 5$, the student can repeatedly subtract 5 from 20 until there is a remainder of 0.
- Skill 315 DIVISION-INTRODUCE ZERO
 B.O.: Given a division problem with zero or one in division, the student will solve the problem.
- Skill 316 DIVISION-ONE-DIGIT DIVISORS, DIVIDENDS, QUOTIENTS
 B.O.: Given a division problem with dividends through 199, with one digit divisors, the student will compute the quotient.
- Skill 317 DIVISION-REMAINDERS(1 digit divisor-2 digit dividends).
 B.O.: Given a long division problem with a 1 digit divisor and a 2 digit dividend, the student will compute for the quotient and the remainder.
- Skill 318 INVERSE RELATIONSHIP OF DIVISION AND MULTIPLICATION
 B.O.: Given a division problem, the student will check it by multiplication.
- Skill 319 GEOMETRY-RIGHT ANGLE, RIGHT TRIANGLE
 B.O.: Given a right angle or a right triangle, the student will identify, name, and distinguish among these figures.
- Skill 320 ODD AND EVEN NUMBERS
 B.O.: Given a set of 2 digit numbers, the student will identify the odd and even numbers and will compute the problems.

- Skill 321 MULTIPLES--ONE-DIGIT MULTIPLIED BY TWO-DIGIT MULTIPLIERS
 B.O.: Given a problem with both factors having 2 digits, the student will compute the product.
- Skill 321-1 TEMPERATURE--READ AND RECORD
 B.O.: Given a picture of a thermometer, the student will read or record the measurement indicated.
- Skill 322 ROMAN NUMERALS--THROUGH XLV
 B.O.: Given either an Arabic numeral or a Roman numeral, the student will write the corresponding numeral.
- Skill 323 FRACTIONS--EQUIVALENT $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$
 B.O.: Given two fractions, the student will determine whether or not the two fractions are equivalent.
- Skill 324 TIME--1/4 HOUR
 B.O.: Using a model of the clock, the student will tell time to the nearest quarter hour.
- Skill 325 MEASURE--INCHES--HALF-GALLON, GALLON
 B.O.: Given two columns of measurements, the student will match column I with an equivalent measure in column II.
- Skill 326 GEOMETRY--QUADRILATERAL
 B.O.: Given a model of a quadrilateral, the student will identify, name and distinguish the figure.
- Skill 327 MEASURE--FOOT
 B.O.: Given a measuring device, the student will measure a given line segment or object to the nearest 1/2 inches and foot.
- Skill 328 PLACE VALUE--5-DIGIT
 B.O.: Given a numeral such as 11,129, the student will identify, name, and distinguish the numerals that are in the ones, tens, hundreds, thousands and ten thousands.
- Skill 329 EXPANDED NUMERALS--5-DIGIT
 B.O.: Given a numeral such as 11,129, the student will write the expanded numeral (10,000 + 1,000 + 100 + 20 + 9)
- Skill 330 STORY PROBLEMS
 B.O.: Given a story problem, the student will read the problem and transfer the required operation (addition, subtraction or multiplication) to the problem.
- Skill 331 INEQUALITIES--TENS AND HUNDREDS
 B.O.: Given two sets of numerals, the student will indicate one is greater than, less than or equal to the other set. ($>$ $<$ $=$)
- Skill 332 MEASURE--OUNCES, POUNDS, AND DOZENS
 B.O.: Given a problem on dry measure, i.e. ounces, pounds or dozens, the student will solve it.

- Skill 401 ADDITION-2 DIGIT ADDENDS
 B.O.: Given an addition problem with 2 addends, the student will use the commutative property to rewrite the problem and name the sum.
- Skill 402 ADDITION-ASSOCIATIVE PROPERTY (3 digits)
 B.O.: Given an open equation, the student will group two addends to make a sum, add the other addend, and name the sum.
- Skill 403 ADDITION-4 DIGITS
 B.O.: Given 4 place addition problem with regrouping, the student will solve it.
- Skill 404 SUBTRACTION-4 DIGITS
 B.O.: Given 4 place subtraction problems of 4 places with regrouping, the student will solve it.
- Skill 405 ADDITION COLUMN 3 AND 4 DIGITS
 B.O.: Given an additional problem from 3 and 4 digits with regrouping, the student will solve it.
- Skill 406 INEQUALITIES
 B.O.: Given a number line with a point at 2,021 and 51,612, the student will write the mathematical sentences.
- Skill 407 TIME
 B.O.: Given 2 analog clocks telling time to the minute and second, the student will correctly identify the time.
- Skill 408 MULTIPLICATION-2 DIGIT MULTIPLIER
 B.O.: Given a problem with 2 digit multiplier, the student will correctly compute the problem.
- Skill 409 MULTIPLICATION-3 DIGIT MULTIPLIER
 B.O.: Given a problem with 3 digit multiplier, the student will correctly compute the problem.
- Skill 410 GEOMETRY-CIRCLES, CIRCLES, POLES, POINTS
 B.O.: Using a compass, the student can construct a circle with a given point and radius (or diameter).
- Skill 411 MULTIPLICATION-IDENTITY PRINCIPLE 1 DIGIT
 B.O.: Given a multiplication problem in which one factor is the identity element, the student will rewrite the factors using the identity property and write the problem.
- Skill 412 MULTIPLICATION-IDENTITY PRINCIPLE 1 DIGIT
 B.O.: Given a multiplication problem as $3 \times 4 \times 5$, the student will regroup the factors into a product. $(3 \times 4) \times 5 = 3 \times (4 \times 5)$.

- Skill 413 MULTIPLICATION-DISTRIBUTIVE PRINCIPLE 1 DIGIT
 B.O.: Given a multiplication problem with two factors, the student will find the product by using the distributive property.
- Skill 414 MULTIPLICATION - 10's AND 100's
 B.O.: Given a group of problems using the multiples of 10's and 100's the student will solve the problem.
- Skill 415 PLACE VALUE-6 DIGITS
 Given a 6 digit numeral (463,512), the student will identify and name the place value of each digit.
- Skill 416 PLACE VALUE-READ, WRITE, AND NAME NUMERALS FOR WHOLE NUMBERS.
 B.O.: Given a numeral such as 467,304, the student will read and write the words four hundred sixty seven thousand, three hundred and four.
- Skill 417 ESTIMATION-SUMS AND DIFFERENCES THROUGH 100's.
 B.O.: Given a group of problems, the student will estimate the sums and differences eg: $28 + 35 = 60$; $95 - 63 = 30$.
- Skill 418 ESTIMATION - PRODUCTS AND QUOTIENTS
 B.O.: Given a group of problems, the student will estimate the products and quotients, eg. $12 \times 26 = 310$; $356 \div 6 = 60$
- Skill 419 DIVISION-2 DIGIT DIVISORS, 3 and 4 DIGIT DIVIDENDS.
 B.O.: Given a division problem in which the dividend is a 3 or 4 digit numeral and the divisor is a 2 digit numeral, the student will compute the problem.
- Skill 420 MONEY-OPERATION WITH DECIMALS
 B.O.: Given decimal notation (money) problems the student can name the sums and differences for the problems.
- Skill 421 AVERAGES-SINGLE
 B.O.: Given a set of numbers such as 15, 45, 83, 52, and 79, the student will demonstrate the steps in solving the average (arithmetic mean) of the numbers.
- Skill 422 ODD AND EVEN NUMBERS
 B.O.: Given a set of 3 digit numbers, the student will identify the odd and even numbers, listing the numbers in the correct column of odd or even.
- Skill 423 ROMAN NUMERAL THROUGH L
 B.O.: Given a numeral such as 52, the student can write the Roman numeral LII.
- Skill 424 PRIME NUMBER, COMPOSITE AND PRIME
 B.O.: Given a whole number greater than 1 and less than 100, the student will classify the number as Prime or Composite.

- Skill 515 DIVISION-MULTIPLES 10 and 100 AS DIVISORS
 B. O.: Given problems with multiples of 10 and 100 as divisors, the student will divide by the shortest method.
- Skill 516 DIVISION- 2 DIGIT DIVISORS AND 4 DIGIT DIVIDENDS.
 B. O.: Given problems such as $98 \overline{)4673}$, the student will implement the proper steps of long division, name the quotient and the remainder.
- Skill 517 DIVISION- 3 DIGIT DIVISORS AND 4 OR MORE DIVIDENDS.
 B. O.: The student can give quotients and remainders for problems with 3 digit divisors and 4 or more dividends.
- Skill 518 AVERAGES-3 OR MORE NUMERALS
 B. O.: Given a set of data greater than two, the student will name the average, range, or median.
- Skill 519 MONEY-DIVISION OF DECIMALS
 B. O.: The student can compute division of money as $\overline{) \$6.37}$ up to 3 digit divisors and place the decimal in the correct place in the quotient.
- Skill 520 FRACTIONS-IDENTIFYING AND WRITING $1/2$, $1/4$, $1/8$, $1/16$
 B. O.: The student can identify, name, read, write, and order fractions $1/2$, $1/4$, $1/8$, $1/16$.
- Skill 521 IDENTIFYING AND WRITING $1/2$, $1/3$, $1/5$, $1/12$.
 B. O.: The student can identify, name, read, write, and order the fractions $1/2$, $1/3$, $1/5$, $1/6$, and $1/12$.
- Skill 522 FRACTIONS-IDENTIFYING, WRITING AND ORDERING
 B. O.: The student will identify points $1/2$, $1/4$, $1/8$, $1/16$, $1/3$, $1/6$, and $1/12$, and 1, will write fractions and will arrange in the correct order from least to greatest.
- Skill 523 FRACTIONS-EQUIVALENT THROUGH 72nds.
 B. O.: Given sets of fractions, the student will identify equivalent fractions and will build equivalent fraction sets
- Skill 523.1 FINDING MISSING NUMERATORS OR DENOMINATORS
 B. O.: Given sentences such as $4/9 = ?/18$ or $4/9 = 8/?$, the student will name the missing numerator or denominator
- Skill 524 FRACTIONS-REDUCING TO LOWEST TERMS.
 B. O.: Given sets of proper fractions, the student will identify those not in lowest terms and will rewrite as lowest term fractions.

- Skill 525 FRACTIONS GREATER THAN ONE-IDENTIFYING AND READING
 B.O.: The student will rename an improper fractions as a mixed numeral and vice versa.
- Skill 526 FRACTIONS-ADDING AND SUBTRACTING LIKE DENOMINATORS
 B.O.: Given single digit fractions with like denominators, the student will compute them by adding or subtracting.
- Skill 527 FRACTIONS-FINDING A COMMON DENOMINATOR
 B.O.: Given 2 or more fractions the student can change them to fractions having a common denominator.
- Skill 528 FRACTIONS-ADDING AND SUBTRACTING UNLIKE DENOMINATORS THROUGH 16ths.
 B.O.: Given single digit fraction with unlike denominators, the student will find the common denominator and compute the fractions by adding or subtracting.
- Skill 529 FRACTIONS-ADD AND SUB FRACTIONS GREATER THAN ONE
 B.O.: Given fraction problems involving mixed numerals, the student will name the sums and differences and express these in simplest terms.
- Skill 530 FRACTIONS-MULTI. 1 DIGIT DENOMINATORS
 B.O.: The student will compute single digit fractions such as $2/3 \times 3/4 = \underline{\quad}$ or $4 \times 3/8 = \underline{\quad}$, and express the product in lowest terms or as a mixed numeral.
- Skill 531 FRACTIONS-DIVISION-ONE DIGIT DENOMINATORS
 B.O.: The student will compute single digit fractions such as $1/2 \div 1/4 = \underline{\quad}$ or $5 \div 3/8 = \underline{\quad}$, and express the quotient in simplest form.
- Skill 532 DECIMALS-READING AND WRITING DECIMAL NOTATION
 B.O.: Given a decimal number the student will read and rewrite it as a fractional number and vice versa.
- Skill 533 DECIMALS-ADDITION AND SUBTRACTION TO 2 PLACES
 B.O.: The student will name the sum or difference for decimal problems to 2 places, putting the decimal point in the right place.
- Skill 534 DECIMALS-MULT. AND DIV. TO 2 PLACES AND NO DECIMAL DIVISORS
 B.O.: The student will compute decimal problems involving multiplication and division, and will place the decimal correctly in the product or quotient.
- Skill 535 GEOMETRY-POINTS, SEGMENTS, RAYS, LINES.
 B.O.: The student will identify, read, or write standard notation for points, segments, rays, and lines.

- Skill 425 GEOMETRY-CIRCLES AND ANGLES
 B.O.: Given a circle, the student will construct and distinguish central and inscribed angles.
- Skill 426 FRACTIONS-NUMERATOR AND DENOMINATOR
 B.O.: Given a fraction such as $\frac{3}{5}$, the student can identify, and name, and distinguish the numerator and denominator.
- Skill 427 FRACTIONS-EQUIVALENT AND INEQUALITIES
 B.O.: Given a fraction such as $\frac{7}{8}$, the student can write a set of fractions which are equivalent to $\frac{7}{8}$, eg. $\frac{7}{8} = \frac{14}{16} = \frac{21}{24}$.
- Skill 428 FRACTIONS-RECOGNIZING AND WRITING LOWER AND HIGHER TERMS
 B.O.: Given a fraction such as $\frac{4}{8}$, the student will list the lower and higher terms fractions of $\frac{4}{8}$, eg. $\frac{1}{2}$, $\frac{2}{4}$, $\frac{3}{5}$, $\frac{4}{8}$, $\frac{5}{10}$, $\frac{6}{12}$, $\frac{7}{14}$.
- Skill 429 RATIONAL NUMBERS-POSITIVE, IDENTIFICATION 1 and greater.
 B.O.: Given a model such as ~~7/4~~ ~~1-3/4~~ the student can identify, name, read, and write the fraction $\frac{7}{4}$ and or the mixed numeral $1\text{-}\frac{3}{4}$ for the rational number associated with the model.
- Skill 430 ADDITION-FRACTIONAL NUMBER.
 B.O.: Given a problem involving addition of fractional numbers with like denominators, the student will find the sum.
- Skill 431 TEMPERATURE-CONVERSION $^{\circ}\text{F}$ TO $^{\circ}\text{C}$ OR FROM $^{\circ}\text{C}$ TO $^{\circ}\text{F}$.
 B.O.: Using a thermometer or model of one calibrated in either $^{\circ}\text{F}$ or $^{\circ}\text{C}$, the student will read the temperature to the nearest $^{\circ}$ and compute problems $^{\circ}\text{F}$ to $^{\circ}\text{C}$ or vis. versa.
- Skill 432 GEOMETRY-RECOGNITION OF 3 DIMENSIONS
 B.O.: Using a ruler and pair of scissors, the student will construct 3 dimensional objects.
- Skill 433 MEASURE-COMPUTATION OF WEIGHT MEASURE, OUNCE, POUND, TON
 B.O.: Using a scale, the student can measure the weight of a given object in whole and fractional parts of units.
- Skill 434 MEASURE-PERIMETER
 B.O.: Given a model of a rectangle or square and using a ruler, the student will determine and name the perimeter (in measurement) of the rectangle or square.
- Skill 435 MEASURE-AREA OF RECTANGLE
 B.O.: Given the measure of the base and altitude of a rectangular region, the student can determine and name the area of the region of multiplication.
- Skill 436 LINEAR MEASUREMENT
 B.O.: Given various measuring devices (ruler, yardstick) the student will measure length in whole and fractional parts of units.

- Skill 501 ADDITION TO 6 DIGITS
 B.O.: Given large number to 6 digits, or columns up to 6 numbers, the student will add them demonstrating correct carrying principles
- Skill 502 SUBTRACTION TO 6 DIGITS
 B.O.: Given large numbers up to 6 digits, the student will subtract them demonstrating correct borrowing procedures.
- Skill 503 PLACE VALUE
 B.O.: Given oral or written word descriptions of numbers, the student will write the correct symbols for the whole numbers to trillions and vice versa.
- Skill 504 INEQUALITIES OF LARGE NUMBERS
 B.O.: Given two numbers of more than 6 digits, the student will express which is larger by the appropriate signs ($<$ $>$).
- Skill 505 ROMAN NUMERALS TO C
 B.O.: Given a Roman numeral such as CXII, the students will write the Arabic numeral 92; given a numeral such as 76, the student will write the Roman numeral LXXVI.
- Skill 506 MULT. - COMMUTATIVE PRINCIPLE TO 2 DIGITS
 B.O.: The student will demonstrate that $103 \times 65 = 65 \times 103$, by writing the vertical algorithm and computing in the easiest arrangement as $\begin{array}{r} 103 \\ \times 65 \\ \hline \end{array}$.
- Skill 507 MULT.-ASSOCIATIVE PRINCIPLE TO 2 DIGITS
 B.O.: Given a problem such as $67 \times 10 \times 4$, the student will group factors which make the computation easiest, such as $67 \times (10 \times 4) = 2680$.
- Skill 508 MULT. - DISTRIBUTIVE PRINCIPLE TO 2 DIGITS
 B.O.: Given a problem such as $125 \times 12 = \underline{\quad}$, the student will demonstrate that $(125 \times 10) + (125 \times 2) = 1250 + 250 = 1500$.
- Skill 508.1 ESTIMATION-NUMERALS TO 1,000
 B.O.: Given a group of numerals, the student will estimate then to the nearest 10, 100, or 1,000.
- Skill 509- ESTIMATION-MULTIPLES OF 1000's
 B.O.: Given a group of problems, the student will estimate the sums, differences, product, or quotients to the nearest 1000's.
- Skill 510 MULT.-MULTIPLES OF 1000's
 B.O.: Given problems using multiples of 10, 100, 1000, the student will name the product in the shortest process.
- Skill 511 MULTIPLICATION-3 DIGIT MULTIPLIERS
 B.O.: Given 3 - digit multipliers (some containing zeros) the student will multiply with accuracy in the shortest way possible.
- Skill 512 MONEY-MULTIPLICATION OF DECIMALS
 B.O.: The student can compute problems such as \$2.53 with the decimal in the correct position in the product. $\begin{array}{r} \\ \times 27 \\ \hline \end{array}$
- Skill 513 PRIME FACTORS OF COMPOSITE NUMBERS
 B.O.: Given a numeral (as 60), the student can write as a product of prime numbers in factor tree ($2 \times 2 \times 3 \times 5$) or vertical ($60 = 2 \times 2 \times 3 \times 5$)
- $\begin{array}{r} 4 \\ \times 15 \\ \hline 60 \end{array}$
- Skill 514 DIVISION-SINGLE DIVISOR SHORT CUT
 B.O.: Given problems such as $9 \overline{)37,416}$, the student can use the short division algorithm to determine the quotients and remainders.

- Skill 536 GEOMETRY-IDENTIFYING AND COPYING CONGRUENT SEGMENTS
 B.O.: Given pairs of line segments, the student will identify congruent pairs and will copy segments congruent to any given segment.
- Skill 537 GEOMETRY-IDENTIFYING AND COPYING CONGRUENT ANGLES
 B.O.: Given pairs of angles, the student will identify congruent pairs and will copy angles congruent to any given angle.
- Skill 538 GEOMETRY-IDENTIFYING AND DRAWING QUADRILATERALS
 B.O.: Given geometric figures, the student will identify and name figures of rectangles, squares, parallelograms, or rhombuses and will draw these figures labeling them correctly.
- Skill 539 MEASURE-AREA OF QUADRILATERAL
 B.O.: Given measures of base and altitude of a quadrilateral the student will compute the area, labeling it correctly.
- Skill 540 MEASURING-PERIMETER OF POLYGONS
 B.O.: Using a ruler, the student will measure any polygon and write the correct measure notation.
- Skill 541 MEASURE-COMPUTING HOURS AND MINUTES
 B.O.: The student will compute problems involving minutes and hours, assign proper unit to the result, and rename if necessary.
- Skill 542 MEASURE-COMPUTING LENGTHS
 B.O.: The student will add and subtract length assign the proper unit to the result, and rename if necessary.
- Skill 542-1 MEASURE-COMPUTING WEIGHT
 B.O.: The student will add and subtract weight measures, assign the proper unit to the result and rename if necessary.
- Skill 543 MEASURE-READING AND MAKING GRAPHS
 B.O.: The student will read and use graphs in finding solutions to problems and will make picture, bar, or line graphs for data.
- Skill 601 EXPONENTS-READING AND WRITING OF 10's WITH EXPONENTS
 B.O.: Given numerals with exponents, the student will read and write ordinary numerals as a power of 10.
- Skill 602 DIFFERENT NUMBER BASES (QUEST ONLY)
 B.O.: Given a set of objects, 1-100, students will use bases 2-8 to group, count, compare with Base 10, and to do simple mathematical problems.
- Skill 603 ROMAN NUMERALS-TO MM
 B.O.: Given either a Roman or an Arabic numeral, the student can write its equivalent in the other numeration system 1-1000.
- Skill 604 ANALYSING STORY PROBLEMS AND WRITING EQUATIONS
 B.O.: Given a story problem the student will be able to analyze the problem, write and compute the equation.

- Skill 605 MULTIPLICATION TO 3 DIGIT
 B.O.: Given 3 digit numerals with 3 digit multipliers the student will be able to compute the problems to the desired proficiency.
- Skill 606 MULTIPLICATION ASSOCIATIVE PRINCIPLE TO 3 DIGIT
 B.O.: Given a multiplication problem with 3 digits, the student will find the product by using the associative and commutative principles.
- Skill 607 MULTIPLICATION DISTRIBUTIVE PRINCIPLE TO 3 DIGIT
 B.O.: Given a multiplication problem with 3 digits, the student will find the product by using the distributive principle.
- Skill 608 EXPONENTS-COMPUTATION THRU POWER OF TENS WITH EXPONENTS THRU 8.
 B.O.: The student will be able to compute problems through powers of tens with exponents through 8.
- Skill 609 EXPONENTS TO POWER OF 7 WITH NUMERALS OTHER THAN 10
 B.O.: The student will compute problems with exponents to power of 7 with numerals other than 10.
- Skill 610 DIVISION-ZEROS IN THE MEDIAL POSITION OF DIVISOR
 B.O.: The student will compute division problems with zeros in the medial position of the divisor.
- Skill 611 DIVISION-ZEROS IN THE QUOTIENT
 B.O.: The student will compute division problems with zeros in the quotient.
- Skill 612 DIVISION-REMAINDERS AS FRACTIONS
 B.O.: The student will compute division problems with remainders used as fractions.
- Skill 613 AVERAGE-ARITHMETIC MEAN
 B.O.: The student will be able to compute the arithmetic mean up to 9 numerals.
- Skill 614 MEASURE-DENOMINATE NUMBERS IN LINEAR MEASURE
 B.O.: The student will compute problems in linear measure using geometry coordinates of 3rd sides
- Skill 615 MEASURE-DENOMINATE NUMBERS IN LIQUID MEASURE (GALLONS)
 B.O.: The student will be able to compute problems using denominate numbers in liquid measure through gallons.
- Skill 616 MEASURE-DENOMINATE NUMBERS IN WEIGHT MEASURE (TONS)
 B.O.: The student will compute problems in weight measure through tons using denominate numbers.
- Skill 617 MEASURE-DENOMINATE NUMBERS IN DRY MEASURE (BUSHEL)
 B.O.: The student will be able to compute problems in dry measure through bushels using denominate numbers.
- Skill 618 MEASURE-DENOMINATE NUMBERS IN TIME MEASURE (SECONDS)
 B.O.: The student will compute problems in time measure, seconds through hours, days, weeks, and years using denominate numbers.

- Skill 619 FRACTIONS-SETS AND EQUIVALENT FRACTIONS
 B.O.: Given a fraction, the student will write two equivalent fractions.
- Skill 620 FRACTIONS-REDUCING TO LOWEST TERMS BY FACTORING
 B.O.: Given a fraction the student will reduce to lowest terms by factoring.
- Skill 621 FRACTIONS-ADDITIONS AND SUBTRACTION LIKE DENOMINATORS
 B.O.: Given an addition or subtraction problem of common fractions with like denominators, the student will find the sum or difference and express in lowest terms.
- Skill 622 FRACTIONS-LEAST COMMON DENOMINATORS L C M PRINCIPLE
 B.O.: Given 2 or 3 fractions or numbers with unlike denominators the student will find the L. C. D or L. C. M whichever is stated.
- Skill 623 FRACTIONS-ADDITION AND SUBTRACTION UNLIKE DENOMINATORS
 B.O.: The student will add and subtract fractions with unlike denominators beyond 16ths.
- Skill 624 CONVERSION OF IMPROPER FRACTIONS
 B.O.: The student will be able to write an improper fraction in place of a mixed numeral and visa versa.
- Skill 625 FRACTIONS-BASIC PRINCIPLES OF ADDITION (O COMMUTATIVE, ASSOCIATIVE)
 B.O.: The student will add rational numbers by using the basic principles; o, commutative, and associative.
- Skill 626 FRACTIONS-ADDING RATIONAL INCLUDING MIXED NUMBERS
 B.O.: The student will add any reasonable fraction.
- Skill 627 FRACTIONS-SUBTRACTION OF RATIONAL NUMBERS
 B.O.: The student will be able to subtract any reasonable rational numbers.
- Skill 628 FRACTIONS-COMMUTATIVE AND ASSOCIATIVE PRINCIPLE OF MULTIPLICATION 1 & 0.
 B.O.: Given a fraction the student will apply the commutative and associative principle of multiplication of 1 and 0.
- Skill 629 FRACTIONS-MULTIPLICATION OF RATIONAL NUMBERS
 B.O.: The student will compute multiplication of rational numbers beyond one digit denominators.
- Skill 630 FRACTIONS-DISTRIBUTIVE PRINCIPLE OF RATIONAL NUMBERS
 B.O.: The student will multiply fractions using the distributive principle.
- Skill 631 FRACTIONS-STORY PROBLEM PROCEDURE FOR RATIONAL NUMBERS
 B.O.: The student will write equations and compute story problems using fractions.
- Skill 632 FRACTIONS-MULTIPLICATION OF PROPER AND IMPROPER FRACTIONS
 B.O.: The student will multiply any reasonable proper or improper fraction.

- Skill 633 FRACTIONS-DIVISION OF RATIONAL NUMBERS
 B.O.: The student will be able to divide any reasonable proper fraction.
- Skill 634 FRACTIONS-DIVISION OF PROPER AND IMPROPER FRACTIONS
 B.O.: The student will be able to divide any reasonable proper and improper fraction.
- Skill 635 GEOMETRY-RECOGNITION OF FIGURES, POINTS, PLANE, POLYHEDRON, PRISM, PYRAMID, SPHERE, HEMISPHERE, CYLINDER, CONE
 B.O.: The student will be able to recognize geometric figures such as: points, plane, polyhedron, prism, pyramid, sphere, hemisphere, cylinder, cone, ect.
- Skill 636 GEOMETRY-MEASUREMENT AND CONSTRUCTION OF ANGLES
 B.O.: Given an angle, a protractor, and a compass the student will measure the angle within 2 degrees and construct an angle congruent to it.
- Skill 637 MEASURE-AREA OF POLYGONS TO INCLUDE 5 SIDED FIGURES
 B.O.: Given dimensions the student will find the area to and including 5 sided polygons.
- Skill 638 GEOMETRY-CONGRUENT TRIANGLES, MEASURE
 B.O.: Given two or more triangles, the student will determine if they are congruent by the parts of the one triangle being matched with equal parts of another triangle.
- Skill 639 MEASURE-AREA OF TRIANGLES
 B.O.: Given the dimensions the student will be able to find the area of a triangle.
- Skill 640 GEOMETRY-CONSTRUCTIONS, TRIANGLES
 B.O.: Given a compass, ruler, and a protractor the student will construct any given triangle.
- Skill 641 GEOMETRY-PARALLEL AND PERPENDICULAR LINES, INTRO.
 B.O.: Given a pair of lines, the student will label them parallel, perpendicular, and/or intersecting.
- Skill 642 GEOMETRY-SUMS OF ANGLE MEASURES
 B.O.: Given a polygon, the student will name the sum of the measures of the angles.
- Skill 643 RATIO AND PROPORTION-LANGUAGE OF RATIO
 B.O.: The student will discuss ratio and proportion using proper language terms.
- Skill 644 RATIO-EQUAL RATIOS (REDUCING OF RATIOS)
 B.O.: The student will be able to solve problems which involve equal ratios.
- Skill 645 RATIO-PROPORTION
 B.O.: Given story problems the student will be able to write rational number equations and solve them to answer ratio questions.

- Skill 646. DECIMALS-READING OF DECIMALS TO MILLIONTHS PLACE
 B.O.: The student will perform probability experiments to determine outcomes.
- Skill 647. DECIMALS-FRACTIONS AND DECIMALS
 B.O.: The student will be able to read and write decimals to ten-thousandths.
- Skill 648. DECIMALS-FRACTIONS AND DECIMALS-CONVERSION OF
 B.O.: Given a decimal number up to 10 thousandths the student will read and rewrite it as a fractional number and vice-versa.
- Skill 649. CHANGING FRACTIONS TO DECIMALS
 B.O.: The student will convert a fraction to a decimal.
- Skill 650. DECIMALS-ADDING AND SUBTRACTING OF DECIMALS TO 4 PLACES
 B.O.: The student will name the sum or difference for decimal problems to 4 places, putting the decimal in the proper places.
- Skill 651. DECIMALS-MONEY STORY PROBLEMS
 B.O.: The student will compute decimal story problems correctly.
- Skill 652. DECIMALS-APPROXIMATION, ROUNDING TO 3 PLACES
 B.O.: The student will round decimals to three places.
- Skill 653. DECIMALS-MULTIPLYING TO 3 PLACES
 B.O.: The student will multiply decimals to 3 places correctly.
- Skill 654. DECIMALS-DIVISION, WHOLE NUMBER DIVISOR TO 3 DIGITS
 B.O.: The student will divide decimals with whole number divisors to three digits.
- Skill 655. DECIMALS-DIVISION DECIMAL DIVISORS
 B.O.: The student will find correct quotients by working problems using three place dividends and up to 3 place divisors.
- Skill 656. MEASURE-VOLUME, CUBES, RECTANGULAR SOLID, PYRAMID
 B.O.: Given measurements the student will compute the volume of a cube, rectangular solid, and a pyramid.
- Skill 657. MEASURE-SURFACE AREA
 B.O.: Given the dimensions the student will compute the surface area of several geometric figures.
- Skill 658. GEOMETRY-GEOMETRIC ILLUSIONS
 B.O.: The observation of straight and curved line segments thru actual linear measurement will alert the student varying geometric illusions.
- Skill 659. INTEGERS-INTRODUCTION
 B.O.: Given a number line, the student will identify positive and negative integers and order them.
- Skill 660. INTEGERS-ADDITION
 B.O.: Given 2 integers the student will find the sum by using the number line.

- Skill 661 INTEGERS-SUBTRACTION
 B.O.: The student will compute the difference of two integers by finding the missing addend.
- Skill 662 INTEGERS-MULTIPLICATION
 B.O.: Given a set of integers, having less than 2 digits, the student will determine the product of any two.
- Skill 663 GRAPHING-GRAPHS ON NUMBER LINE
 B.O.: Given a set of numbers on the number line, the student will graph a set of numbers on this number line.
- Skill 664 GRAPHING-NUMBER PAIRS
 B.O.: Given an ordered pair, the student will label each point on a number plane.
- Skill 665 GRAPHING-RATIONAL NUMBER COORDINATES
 B.O.: Given an ordered pair of rational numbers, the student will label each point approximately on a number plane.
- Skill 666 GRAPHING-GRAPHING AN EQUATION OR FUNCTION
 B.O.: Given a function rule and a set of single digit input numbers, the student will find the set of number pairs and graph the number pairs.
- Skill 701 MULTIPLICATION TO 4 DIGITS
 B.O.: Given any "reasonable" multiplication problem, the student can compute the product; he can determine whether or not to use multiplication in a given story problem.
- Skill 702 DIVISION-4 DIGIT DIVISION
 B.O.: Given any "reasonable" division problem, the student can compute the product; he can determine whether or not to use division in a given story problem.
- Skill 703 SETS AND SUBSETS
 B.O.: The student can demonstrate an understanding of set terminology and use set notation correctly.
- Skill 704 SETS-OPERATIONS OF
 B.O.: Given sets, a student can form or state the union, intersection, and illustrate these with Venn diagrams.
- Skill 705 NUMBERS-ODD AND EVEN-PRIME AND COMPOSITE
 B.O.: Student can generalize concerning operations with odd, even and odd and even numbers. Student can show the difference between prime and composite numbers and demonstrate the use of the Sieve of Eratosthenes.
- Skill 706 FACTORS AND FACTORING
 B.O.: Given any whole number of less than 4 digits, the student will determine its complete factorization and be able to give the greatest common factor or 2 or more such numbers.

- Skill 707. NUMBER MULTIPLES
B.O.: The student can give the multiples of any whole number and also determine the least common multiple of a set of numbers of less than 4 digits.
- Skill 708. EXPANDED AND SCIENTIFIC NOTATION
B.O.: The student can write any number of less than 10 digits in expanded notation using exponents and also in scientific notation.
- Skill 709. NUMBER SENTENCES-SOLVING LINEAR EQUATIONS
B.O.: The student can read and write number sentences, use brackets and parenthesis and determine solution sets for simple equations and inequalities.
- Skill 710. MODULAR ARITHMETIC
B.O.: The student can change base 10 numbers to any modular system and multiply in these systems.
- Skill 711. DIFFERENT NUMBER BASES (QUEST)
B.O.: Given a base 10 numeral the student can change it to any base from two to twelve and vice versa. He can add and multiply with numerals in other bases.
- Skill 712. FRACTIONS-REVIEW AND EXTENSION
B.O.: The student can manipulate fractions and compute with them.
- Skill 713. FRACTIONS-USE IN FINDING MISSING NUMBERS
B.O.: The student can find what part one number is of another, a number when a fractional part of it is known and compare numbers using fractions(ratios).
- Skill 714. DECIMALS-READING, WRITING, ROUNDING, COMPARING .
B.O.: Given a set of decimal fractions the student can read them, write them, round them to a given place value and put them in ascending or descending order.
- Skill 715. DECIMALS-ADDITION AND SUBTRACTION
B.O.: The student can compute accurately any "reasonable" addition or subtraction problem in decimal fraction in either horizontal or vertical notation.
- Skill 716. DECIMALS-MULTIPLICATION
B.O.: Given any "reasonable" problem of multiplication of decimal fraction, the student can compute accurately.
- Skill 717. DECIMALS-DIVISION
B.O.: Given any "reasonable" problem of division with decimals, the student can compute accurately.
- Skill 718. DECIMALS-TO FRACTIONS, REPEATING AND IRRATIONALS
B.O.: The student can change decimal to fraction and common or mixed fraction to decimal (including those that repeat).

- Skill 719 DECIMALS-EXPANDED AND SCIENTIFIC NOTATION
B.O.: The student can write decimal fractions in expanded and scientific notations using powers of 10 and negative exponents.
- Skill 720 PER CENT-MEANING OF
B.O.: The student can demonstrate the meaning of percents by illustrations, by writing them as ratios or fractions, and as decimal and vice versa
- Skill 721 BLANK
- Skill 722 BLANK
- Skill 723 PER CENT-OF A NUMBER
B.O.: The student can find the percent of a number (23% of 64) by multiplication and/or proportion.
- Skill 724 PER CENT-APPLIED TO BUSINESS
B.O.: The student can compute with per cent in discount, commission, and simple interest problems.
- Skill 725 OPEN
- Skill 726 GEOMETRY-TERMINOLOGY OF POINTS, LINES AND PLANES
B.O.: The student can read and illustrate geometric terminology regarding points, lines, and plain figures.
- Skill 727 MEASURE-LENGTH OF AND IN BASIC FIGURES
B.O.: The student can measure concrete polygons to fractional accuracy and can find the perimeter of polygons by measuring or by applying the appropriate formula
- Skill 728 MEASURE-ANGLES AND ARCS
B.O.: The student can construct angles and perpendiculars, bisect angles and lines, and measure angles.
- Skill 729 MEASURE-CIRCUMFERENCE
B.O.: Given the radius or diameter of a circular object, the student can measure or calculate the circumference.
- Skill 730 MEASURE-AREA EXTENDED TO TRAPEZOID, CIRCLE, SPHERE
B.O.: The student can change square units of one denomination to another and compute area of polygons, circle, and sphere utilizing and explaining the appropriate formula.
- Skill 731 MEASURE-VOLUME EXTENDED TO SPHERE AND CYLINDER
B.O.: The student can select, utilize, and explain in acceptable way of finding the volume of rectangular and circular prisms.
- Skill 732 MEASURE-DRY, LIQUID, AND WEIGHT RELATED TO VOLUME AND CAPACITY
B.O.: The student can name, use, and change from one denomination to another and to units measuring volume the common standard unit of dry, liquid, weight measure.
- Skill 733 METRIC SYSTEM-
B.O.: The student can read, write, illustrate (within reason), change from one denomination to another, and compute with the various metric units of length, area, volume, capacity and weight.

- Skill 734 METRIC-RELATED TO ENGLISH
 B.O.: The student can work problems that involve changing from the metric system to the English system
- Skill 735 PRE-ALGEBRA-POSITIVE AND NEGATIVE NUMBERS
 B.O.: The student can locate positive and negative numbers on a number line, give the opposite (additive inverse) and the absolute value of any integer.
- Skill 736 PRE-ALGEBRA-ADDITION OF POSITIVE AND NEGATIVE NUMBERS
 B.O.: Given an addition problem involving negatives and or positives, the student will compute and solve, and recognize the properties of addition applied to integers.
- Skill 737 PRE-ALGEBRA-SUBTRACTION OF POSITIVE AND NEGATIVE NUMBERS
 B.O.: Given a subtraction problem involving negative and or positive, the student can compute and solve.
- Skill 738 PRE-ALGEBRA-MULTIPLICATION OF POSITIVE AND NEGATIVE NUMBERS.
 B.O.: Given a multiplication problem involving negative and or positive numbers, the student can compute and solve.
- Skill 739 PRE-ALGEBRA-DIVISION OF POSITIVE AND NEGATIVE NUMBERS
 B.O.: Given a division problem involving negative and or positive numbers, the student can compute and solve.
- Skill 740 PROBLEM SOLVING (QUEST)
 B.O.: The student can write an equation and solve a practical mathematical problem from everyday life.
- Skill 741 SQUARES AND SQUARE ROOT (QUEST)
 B.O.: The student will find the second root of squares by computation (perfect squares) and by using a table.
- Skill 742 SLIDE RULE I (quest - see A.W Ind. packet)
- Skill 743 FLOW CHART I (quest - see A.W Ind. packet)
- Skill 801 FRACTIONS AND DECIMALS
 B.O.: The student will do any "reasonable" problem involving fractions or decimals.
- Skill 802 EXPANDED AND SCIENTIFIC NOTATION - COMPUTING WITH
 B.O.: The student will write any "reasonable" number in expanded and scientific notation and compute with exponents and scientific notation.
- Skill 803 BASES OTHER THAN 10
 B.O.: Given a base 10 numeral the student will change it to any base for two to twelve and vice versa. He can also add and multiply with numbers in other bases.
- Skill 804 INTEGERS-EXTENDED TO WORD PROBLEMS
 B.O.: The student will do and demonstrate an understanding of any "reasonable" problem, verbal or otherwise, involving integers.

- Skill 805 PROPERTIES-APPLIED TO WHOLE NUMBERS, RATIONALS AND INTEGERS
 B.O.: The student will identify a property when given an example expressed in whole numbers, fractions or decimals, or when asked give an example of any property.
- Skill 806 SETS
 B.O.: The student will use sets and set builder notation in solving problems in one variable and will graph such solutions.
- Skill 807 RATIO AND PER CENT-USE OF IN DISCOUNT, COMMISSION, INTEREST, TAXES, ETC.
 B.O.: The student will use ratio-proportion (or another method) to solve applied percentage problems.
- Skill 808 IRRATIONALS-FINDING SQUARE ROOT
 B.O.: The student will find the second root of squares by computation (perfect squares) and by using a table.
- Skill 809 IRRATIONALS-MEANING AND SIMPLIFICATION OF
 B.O.: Given a set of radicals, the student will simplify each, and compute simple problems in addition, multiplication, and division.
- Skill 810 OPEN
- Skill 811 GEOMETRY-PARALLEL LINES, TRANSVERSALS AND ANGLES
 B.O.: Given two parallel lines with a transversal, the student will recognize, draw, and label the corresponding angles, alternate interior and exterior angles, vertical angles.
- Skill 812 OPEN
- Skill 813 GEOMETRY-KINDS OF ANGLES AND TRIANGLES
 B.O.: The student can recognize, identify, and construct the various kinds of angles and triangles.
- Skill 814 GEOMETRY-CONGRUENCY OF TRIANGLES
 B.O.: Given the congruency statements (in words or picture) the student can tell which congruency theorem applies.
- Skill 815 GEOMETRY-SIMILAR TRIANGLES
 B.O.: The student can demonstrate the characteristics of similar triangles through construction and can use proportions to find the missing measures.
- Skill 816 MEASURE-PERIMETER, AREA, VOLUME EXTENDED TO IRREGULAR FIGURES
 B.O.: Given the necessary measurements, the student will find the perimeter, area, and volume of polygons by applying the appropriate form.
- Skill 817 MEASURE-SURFACE AREA EXTENDED TO METRIC AND ALL POLYGONS
 B.O.: The student will find the surface area of rectangular and triangular prisms, and cylinders if given the necessary measurements.
- Skill 818 OPEN

- Skill 819. MEASURE-PYTHAGOREAN PROPERTY
 B.O.: Given a problem which involves utilization of the Pythagorean property, the student can diagram and explain the solution process and compose the answer.
- Skill 820 OPEN
- Skill 821 FUNCTIONS AND COORDINATE GRAPHING-ORDERED PAIRS
 B.O.: The student will form from two given sets the product set using ordered pairs and ordered pair notation. (Relations and functions as quest).
- Skill 822 OPEN
- Skill 823 FUNCTIONS AND COORDINATE GRAPHING-COORDINATE GRAPHING
 B.O.: The student will graph equalities and inequalities of simple functions with 2 variables.
- Skill 824 ALGEBRA-EQUATIONS EXTENDED TO COMPOUND CONDITIONS
 B.O.: Given a verbal problem of less than 3 conditions, the student write an appropriate equations, solve, and graph.
- Skill 825 ALGEBRA-INEQUALITIES IN COMPOUND CONDITIONS
 B.O.: Given a verbal problem of less than 3 conditions, the student can write an appropriate inequality, solve and graph.
- Skill 826 ALGEBRA-SYSTEMS OF LINEAR EQUATIONS IN 2 VARIABLES (quest)
 B.O.: The student will solve systems of linear equations in two variables by addition and substitution as well as by graphing.
- Skill 827 STATISTIC-FREQUENCY DISTRIBUTIONS AND HISTOGRAMS
 B.O.: Given a set of data, the student can construct a frequency distribution table and a histogram.
- Skill 828 STATISTICS-MEASURES OF CENTRAL TENDENCY
 B.O.: Given a set of data, the student can give the mode, median, and mean.
- Skill 829 ALGEBRA-REFLEXIVE, SYMMETRIC AND TRANSITIVE PROPERTIES
 B.O.: The student will identify an example or give his own as an illustration of the reflexive, symmetric, or transitive property.
- Skill 830 ALGEBRA-FORMULA
 B.O.: In a formula the student can find a required value by substituting the given values.
- Skill 831 ALGEBRA-MEANING OF AND SIMPLIFYING MONOMIALS AND POLYNOMIALS
 B.O.: The student will tell the difference between monomials and polynomials and will combine like terms under addition, subtraction, multiplication, and division.
- Skill 832 OPEN

- Skill 833. PROBABILITY (quest)
B.O.: Given an exercise involving probability, the student will state the number of possible outcomes in the sample space and find the probability of an indicated outcome.
- Skill 834 TRIGONOMETRY (quest)
B.O. Given a right triangle, the student can find the sine, cosine, and tangent in terms of the measures of sides.
- Skill 835 COMPLEX NUMBERS (quest-see Holt 8th grade)
- Skill 836 SLIDE RULE II (quest-see A.W Ind. packet-8th grade).
- Skill 837 FLOW CHART II (quest-see A.W Ind. packet-8th grade).

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Name

Skill No.	State Math Guide			Math Concepts	Ref.	Date	Comp.	Score	Comments
	Ctr	Scope	Page						
001	Y	A1	1	Counting objects to ten					
002	G	A1	5	Sets- identifying members of					
003	Y	A4	2	Numbers-five more pattern 1-10					
004	Y	A4	2	Numbers-Order relations 0-10					
*Recall 0-1									
005	Y	A4	2	Ordinal numbers thru fifth					
006	G	A5	7	Set union-Readiness for add.					
007	G	A5	7	Set union-Readiness for sub.					
008	G	A5	8	Sets-computative principle					
*Recall 0-2									
009	P	A2	9	Comparisons-size of objects					
010	P	A1	9	Relative position of objects					
011	B	B5	32	Weight-heavy, light					
*Recall 0-3									
012	F	B1	24	Geometry-Points, lines, rays, closed curves					
013	F	B1	24	Geometry-recognition of shapes					
014	P	B1	9	Geometry-recognition of shapes					
015	P	B1	9	Geometry-recognition of rect.					
016	P	B1	9	Geometry-recognition of triangle					
017	P	B1	9	Geometry-figures-Ident. of geometric figures					
018	P	B1	10	Geometry-solids-Identify cubes, cones, cylinder					
*Recall 0-4									
019	G	A4	5	Patterns-recog. & extension					
020	B	B1	29	Calendar-orientation-day, week, month					
021	G	A3	6	Sets-Quantitative relationship bet.					
022	G	A3	6	Equivalent sets					
023	G	A3	6	Inequivalent sets					
*KIT 0-1									
024	G	A4	6	Cardinal no. one & numeral 1					
025	G	A4	6	Cardinal no. two & numeral 2					
026	G	A4	6	Cardinal no. three & numeral 3					
027	G	A4	6	Cardinal no. four & numeral 4					
028	G	A4	6	Empty set-no. zero & numeral 0					
029	G	A4	6	Cardinal no. five & numeral 5					
030	G	A4	6	Cardinal no. six & numeral 6					
*Recall 0-5									
031	P	C1	10	Geometry-Solids. Identify cones, pyramids					
032	G	A4	6	Cardinal no. seven & numeral 7					
033	G	A4	6	Cardinal no. eight & numeral 8					
034	G	A4	6	Cardinal no. nine & numeral 9					
035	G	A4	6	Cardinal no. ten & numeral 10					

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Snake River Dist. 52				Name				
Skill No.	State Math Guide			Math Concepts	Ref.	Date Comp.	Score	Comments
	Clr	Scope	Page					
036	B	B2	31	Money-Pennies, counting to 10c				
037	Y	A3	14	Whole numbers-order of to 10				
038	Y	A2	14	Whole numbers-Order of 10				
*KIT 10-2								
101	Y	A4	15	Ordinal numbers through tenth	1005			
102	Y	A4	15	Ordinal numbers through 10				
103	Y	B1	15	Add. combinations through 5				
104	Y	B2	18	Identity element for add. 0				
105	Y	B1	16	Sub. combinations thru 5				
*Recall 1-1								
106	Y	B1	16	Inverse rel. between add. & sub. thru 5				
107	Y	B2	18	Commutative princ. of add. thru 10	1008			
108	Y	A3	14	Whole numbers-order of to 20	1034			
*Recall 1-2								
109	Y	A3	14	Whole numbers-order of to 30	1028			
110	Y	A3	14	Whole numbers-order of to 40				
111	Y	B1	16	Add. combinations thru 5				
112	G	A3	14	Whole numbers-order of to 50	110			
*KIT 1-1								
113	Y	B1	15	Add. combinations thru 6	103			
114	Y	B1	16	Sub. combinations thru 6	105			
115	Y	A3	14	Whole numbers-order of to 60	112			
116	Y	B1	15	Add. combinations thru 7	114			
117	Y	B1	16	Sub. combinations thru 7	114			
*Recall 1-3								
118	Y	A3	14	Whole numbers-order of to 70	115			
119	B	B2	31	Money-counting pennies & nickels to 10c	036			
120	Y	B1	15	Add. combinations thru 8	116			
121	G	B1	24	Functions-add. & sub. thru 10				
122	Y	B1	16	Sub. combinations thru 8	117			
*Recall 1-4								
123	Y	A3	14	Whole numbers-order of 0-80	118			
124	Y	B1	15	Add. combinations thru 9	120			
125	Y	B1	16	Sub. combinations thru 9	122			
126	Y	A3	14	Whole numbers-order of to 90	123			
127	Y	B1	15	Place value (add.) thru 10				
128	Y	B1	16	Place value (sub.) thru 10				
129	Y	A3	14	Whole numbers-order of to 100	126			
*KIT 1-2								
130	Y	A3	15	Place value 10-19				
131	Y	A3	15	Place value 20-29				
132	Y	A3	15	Place value 30-39				
133	Y	A3	15	Place value 40-49				
134	Y	A3	15	Place value 50-59				

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Skill No.	State Clr	Ma'n Scope	Guide Page	Math Concepts	Ref.	Date Comp	Score	Comments
135	Y	A3	15	Place value 60-69				
136	Y	A3	15	Place value 70-79				
137	Y	A3	15	Place value 80-89				
138	Y	A3	15	Place value thru 99				
*Recall 1-5								
139	Y	A5	15	Expanded notation thru 99	138			
140	Y	A3	14	Order of whole numbers 0-100	129			
141	B	B2	31	Money-dimes place value	119			
142	Y	A4	15	Inequalities to 100	102			
*Recall 1-6								
143	B	B1	29	Time-hour				
144	Y	B1	15	Add. combinations thru 10	124			
145	Y	B1	15	Sub. combinations thru 10	125			
*Recall 1-7								
146	B	B2	31	Money-computing 10¢ & under				
*KIT 1-3								
147	Y	B2	18	Commutative principles of add thru 10	107			
148	Y	B2	18	Associative principle-add. thru 10				
149	B	B6	32	Temperature-noting increase & decrease				
150	Y	B1	17	Minimum addition thru sum of 10				
*Recall 1-8								
151	Skip counting			Skip counting by 2, 5, 10's				
152	Y	C1	18	Fractions-Dividing objects & sets into halves				
153	Y	C1	18	Fractions-Dividing objects & sets into thirds				
*Recall 1-9								
154	B	B3	31	Measure-inches & centimeters				
155	B	B4	32	Measure-cups, pints				
156	Grouping			Grouping to find sums greater than 10				
*KIT 1-4								
201	Y	B1	37	Add. & sub. thru 11	144 145			
202	Y	B1	37	Add. & sub. thru 12				
202				Doubles & near doubles				
203	Y	B1	37	Add. & sub. thru 13				
204	Y	B1	37	Add. & sub. thru 14				
*Recall 2-1								
205	B	B1a	29	Telling time to ½ hour	143			
206	Y	B1	37	Add. & sub. thru 15	204			
207	Y	B1	37	Add. & sub. thru 16				

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State Math Guide				Math Concepts	Ref.	Date Comp	Score	Comments
State No.	Level	Scope	Page					
208		B1	37	Add. & sub. thru 17				
209		B1	37	Add. & sub. thru 18				
				100 Addition Facts				
*KIT 2-1								
210	Y	B2b	39	Commutative property of add.				
	Y	G6b	47	thru 18	147			
211	Y	B2d	39	Associative property of add.				
	Y	C7b	81	thru 18	148			
212	Y	B2f	40	Identity element for add.				
					104			
*Recall 2-2								
213	Y	A5	66	Roman numerals-I thru XII				
214	Y	B2b,c	69	Grouping into tens + ones	156			
*Recall 2-3								
215	Y	B1i	17	Two digit add. & sub. without regrouping				
				100 Subtraction Facts				
216	Y	B1g	38	Add. column sum over 10	150			
*KIT 2-2								
217	Y	A3b	35	Writing numerals from 100 to 1000	129			
218	Y	A2g	34	Skip counting by 100's & 1000's	151			
219	Y	A4a	35	Inequalities-100's	142			
220	Y	A4a	35	Inequalities-1000's	220			
*Recall 2-4								
221	Y	A5	27	Expanded notation-place value for 3 digit numbers	139			
222	Y	A1	63	Expanded notation-place value for 4 digit numbers				
*KIT 2-3								
223	Y	Bg	38	Add. of 2 digit no. with regrouping (carrying)				
+ P2-3								
224	Y	Bg	38	Sub. of 2 digit no. with regrouping (borrowing)				
225	R	Ab2	98	Money-comparing to dollars	146			
*Recall 2-5								
226	Y	A5j	35	Ordinal numbers to twentieth	101			
227	Y	A1c	33	Odd & even numbers to 100				
228	Y	B2	49	Skip counting by 3's & 4's	218			
+ P2-3								
				Two digit borrowing proficiency				
*KIT 2-4								
229	Y	C	43	Fractions recognizing sym. $\frac{1}{2}$	215			
230	R	A16	59	Calendar-day, week, month (use)	220			
231	Y	C	43	Fractions-recognize symbol $\frac{1}{3}, \frac{2}{3}$	230			
232	Y	C	43	Fractions- $\frac{1}{2}, \frac{3}{4}$, recognizing symbol $\frac{1}{2}, \frac{2}{4}, \frac{3}{4}$				
*Recall 2-6								

Snake River Dist. 52				Name				
SP	State No	Math Clr.	Guide Scope Page	Math Concepts	Ref.	Date Comp.	Score	Comments
	233	B	B3 31	Measure-inches & centimeters	154			
	234	B	B4 32	Measure-quarts	155			
	235	P	C1 52	Geometry-line segments-points	012			
	236	P	C2 52	Geometry-Open & closed figures				
	*Recall 2-7							
	237	G	B 84	Functions and patterns	121			
	238	B	46a 61	Temperature F. Degrees	149			
	*KIT 2-5							
	301	Y	B1 67	Addition-3 digits-2 addends	223			
	301	1G	A7a 81	Addition-Commutative beyond 20	210			
	301	2G	A7b 81	Addition- Associative beyond 20	211			
	302	Y	B1g 68	Subtraction-3 digit	224			
	303	Y	B1g 68	Sub. Regroup with zero	212			
	303	1Y	B1b 67	Add. Sub. Inverse Relation				
	*Recall 3-1							
	304	B	B2 98	Money-Symbol concepts				
	305	B	B2 98	Money-Computing to \$20	225			
	*Recall 3-2							
	306	Y	B1 67	Add. 2 digit column carrying	216			
	307	Y	A4c 65	Ordinal number above 20	227			
	*KIT 3-1							
	308	Y	B3 69	Multi. Repeated Addition				
	309	Y	B3 69	Multi. Product-Factors (1 digit)				
	310	Y	B3de 73	Multi. One and zero				
	*Recall 3-3							
	311	Y	B4a 73	Multi. Introduce Commutative principle				
	312	Y	B4c 73	Multi. Introduce Associative principle				
	313	Y	B4f 74	Multi. Introduce Distributive principle (1 digit)	308			
	-P3- Multi. 100 Facts-Proficiency							
	*Recall 3-4							
	314	Y	B3f 70	Division-Repeated Sub.				
	315	Y	B3 70	Division-One and Zero				
	316	Y	B3 70	Division-Divisor, Dividends, Quotients-No Remainders				
	*Recall 3-5							
	317	Y	B3 70	Division-Remainders (1 digit divisor-2 digit dividends)				
	318	Y	B3 69	Division-Checking				
	-P3-2 Division 90 Facts							
	*KIT 3-2							
	319	P	A1 87	Geometry-Right Angle-Right triangle				
	320	Y	A1 63	Odd and even numbers	227			
	321	Y	B3 70	Multiplication-2 digit	313			
	321	1B	B7 100	Temperature	238			

Snake River Dist. 52				Name				
Skill No.	State Clr.	Math Scope	Guide Page	Math Concepts	Ref.	Date Comp	Score	Comments
*Recall 3-6								
322	Y	A6	66					
				Roman Numerals thru XX	213			
323	Y	C2	76	Fractions-equivalent 1/2,	232			
				1/3, 1/4				
*Recall 3-7								
324	B	B1	98	Time to 1/4 of hour	205			
325	B	A1	97	Measure-half-gallons, gallons	225			
326	P	F2	94	Geometry-quadrilateral	017			
327	B	A1	91	Measure foot	233			
*Recall 3-8								
328	Y	A5	66	Place value 5 digit	222			
329	Y	A5	66	Expanded Notation 5 digit	222			
330				Story Problems-Reading				
331	Y	2d	64	inequalities-thru 4 digits	220			
332	B	B6	99	Measure- ounces, pounds, dozens				
*KIT 3-3								
401	Y	B2a	68	Add. commutative Property	210			
402	Y	B2b	69	Add. -Associative property 2	211			
	Y	B2a	108	and 3 digits				
403	Y	B1d	107	Add. 2 digits	301			
*Recall 4-1								
404	Y	B1d	107	Sub. -4 digits	302			
405				Add. -Column 3 & 4 digits	306			
+P4-1				Add. - column				
*Recall 4-2								
406	G	C1a	123	inequalities-5 digits	220			
407	B	B1a	136	Time-minute and second	324			
*KIT 4-1								
408	Y	B3g	110	Multi. -2 digit multiplier	321			
409	Y	B3g	110	Multi. -3 digit multiplier				
+P4-2				Multi. -1 digit multiplier				
410	P	C1d	128	Geometry-closed curves, circles points	326			
*Recall 4-3								
411	Y	B4a	73	Multi.-Commutative principle 1	311			
			111	digit				
412	Y	B4c	73	Multi. Associative principle 1	312			
				digit				
413	Y	B4f	74	Multi. Distributive principle 1	313			
				digit				
*Recall 4-4								
414	Y	B3i	110	Multi. by 10's, 100's				
*KIT 4-2								
415	Y	A5a	105	Place Value 6 digits	328			
416	Y	A5a	105	Place Value-read, write, thru 6 digits				
*Recall 4-5								
417	Y	A6a	106	Estimation-Sums & differences thru 100's				
418	Y	A6a	106	Estimation-Products & quotients thru 100's				

Shore River Area		Name	Date	Score	Comments
Skill	State		Comp.		
No. 101	Grade 4-6				
*Recall 4-6					
418					
*P4-3:					
420					
421					
*Recall 4-7					
422					
423					
424					
*KIT 4-3					
425					
*KIT 4-3					
426					
427					
428					
429					
430					
*Recall 4-1					
431					
432					
*Recall 4-2					
433					
434					
435					
*KIT 4-6					
436					
501					
502					
*Recall 4-1					
503					
504					
505					
*Recall 4-1					
506					
507					
508					
509					
*P5-1:					
510					
*Testing					

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Skill No.	State Clr.	Math Guide Scope	Page	Math Concepts	Ref.	Date Comp.	Score	Comments
511	Y	B4f	149	Multi. 3 digit multipliers (1 or more being 0)	409			
512	Y	D56	156	Money-Mult. of decimals	420			
*Recall		5-2						
*KIT		5-1						
513	Y	A7		Prime factors of composite no.	424			
	Y	B3a	148					
514	Y	B3g	148	Division-Single divisor short cut	419			
515	Y	B3	148	Division-Multiples of 10 & 100 as divisors	419			
516	Y	B3f	148	Division-2 digit divisors & 4 digit dividends	419			
+P5-2				Division-2 digit divisor & remainder profic.				
517	Y	B3d	183	Division-3 digit divisors & 4 or more dividends	419			
*Recall		5-3						
518	B	B10c	175	Averages-3 or more numerals	421			
519	B	B2	172	Money-division of decimals	512			
*KIT		5-2						
520	Y	C1	151	Fractions-Identifying & writing $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, $\frac{1}{16}$				
521	Y	C1	151	Fractions Identifying & writing $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{6}$, $\frac{1}{12}$, $\frac{1}{5}$				
522	Y	C1e	151	Fractions-Identify, write & ordering				
523	Y	Cz	151	Fractions-Equivalent-thru 72nds	427			
523.	Y	Cz	151	Fractions-Finding numerator & denominator				
524	Y	Cz6	152	Fractions-Reducing to lowest term	428			
525	Y	C1c	151	Fractions-Greater than one-Identifying & reading	429			
526	Y	D1	153	Fractions-Adding & Sub. like denominators thru 16ths	430			
*Recall		5-5						
527	Y	D1e	154	Fractions-Finding common denom.				
528	Y	D1e	154	Fractions-Adding & sub. unlike denominator thru 16ths.				
+P5-3				Fraction-Common-Sub. & Add.				
529	Y	D1f	154	Fractions-Add. & Sub. fractions greater than 1				
*Recall		5-6						
*KIT		5-3						
530	Y	D3	155	Fractions-Multi. 1 digit denom.				
531	Y	D3b	193	Fractions-Div. 1 digit denominator				
532	Y	C4	221	Decimals - Reading & Writing Decimal Notation				

* Testing

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Snake River Dist. 52				Name			
Skill No.	State Clr.	Math Guide Scope Page	Math Concepts	Ref	Date Comp	Score	Comments
*Recall 5-7			Reading & Writing decimal notation				
533	Y	D5 156	Decimals-Add & Sub.-2 places				
534	Y	D6 156	Decimals-Multi. & division to 2 places (No decimal divisors)				
		D5b 195					
*Recall 5-8							
535	P	A1 163	Geometry-Points, segments, rays, lines	410			
536	P	B4 166	Geometry-Identifying & copying congruent segments				
537	P	C1e 168	Geometry-Identifying & copying congruent angles				
538	P	A1b 163	Geometry-Identifying drawing quadrilaterals	432			
*Recall 5-9							
539	B	B4b 172	Measure-Area of quadrilaterals	434			
540	B	B3 172	Measure-Perimeter of Polygons	434			
541	B	B1 172	Measure-Computing hours, min.	437			
542	B	D1 176	Measure-Computing lengths	433			
542	1B	D1 176	Measure-Computing weight	433			
543	B	B10 171	Measure-Reading & making graph				
	B	B10 175					
*KIT 5-4							
*Recall 5-10							
601	Y	A2b 177	Exponents-Reading and writing of 10's with exponents.				
	Y	A2a 177					
	Y	A8a 180					
602	Y	A5e 180	Different number bases (Quest Only)	803			
603	Y	A5a 179	Roman Numerals to MM	505			
604			Analysing story problems and writing equations	830			
*Recall 6-0							
605	Y	B3e 148	Mult. to 3 digit	506			
606	Y	B4a 184	Mult. associative principle to 3 digit	507			
607	Y	4f 185	Mult. distributive principle to 3 digit	508			
*KIT 6-1							
608	Y	A8b 180	Exponents-Computation thro power of tens with exponents thro 8.				
609	Y	A8 a,c,d 180	Exponents to power of 7 with numerals other than 10				

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Snake River Dist. 52				Name		Score	Comments
Skill No.	State Clr.	Math Guide Scope	Page	Matr Concepts	Ref.		
610	Y	B3abc	183	Division-Zeros in the medial position of divisor	517		
611	Y	B3abc	183	Division-Zeros in the quotient			
612	Y	B3e	183	Division-Remainders as fraction			
*KIT 6-2							
613	B	B14	217	Average-Arithmetic mean	518		
614	B	A1ac	171	Measure-Denominate numbers in linear measure	542		
	B	B3a	172				
	B	B5b	174				
	B	B3a	214				
	B	B5b	215				
	B	B6a	215				
	B	A1a	271				
	B	B3a	273				
615	B	5b	242	Measure-Denominate numbers in liquid measure (gallon)			
616	B	A1a	213	Measure-Denominate numbers in weight measure (tons)	542.1		
617				Measure-Denominate numbers in dry measure (bushel)			
618	B	B1a	172	Measure-Denominate numbers in time measure (seconds)	541		
*Recall 6-3							
*KIT 6-3							
619	Y	C2c	187	Fractions-Terms and equivalent fractions	523		
620	Y	efg	193	Fractions-Reducing to lowest terms by factoring			
621	Y	D1a	190	Fractions-Additions and Sub. like denominators	526		
622				Fractions-Least common denom. L.C.M principle	527		
623	Y	D1abc	190	Fractions-Add. and Sub. unlike denominators	528		
*Recall 6-4							
624				Conversion of improper fraction	529		
625	Y	D2	191	Fractions-Basic principles-of addition (0, commutative associative)			
626				Fractions-Adding rational including mixed numbers	529		
627	Y	D1abc	190	Fractions-Subtraction of rational numbers			
*Recall 6-5							
+P6-1							
628	Y	D3		Fractions-Commutative & Assoc. principle of mult. of 1 & 0.			

* testing

+Proficiency

Snake River Dist. 52				Name				
Skill No.	State Clr.	Math Scope	Guide Page	Math Concepts	Ref.	Date Comp.	Score	Comments
629	Y	D3abc	191 192	Fractions-Mult. of rational No.	530			
630	Y		194	Fractions-Distributive princ. of rational numbers				
631				Fractions-Story problem proced. for rational numbers	604			
632	Y	C1c	187	Fractions-Multi. of proper and improper fractions				
*Recall 6-6								
+P6-2				Multi. of fractions				
633	Y	D3bc		Fractions-Division of rational numbers	531			
634				Fractions-Division of proper and improper fractions				
635	P	Aa B1a 1b	205 205	Geometry-recognition of figures: points, plane, polyhedron, prism, pyramid, sphere, hemisphere, cylinder, cone	502			
*KIT 6-4								
636	B	9a	215	Geometry-Measurement & construction of angles	537			
	B	B4a	215					
	P	E1b						
637	B	9a	213	Measure-Area of polygons to include 5 sided figures	523			
	B	14a	214					
	B	4a	215					
638	P	2d	209	Geometry-Congruent triangle	621			
639	B	B4bd	215	Measure-Area of triangles	622			
	B	A1a	239					
	B	9a	216					
	B	B4d	215					
640	P	E1b	209	Geometry-Constructions, triangles	622			
641	P	1a	205	Geometry-Parallel & perpendicular lines, intro.				
	P	1e	210					
	P	1h	212					
642	Y	C1c	185	Geometry-Sums of angle meas				
*Recall 6-7								
643	Y	C4a	188	Ratio & proportion-language				
644				Ratio-Equal ratios(reducing of ratios).				
645	Y	C4ab	188	Ratio & proportion				
*KIT 6-5								
+P6-3				Division of fractions				
646	Y	A2	177	Decimals-Reading of decimals to millionths place	532			
	Y	C5abcd	189					
*Recall 6-8								
647	Y	5a	189	Decimals-Fractions & Decimals				

* Testing

- Proficiency

Snake River Dist. 52				Name				
Skill No.	State Cir.	Math Guide Scope	Page	Math Concepts	Ref.	Date Comp.	Score	Comments
648				Decimals-Fractions & Decimals Conversion of				
649				Changing fractions to decimals				
650	Y	8Ba	181	Decimals-Adding & subtr. of decimals to 4 places	533			
* Recall 6-9								
651	G	C1e	203	Decimals-Money story problems				
652				Decimals-Approximation, rounding to 3 places				
653	Y	5a	195	Decimals-Multi. to 3 places	534			
654	Y	5a	195	Decimals-Division, whole no. divisor to 3 digits	534			
655				Decimals-Division decimal divisors				
* Recall 6-10								
* KIT 6-6								
656	B	5a	215	Measure-Volume, cubes, rectangular solid, pyramid				
657	B	4d	215	Measure-Surface area	623			
658				Geometry-geometric illusions				
* Recall 6-11								
* KIT 6-7								
659	Y	E3ab	197	Integers-Introduction				
660	Y	4abc	197	Integers-Addition				
661	Y	4abc	197	Integers-Subtraction				
662	Y	5ab	198	Integers-Multiplication				
* Recall 6-12								
663	B	10a	175	Graphing-graphs on number line	543			
	B	2a	214					
* KIT 6-8								
664	B	A2a	214	Graphing number pairs				
665				Graphing rational number coordinates				
666	G	B5a	228	Graphing-graphing an equation or function				
* Recall 6-13								
701	Y	B3d	183	Number-division-4 digits	605			
702	Y	B3c	183	Number-division-1 digit divisor	611			
703	G	A	225	Sets and subsets-Intro.				
704	G	A5	226	Sets-operations of				
705	Y	A	219	Number-Odd & Even Prime & Composite	622			
706	Y	A1a	219	Factors & Factoring	620			
707	Y	B1b	220	Number Multiples				
708	Y	A2	219	Expanded & Scientific Notation	601 608			

Snake River Dist. 52

Name

Skill No.	State Clr.	Math Scope	Guide Page	Math Concepts	Ref.	Date Comp.	Score	Comments
709	G	C2	229	Number sentences-Solving linear equations	604			
710				Modular Arithmetic				
*Recall 7-1								
711	Y			Different No. Bases	602			
712	Y	CD	220	Fractions-Review & Extension				
713				Fractions-Use in finding missing numbers	634			
714				Decimals-Reading, Writing, rounding, comparing	652			
715				Decimals-Add. & Subt.	650			
716				Decimals-Mult.	653			
717				Decimals-Division	634			
718				Decimals-to fractions	647			
719				Repeating & terminating Decimals expanded & scientific notation	648			
*Recall 7-2								
720				Per Cent-Meaning of; to dec. and fractions	645			
721				Open				
722				Open				
723				Per Cent-dtypes of problems				
*Recall 7-3								
724				Cumulative test				
725				Computing with Per Cent				
726				Open				
727	B	B3a	240	Geometry-terminology of points, lines, and planes	635			
728	P	B1d	233	Measure of length of & in basic figures				
729	B	B3c	240	Measure-Angles & Arcs	636			
730	P	B2	234	Measure-Circumference				
731	P	B3	237	Measure-Area ext. to trapozoid, circle, sphere	637			
732	B	B5b	242	Measure-Volume ext. to sphere and cylinder	656			
733	b	B8	175	Measure-dry, liquid & weight related to volume & capacity	617			
				Metric System-Length, area, volume, cap. weight				

* Testing

+ Proficiency

Snake River Dist. 52

Skill No.	State Clr.	Math Guide Scope	Page	Math Concepts	Ref.	Name	Score	Comments
						Date Comp.		
734	B	B8	242	Metric-related to English				
*Recall 7-4								
735	Y	F	157	Pre-Algebra-Positive & Neg. No.	659			
736	Y	E2	223	Pre-Algebra-Add. of Pos. & Neg.	660			
737	Y	E2	223	Pre-Algebra-Subt. of Pos. & Neg. No.	661			
738	Y	E3	224	Pre-Algebra-Mult. of Pos. & Neg. No.	662			
739	Y	E3	225	Pre-Algebra-Div. of Pos. & Neg.				
*Recall 7-5								
740	G	C1	229	Problem Solving (quest)				
741				Squares & square root(quest)				
742				Slide Rule I (quest from A.W Ind. material)				
743				Flow Chart I (quest from A.W Ind. packet)				
801				Proficiency Fractions & dec.	724			
802				Whole nos. Exponent & scientif notation, computation with exp.	710			
803				Bases other than 10				
804				Integers-Extended to Integers word problems	741			
805				Properties-applied to whole nos rational no. & integers	606			
806				Sets-extended to set builder notation	705			
807				Ratio & per cent-Use of in discount, commission, interest, taxes, etc.	728			
808				Irrationals. Finding square root by computation & table				
809				Irrationals-Meaning & simplification of	747			
*Recall 8-1								
810				Open				
811				Geometry-Parallel lines, transversals & l's	731			
812				Open				
813				Geometry-Kinds of l's & Δ 's				
814				Geometry-Congruency				
815				Geometry-Similar Δ 's				

* Testing

+ Proficiency

Snake River Dist. 52				Name			
Skill No.	State Clr.	Math Guide Scope Page	Math Concepts	Ref.	Date Comp.	Score	Comments
316			Measure-Perimeter, area & vol. extended to hexagonal prisms, cylinders & irregular figures	735			
317			Measure-Surface area extended to metric & all polygons	658			
318			Open				
319			Measure-Pythogorean Property				
*Recall 8-2							
320			Open				
321			Functions & Coordinate Graphing-ordered pairs				
322			Open				
323			Functions & Coordinate graphing				
324			Algebra-equations in one variable extended to graphing & compound conditions	746			
325			Algebra-Inequalities in 2 variable				
326			Algebra-systems of linear equations in 2 variables				
*Recall 8-3							
327			Statistics-frequency distributions & histograms				
328			Statistics-Measures of central tendency	610			
*Recall 8-4							
329			Algebra-reflexive symmetric & transitive properties				
330			Algebra-formulas				
331			Algebra-Meaning of & simplifying monomials & polynomials under operations				
332			Open				
333			Probability (quest)				
334			Trigonometry (quest)				
335			Complex #'s				
336			Slide rule II				
337			Flow Chart II				

* Testing

+ Proficiency

MATH STUDENT ROUTE SHEET - Rev'd. June, 1971

Name Lynae

Skill No. 208

Addition and subtraction-through 17

Date Started 10-15

Goal Date 10-20

The student will identify and name sums, differences, missing addends and missing operational signs in problems dealing with the basic facts up to and including 17.

Route No.	Pub* Code	Concept	Goal Date	Page	Assignment	Stu. Score	Teach. Score
1	52	Pre-test					
2	AW			87			
	AW			88			
	AW			97			
	AW			98	E.O.P.		
	AW			99			
	AW			100			
	AW			107			
	AW			108			
	AW			109			
	AW			110			
	AW			111			
	AW			112			
	AW			115			
	AW			116	E.O.P.		
3	52			1			
	Si			2			
	52			3			
	52			4			
	SF			5			
	SF			6			
4		Game: I'm Thinking Of					
5	52	How Many Hearts can you make?					
10	52	Post test					

*Note bibliography of code

DAILY CHECK SHEET

REVISION 10-70

Name Yamada

	8-24	8-25	8-26	8-27	8-30	8-31	9-1	9-2	9-3	9-4	9-5	9-6	9-7	9-8	9-9	9-10	9-11	9-12	9-13	9-14	9-15	9-16	9-17	9-18	9-19	9-20	9-21	9-22	9-23		
James B.	Pl. Test	201	201	Pre 201	Pre 201	-	202	-	-	-	Pre 202	-	-	PT 202	203	-	-	Pre 203	204	ab	-	-	-	-	-	-	-	-	-	-	
Merlin B.	"	210	210	210	210	P 210	-	-	-	ab	-	-	Pre 210	Pre 213	-	-	-	Pre 213	Pre 214	-	-	-	-	-	-	-	-	-	-	-	
Laurie D.	"	201	201	201	201	Pre 202	202	-	-	ab	-	-	-	-	-	-	-	203	-	-	-	-	-	-	-	-	-	-	-	-	
Becky E.	"	301	302	302	302	-	-	-	-	ab	-	-	-	Pre 302	R 302	-	-	303	-	RT 303	-	-	-	-	-	-	-	-	-	-	
Rickey E.	"	301	301	301	301	-	PT 301	-	-	Pre 301	-	-	-	-	PT 301	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Deena G.	"	301	301	301	301	-	-	-	-	Pre 301	302	-	-	-	PT 302	-	-	-	303	-	Pre 303	-	-	-	-	-	-	-	-	-	
Jolene H.	"	301	302	302	302	Pre 302	Pre 302	-	PT 302	303	ab	-	-	-	-	-	-	-	-	-	PT 303	PL 303	-	-	-	-	-	-	-	-	-
Kim H.	"	301	301	301	301	-	Post	-	-	ab	302	Pre	-	Pre 302	-	-	-	-	-	-	303	-	-	-	-	-	-	-	-	-	-
Lisa J.	"	301	301	301	301	-	-	-	-	PT 301	AR 301	-	-	Pre 302	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
David K.	"	301	301	301	301	-	-	-	-	302	Pre 302	-	-	-	303	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lance L.	"	201	201	202	202	Pre 202	Pre 202	-	-	Pre 202	Pre 202	Pre 202	Pre 202	Pre 202	Pre 202	-	-	Pre 202	Pre 202	Pre 202	Pre 202	Pre 202	Pre 202	Pre 202	Pre 202	Pre 202	Pre 202	Pre 202	Pre 202	Pre 202	Pre 202
Kent L.	"	301	301	301	301	-	-	-	-	PT 301	PT 301	Pre 301	Pre 301	Pre 301	Pre 301	-	-	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	
Leslie M.	"	301	301	301	301	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Roger N.	"	301	301	301	301	-	-	-	-	Pre 301	-	-	-	PT 301	302	ab	-	-	Pre 302	303	-	-	-	-	-	-	-	-	-	-	
Debra L.	"	301	301	301	301	PT 301	302	-	-	-	-	-	-	-	PT 302	303	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Michael P.	"	301	301	301	301	-	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301
Brian S.	"	301	301	301	301	-	-	-	-	-	-	-	-	PT 301	Pre 302	303	303	303	303	303	303	303	303	303	303	303	303	303	303	303	303
Lynae S.	"	301	301	301	301	-	-	-	-	Pre 301	Pre 301	-	-	-	PT 301	Pre 301	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jill V. O.	"	301	301	301	301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301	Pre 301
Darrell W.	"	301	301	301	301	-	-	-	-	PT 301	-	-	-	Pre 301	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cynthia W.	"	301	301	301	301	-	-	-	-	Pre 301	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bill W.	"	301	301	301	301	-	-	-	-	-	-	-	-	PT 301	-	ab	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leresa J.	"	301	301	301	301	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Key
 P. - Pre-test
 P.T. - Post tes
 R. - Recall
 K. - Keeping in touch
 - No progr
 Ab. - Absent

CURRICULUM CHANGE
THROUGH
NONGRADED INDIVIDUALIZATION

READING PROGRAM

I. Philosophy of Reading Program

Underlying the philosophy of the reading program is the recognition that reading is a thought process. Reading takes the child beyond the interpretation and meaning intended by the author and stimulates his own thinking processes. The final goal of a sound reading program is to develop a child to a point where he loves to read, where he seeks reading in solution to problems, where he uses reading to stimulate realistic thinking or reasoning, where he seeks pleasurable respite in imaginative fiction, and benefits from each experience in the process.

Learning to read is a very individualized experience. The task of learning to read is different for each child launching into the process -- as different as the personality and background of experience of each child is different. The child succeeds to the degree that the instructional program is built upon his previous learnings, capitalizing upon his strengths, his own language patterns and what he already knows about his world. These are the assets which each child brings to the experience of learning to read whether he is a beginner or in the fourth year of the nongraded program.

The starting point for teaching reading skills is of paramount importance. The contributions which each child brings to the process of learning to read are his knowledge of the world around him and his personal language patterns, whatever they may be. These are his assets, his strengths, and his foundations for new learning. The framework of the instructional program must be adjusted to the capabilities of each child, and within the realm of his understanding, rather than the canned experiences of Dick and Jane's world whose cultural environment may be foreign and very different from that of many children. Thus, the underprivileged, the gifted, the slow learner, the average child -- each enters the learning situation within the

security of his own experience. Success in learning to read is then measured by the only true dimension, the child, himself, and his experiences.

Current achievements and accomplishments become the doorway, or springboard, for new experiences, new vocabulary and progressive learning. The child's present learning cannot be allowed to set for all time the limits of what he can do or what he can become. The flexible instructional program which develops from the framework of his experience provides many opportunities for him to choose and to shape his own destiny through varied activities and an abundance of instructional materials. Skillful diagnosis and diagnostic teaching procedures aid teachers in identifying each child's learning style, his strengths and weaknesses in learning situations. This information is the basis for prescriptive programs used to reinforce each step in the learning sequence of reading. There are no preconceived advancement blocks or rigid formulas to prohibit a child from developing at a rate or in a direction which is different from his peers. There is time and space for each child to progress at a rate commensurate with his capabilities.

Team teaching with differentiated staff assignments provides a framework for sharing expertise, exchanging information about children and teaching materials and for organizing children according to need groups. More time for working individually with children can be provided through differentiated staff assignments without an increase in educational expenditures. Nongrading of children - the mixing of children from five years of age through 8 years of age - releases children from pre-conceived ideas that they must achieve specified levels in reading (and no higher) and allows them to progress in successive, successful steps through skill developing activities which are individualized according to each child's learning styles and needs. Many types of

resource materials are required in meeting the varied needs and interests of children in such a program. Specialized teaching packets are prepared to teach specific skills. Testing devices measure step-by-step progress through word recognition and other measurable skills.

The classroom environment emerging from the individualized reading program encourages each child to develop self-reliance and responsibility for learning. Pupils who are self-reliant and responsible are free to make mistakes, free to be creative, free to be curious, free to be different, free to struggle and to learn. They learn how to work in an atmosphere that is challenging rather than threatening. In this environment a certain amount of self-disciplining is required in order that freedom and learning be maintained.

The nongraded grouping of children in the Individualized Reading Program is flexible and open to change and improvement. By skillful observation of each child's performance and through honest searching for the best use of the assets of each child, assessment and evaluation information can be used as stepping stones for further learning. An adequate reading program which is individualized can be maintained for each child at all reading levels..

II. Outline of the Elements of the Individualized, Nongraded Reading Program

A. Pre-Reading Experiences

1. Development of positive attitudes and feelings toward self
2. Sensory-motor integration to develop body balance and physical skills
3. Visual discrimination in recognizing likenesses, differences and various relationships

4. Auditory discrimination using rhythms, rhyming, likenesses and differences in sounds.
5. Oral expression
 - a. Identification and/or correction of immature speech patterns
 - b. Individual language patterns the beginning point for reading
6. Becoming acquainted with the alphabet

B. Language Experience Approach to Reading

1. Reading a communication process
2. Experience a facilitator of oral language
3. Sight vocabulary evolves from child's dictated stories
4. Word recognition skills reinforced
5. Program paced to child's individual learning rate
6. Dictated story plan evolves into creative writing at higher levels

C. Expanding Reading Vocabulary - Basic Materials

1. Pre-test, teach, post-test procedures followed
2. Child's sight vocabulary from dictated stories extended
3. Word recognition taught through specially prepared materials
4. Basal reader materials, of several series, introduced
5. Various supplementary materials to reinforce skills used as needed to insure continued progress
6. Informational type of reading materials used
7. Periodicals of various ability levels used
8. An abundance of library books provided

D. Reading-Thinking Activities

1. Reading-thinking activities introduced as children gain confidence
2. Children learn to declare purposes for reading
3. Comprehension skills developed with narrative and informational materials.

E. Developing Independence in Reading

1. Mastery of basic reading skills assure independence
 - a. Reading for meaning - not word calling
 - b. Meaningful materials at level of understanding of pupils
 - c. Use of context clues-first technique applied in word recognition
 - d. Phonetic generalizations taught in context
 - e. Structural generalizations applied to word recognition within context
 - f. Substitution of consonants and vowels, blends and diacritical keys
2. Dictionary skills taught as an aid in word recognition

F. Reading for Enjoyment

1. Abundance of multivariied books provided for free reading
2. Time and space provided for reading for enjoyment
3. Opportunities provided for sharing
4. Self-selection, self-direction and self-evaluation skills contribute to enjoyment of reading

G. Versatility in Reading

1. Competence in basic skills
2. Competence in establishing purposes for reading
3. Competence in adjusting rate according to need
4. Practice through oral reading
5. Directed reading-thinking activities used to develop skill
6. Practice in study skills - skimming, scanning, in detecting important details

III. Description of the Nongraded, Individualized Reading Program.

A. Pre-Reading Experiences

A major objective of this program is to make each child feel that he is wanted, that he is important, and that he can do things. A positive attitude toward himself and his level of performance are considered the most important factors contributing toward his future success in school. Informal evaluations and diagnostic techniques indicate those children who are lacking in feelings of adequacy and security. The teacher then devises means of learning more about the child and the causes for his lack of security and adequacy. Instruction is adapted to his needs and competencies.

1. Sensory-motor Integration

Leading authorities of human development remind us that in educating the young child we should provide the experiences which parallel the developmental processes of that particular stage of growth, that intellectual development is one of continuous

transformation. Therefore, the reading program begins with physical involvement wherever possible. Experiences are the building blocks for the young child in processing information and relating ideas to others. Movement and verbalization are basic to the learning experiences of this level.

2. Visual Discrimination

Activities are provided to develop visual skills, in making the transition from distance seeing to near-point seeing, seeing objects in various positions or forms, figure-ground discrimination, position in space and spatial relations. Children can be helped to train their visual skills by training them to remember, making meaningful associations, using information, etc. Children are given experiences detecting similarities and differences, in sorting according to size or color, by purpose or destination, arranging according to relationship or adjustment. Children are also given experiences organizing things and ideas into units according to relationships, or types, kinds, etc., or species. These experiences help the child to deal more adequately with the physical world, also with the intellectual world of words and ideas, and to relate these ideas into language.

3. Auditory Discrimination

At the pre-reading level most children have developed the foundation for phonetic analysis training. They have learned much about auditory discrimination of words and many sounds. The school program begins with the children perceiving likenesses and differences in non-vocal sounds and hearing the sound of recurring rhyming words,

and contrasting them with words that do not rhyme. The children are taught that many words can begin with the same sound. Many activities are provided that permit frequent and varied repetition, to capture much rhythmic movement, alliteration and voice modulation to give breadth and interest in acquiring the skill of understanding how words are different.

4. Oral Expression

This phase of the program includes the recognition of immature speech patterns of some young children. Some youngsters will require speech correction therapy. Careless speech habits reflect inadequate auditory discrimination and thus indicate to the teacher the need for specific training in auditory discrimination. Activities are structured to teach correct sounding of initial consonants and consonant blends..

Facility in ability to express himself well orally is considered an index to the child's potential for learning to read. In this consideration the teacher evaluates the quality of ideas expressed, use of vocabulary, ability to express ideas and the mastery of sentence structure. The language patterns used by children of this age are basically the same as those he has been hearing. The language spoken varies according to socio-economic, ethnic and linguistic group characteristics of the geographical area he represents. The level of oral expression of the child indicates the point of beginning instruction in pre-reading experiences. The individuality of each child is recognized as he progresses into reading experiences.

B. Language Experience

Reading is taught as a communication process, as an aid in understanding and relating to others, not as a memorization process of parroting the words of Dick and Jane. Meaning is the important element of this program. The oral language of the individual child becomes the text for his beginning reading program. His vocabulary and concepts are the foundation of meaningful communication. What children say is written down in a dictated story which they in turn can read. The language of the pupil's experiences make up his individual sight vocabulary with which he launches into more formal reading. Subsequent skills are taught and paced at the rate at which each individual child can assimilate and use. The dictated story plan is continued until it levels off into creative writing activities.

C. Expanding Reading Vocabulary

By the time the pupil has dictated about twenty story accounts and learned the vocabulary of each, he is ready to expand into broader reading experiences. Pre-test, teach, post-test procedures are followed to insure individual progress through the sequence of skills. As the pupil's reading vocabulary grows, his reading instruction is expanded to include basal reading materials. Pre-primer and primer level stories of several different series are used to extend reading experiences, build confidence and to reinforce beginning reading skills. As the reading vocabulary approaches the first reader level the children are directed, individually and in small groups, into directed reading-thinking activities. Reading for information becomes a basic component of his reading experiences. Thinking, speaking, writing, reading are processes of communication and are fostered and nurtured as such, not as separate skills taught in isolation from one

another. Various supplementary materials are used to reinforce the basic reading skills. Word recognition training is provided through the use of various techniques and media of specially prepared packets of materials. Other children's stories, materials of several series of basal readers, library books, and periodicals provide ample opportunity for the child to read widely and to expand his reading skills.

D. Reading-Thinking Activities

As soon as the children of a small group are able to read preprimers they are ready to participate in directed reading-thinking activities. As children develop skill in this activity, individual children are guided into the individualized reading phase of the program. This is not to be confused with "round-robin" type of reading. The directed reading-thinking process guides the children in declaring purposes for reading; these will be self-declared purposes, not imposed purposes of the teacher, or of someone else. The teacher guides the children of a small group to think about the selection to be read, and to declare a purpose for reading, to speculate upon outcomes, to interpret events and to evaluate. The process develops open-mindedness, alertness, curiosity, and a responsibility for reading. Thus prepared for reading the child reasons while reading. He thinks to further his purpose for reading. He finds solutions to problems, weighs information and makes judgments. He extends ideas as he reads to satisfy his own purposes for reading. This technique provides ways of applying word recognition skills in functional ways.

E. Developing Independence in Reading

To become an independent reader the pupil must have become proficient

in the basic reading skills:

1. The pupil must always be reading for meaning.
2. The vocabulary of the context of the story or article must be at a meaningful level for the understanding of the pupil.
3. The pupil should become skilled in using context clues to aid him in recognizing new words. This technique is tried first in reading.
4. Using phonic generalizations is especially useful during the learning to read stage because the words being learned are already a part of the child's oral language vocabulary. Instruction in phonics should be done within the context in which the word is being used, not in isolation of meaning.
5. Structural generalizations of words are also useful to the child. Knowledge of the common affixes help the reader to deal with words already a part of his speaking-meaning vocabulary.
6. The ability to substitute consonant sounds, to recognize variations of vowel sounds, the ability to blend sounds, to recognize and to use diacritical keys are all useful in becoming an independent reader.

Dictionaries of various levels provide word-recognition helps for both pronunciation and meaning. Skills in use of the dictionary become more sophisticated as the child advances in school.

F. Reading for Enjoyment

One of the most valid tests of a sound reading program is the extent to which children will choose to read during their leisure time in .

preference to other activities. With a wide variety of enticing reading materials at children's independent reading levels available, with time to read and to share, children are encouraged to read just for fun. Reading for enjoyment is a very important phase of the individualized reading program. Self-selection is also a basic element, and multivarieted materials are essential for self-selection. In order for a student to make decisions about what materials to read, he must know why he is reading. Setting purposes for reading is a first step in developing independence in reading. Provision is made in the framework of the program in allowing time and space for children to read for enjoyment. Self-selection of books to read, self-direction of time, and self-evaluation of accomplishments are contributing factors in developing responsibility in reading and its subsequent enjoyment.

G. Versatility in Reading

The versatile reader is a competent and mature reader. This is the goal of all instructional reading programs. Pupils of all levels of reading, including the primary grades, are able to learn techniques which contribute to their becoming versatile readers. A versatile reader is one who adjusts his rate of reading according to his purpose for reading, and to the difficulty of the material to be read. Children of the primary grades have opportunities to develop this skill as they learn to set purposes for reading in the directed reading-thinking activity. Versatility is required as the young reader learns to use voice inflections and modification in reading orally to interpret the meaning of the author. Students of the upper elementary grades have greater opportunity to develop this skill as they survey a selection before reading, apply planned study

techniques to reading for meaning, skill, scan, and adjust rate according to his purpose for reading. These are skills the student learns as he progresses through the reading program.

IV. How the Individualized, Nongraded Reading Program Functions

Acknowledging that one's ability to read is essential in our modern society, the nongraded program is strongly oriented to reading and coincides with every individual's "right to read."

A. Pre-Reading Experiences

Pre-reading Readiness is introduced to the child through several facets that are given emphasis according to each child's needs.

Sensory-motor skills, visual discrimination skills, and auditory skills are taught along with a perceptual-training program. Frostig materials and ideas from a program developed by Don Applegate, Reading Specialist for the Snake River Center, are being utilized along with other resource materials.

Sensory-motor, visual discrimination and auditory skills have been sequenced and Skill-Building Packets have been made for each skill with options for varied learning routes.

Oral Expression is another important part of pre-reading readiness activities. Experience centered activities in which students bring interesting momentos, insects, pictures, etc., and tell about them, describe them, and discuss them are used to develop language adequacy. Showing pictures of farm animals, pets, cities, etc., and telling about them is another method used to develop oral expression skill. These activities

provide the content for dictated stories in the language experience approach to reading.

The Peabody Language Development kit is used as a vehicle to develop oral expression.

B. Language Experience Approach to Reading

The Language Experience Program is used with 5 and 6 year olds who are able to see relationships in pictures or events and express these ideas in adequate sentence patterns by talking, listening, writing, and reading.

In the beginning the language experience reading program is done as a group story activity in which all students have a common experience, then dictate their sentences to the teacher or aide in charge who writes it into a group story. After several students, or all students have responded, each student will read aloud his sentence, or as many sentences as he can. Another method is for all students to share a common experience and then work one to one with the teacher or aide writing as the student dictates his story. This becomes his personal story which he may illustrate and read to others.

One day is devoted to writing and illustrating, next day reading and entering new "learned" words into his own dictionary which is an alphabetized book and also into his word bank which is a set of alphabetized envelopes. The third or fourth day, the students re-read their stories and compose new sentences from their word bank. The stories are shared with their buddies during "share day."

The time spent for language experience varies according to students' motivation. In our program the time allotted runs between 20 to 30 minutes. In the ideal language-experience program the time block would stretch from 1 to 1½ hours with children involved in individual activities - some writing, some dictating, some composing sentences, some working with buddies, some with the teacher. As the child grows in skill and maturity, the language experience program becomes a creative writing experience. After the child dictates about 20 stories and learns the vocabulary of each, he is ready to start reading basal readers.

C. Expanding Reading Vocabulary

To further Expand the Reading Vocabulary, along with the language experience program, the students are placed in basal readers. Students all progress at an individualized rate in the basals. Every student conferences with his reading instructor or instructional aide twice a day. During these conferences he is evaluated for oral reading, comprehension of text, and word-attack skills. Before conferencing with his instructor, the student must read his story twice to one of his 7, 8, or 9 year old "buddies."

D. Programmed Reading

Students who have reached the 2/1 reading level and according to the judgment of the teacher will work best in this area are placed in Sullivan Programmed Reading which is another phase of the individualized reading program.

E. Individualized Reading

When the student demonstrates sufficient responsibility, he is placed in another area of the individualized reading program. This is a self-selection, self-pacing reading program. He chooses his own trade (library) books to read. Regardless of each student's reading placement (programmed or self-selection), every student spends approximately 5 minutes recording keeping in his book. Students may not change their plans once they have been made.

1. Choosing a book

He is responsible to choose books that he can read and he follows the "how to choose a book" standard steps:

- a. Find a book that is appealing
- b. Turn to the middle and read one page
- c. Miss 0-1 words - too easy
- d. Miss 5 or more words - too hard
- e. Miss 2-4 words - just right to read

2. Conferencing

These students are required to have two conferences a week with their reading instructor. During the conference period the instructor evaluates the student on his oral reading, comprehension, and word-attack skills. Individual records are kept on the students' word analysis skills and development of reading. Students who are not signed up for conferences read silently at their seats. The Silent Reading and conferencing period occupy approximately 20 minutes.

3. Skill Time

The next 20 minutes are set aside as Skill Time. During this time the students are grouped according to their needs as determined during the reading conference. This could mean grouping for a large needs group, small needs group, or on a one to one basis.

For this particular area the Word Analysis Reading Skills have been sequenced and packets have been made for the listed 200 skills. Every packet states the concept to be learned, the behavioral objective and includes the pre-test, at least 3 learning routes, and the post test.

4. Special Time

The next 20 minutes is set aside as Special Time. Here the children are responsible to select one out of 4 activities. This selection has been made during the planning time and recorded by each child in his record keeping book. During the special time, students prepare various ways of sharing books they have enjoyed reading. Before a sharing of a book is presented to the other students on Friday, each student must have practiced his presentation with a buddy and be evaluated by him.

Time set aside for each segment of the Reading Program is flexible.

F. Skill Development

To further evaluate students comprehension, every student in a reading program, whether age 5, 6, 7, or 8, works in a workbook and works individually at his own speed. Certain pages are handed in to be evaluated by the instructors. Other pages are corrected by the student himself.

Students who have completed their workbooks from the Readers Digest Skill Builders, S.K.A., Weekly Readers, and other similar booklets.

Students aged 7 to 8 are also placed in basal readers in small groups of up to 10 students for the purpose of developing interpretive skills and further evaluating comprehension skills. Basal readers are reviewed for their special purpose.

In the afternoon, we have U.S.S.R. (Uninterrupted Sustained Silent Reading). Performance in U.S.S.R. signals that the student is able to read by himself or for himself over long spans of print. His purpose in the silent reading time is to get as many of the important and significant ideas as he can through silent reading. It is a selective type activity. The U.S.S.R. time span has been extended from 3 minutes to 20 minutes since the beginning of the year.

G. Summary

There is a wide selection of books in the quad and all students are given the freedom to check books out on their own. This is in addition to the school library.

In this primary level of individualized reading program, students acquire the necessary skills for versatility in reading.

V. Summary

The primary objectives of the nongraded, individualized reading program are to identify the learning strengths of each child, structure a developmental program wherein he will be guided to work at his optimum level, paced to his own capacities for learning. Beginning reading evolves from the child's own

vocabulary and grows into the use of many commercially prepared materials. Multi-media materials, abundance of library books, basal reader materials from various companies, and books authored by the children provide the reading fare of the program. A skills program, which is a collection of the most appropriate materials available (sample of the bibliography is contained in this packet) provides breadth to the sequence of word recognition skills. The nongraded organization destroys preconceived ideas of "levels" and allows for time and space in which children interrelate in all of the communication skills. The student learns that reading serves many purposes. It is not only a tool for greater learning, but a means of great enjoyment.

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READING ACHIEVEMENT AGE

K.1 K.5 1.1 1.5 2.1 2.5 3.1 3.5 4.1 4.5 5.1

Intervention of *Step by Step*

DIRECTED READING ACTIVITY
COMPREHENSION SKILLS

PROGRAMMED

READING

INDIVIDUALIZED
READING

WILSON'S
PROGRAM

INDIVIDUALIZED WORD ANALYSIS SKILL PROGRAM
SUPPLEMENTAL PHASES

ELEMENTS OF PRESCRIPTIVE READING PROGRAMS - Chart 2

	K	1	2	3	4	5	6	7	8
Pre-Reading Readiness									
1. Sensory-motor Integration	I	E	-	-	-	-	-	-	-
2. Visual Discrimination	I	E	-	-	-	-	-	-	-
3. Auditory Discrimination	I	E	-	-	-	-	-	-	-
4. Oral Language Development	I	E	-	-	-	-	-	-	-
a. Speaking	E	-	-	-	-	-	-	-	-
b. Listening	I	-	-	-	-	-	-	-	-
Language Experience Approach to Reading									
1. Oral Language and Reading/Writing Stories	I	-	-	-	-	-	-	-	-
2. Reading-aloud	I	E	-	-	-	-	-	-	-
3. Reading-oral and silent	I	E	-	-	-	-	-	-	-
4. Sight Vocabulary	I	-	-	-	-	-	-	-	-
Basal Reader Materials									
1. Directed - reading-Thinking Activities	I	E	-	-	-	-	-	-	-
2. Comprehension Skills	I	-	-	-	-	-	-	-	-
3. Expanding Reading Vocabulary	I	E	-	-	-	-	-	-	-
4. Word Attack Skills	I	E	-	-	-	-	-	-	-
5. Versatility in Reading for Purpose	I	E	-	-	-	-	-	-	-
6. Study Skills	I	-	-	-	-	-	-	-	-
Individualized Reading - Reading Widely									
1. Conferencing	I	E	-	-	-	-	-	-	-
2. Sharing	I	-	-	-	-	-	-	-	-
3. Reading for Enjoyment	I	E	-	-	-	-	-	-	-
Supplementary Phases and Reinforcement									
1. Programmed Reading Materials	I	-	-	-	-	-	-	-	-
2. Reading Development Kits	I	E	-	-	-	-	-	-	-
3. Readers Digest Materials	I	-	-	-	-	-	-	-	-
4. Weekly Reader (and similar Pub.)	I	-	-	-	-	-	-	-	-
5. Specially Prepared Materials	I	-	-	-	-	-	-	-	-
6. Work-book-type Materials	I	-	-	-	-	-	-	-	-

Key: I = Introduce
 E = Extend training
 - = Continue development
 Re = Re-emphasized at a more sophisticated level

SCOPE AND SEQUENCE

Developed through Title III,
Project curriculum change through
nongraded individualization
Snake River District #52

K	1	2	3	4	5	6	7	8
1. Sensory-Motor Integration								
A. Visual Discrimination								
1. Identification of right and left, top and bottom								
2. Eye-hand coordination - copy simple shapes								
3. Name in front								
4. Identification of colors								
5. Observation of spatial relationships								
6. Identification of reference to color								
7. Identification of differences in form								
8. Identification of letter sounds and differences between other than pictures								
9. Perception of differences between letters								
10. Identification of differences in letters of uppercase and lowercase								
11. Identification of letter forms by shape capital and small								
12. Perception of letter forms and differences in words								
13. Identification of upper case letters with corresponding lowercase letters								
14. Identification between letters that are similar in form								
B. Auditory Discrimination								
1. Listening and identifying								
2. Recognizing and identifying								
3. Hearing, copying and identifying								
4. Hearing, copying and identifying								
5. Copying by dictation								
6. Supplying copy by dictation								
7. Dictating								
8. Listening to and hearing								
9. Hearing and identifying the								

1. Sensory-Motor Integration

A. Visual Discrimination

1. Identification of right and left, top and bottom
2. Eye-hand coordination - copy simple shapes
3. Name in front
 1. Identification of colors
 2. Observation of spatial relationships
 3. Identification of reference to color
 4. Identification of differences in form
 5. Identification of letter sounds and differences between other than pictures
 6. Perception of differences between letters
 7. Identification of differences in letters of uppercase and lowercase
 8. Identification of letter forms by shape capital and small
 9. Perception of letter forms and differences in words
 10. Identification of upper case letters with corresponding lowercase letters
 11. Identification between letters that are similar in form

B. Auditory Discrimination

1. Listening and identifying
2. Recognizing and identifying
3. Hearing, copying and identifying
4. Hearing, copying and identifying
5. Copying by dictation
6. Supplying copy by dictation
7. Dictating
8. Listening to and hearing
9. Hearing and identifying the

intended to be extended to maintain concept of sound

IV. Pronunciation Skills (cont.)

F. Diphthongs

1. Identification of sound and letter symbols for the vowel diphthongs OW, OU, OI, OY

	K	1	2	3	4	5	6	7	8
1. Identification of sound and letter symbols for the vowel diphthongs OW, OU, OI, OY									

V. Comprehension Skills

A. Listening

1. Ability to recognize five word categories (I-B-72)
2. Following directions (I-B-73)
3. Recall after listening (I-B-74)
4. Comprehending the main idea (I-B-75)

B. Interpreting Pictures

1. Identifying pictures (I-B-76)
2. Identifying pictures (I-B-77)
3. Identifying pictures (I-B-78)
4. Identifying pictures (I-B-79)
5. Identifying pictures (I-B-80)
6. Identifying pictures (I-B-81)
7. Identifying pictures (I-B-82)
8. Identifying pictures (I-B-83)
9. Identifying pictures (I-B-84)
10. Identifying pictures (I-B-85)
11. Identifying pictures (I-B-86)
12. Identifying pictures (I-B-87)
13. Identifying pictures (I-B-88)
14. Identifying pictures (I-B-89)
15. Identifying pictures (I-B-90)
16. Identifying pictures (I-B-91)
17. Identifying pictures (I-B-92)
18. Identifying pictures (I-B-93)
19. Identifying pictures (I-B-94)
20. Identifying pictures (I-B-95)
21. Identifying pictures (I-B-96)
22. Identifying pictures (I-B-97)
23. Identifying pictures (I-B-98)
24. Identifying pictures (I-B-99)
25. Identifying pictures (I-B-100)

VI. Interpretive Thinking Skills

A. Relating information to past experiences

- see III-A-3 1. Recognizing emotional attitudes in pictures
 V-B-3 2. Pupil indicates what conversation might take place in a picture
 V-B-4 3. Illustrating story and thought content

	K	1	2	3	4	5	6	7	8
I		E	E	-	-	-	-	-	-
II		E	E	-	-	-	-	-	-
III		E	E	-	-	-	-	-	-

VII. Meaning Acquisition Skills

A. Using context

1. Context clues using initial course texts
2. Use of context clues on word recognition, comprehension
3. Synonyms
4. Antonyms

	K	1	2	3	4	5	6	7	8
I		E	E	-	-	-	-	-	-
II		E	E	-	-	-	-	-	-
III		E	E	-	-	-	-	-	-

VIII. Information Locating Skills

A. Glossary

1. Use of glossary
2. Distinguishing between a dictionary and a glossary

I = introduce, E = extend, - = maintain concept of skill

	K	1	2	3	4	5	6	7	8
I									
II									
III									

VIII. Information Locating Skills (cont.)

F. Index

1. Index

K	1	2	3	4	5	6	7	8
			I	E	-			
			I	E	E	-		
			I	E	E	-		
			I	E	E	-		
			I	E	E	-	-	
			I	E	E	-	-	
			I	E	E	-	-	
			I	E	E	-	-	

G. Encyclopedias

1. Using the Encyclopedia index
2. Finding topics in an Encyclopedia
3. Using guide letters to locate information in the Encyclopedia

H. Pictorial and Graphic Material

1. Reading pictorial and graphic material

I. Thesaurus

1. Using the Thesaurus

J. Table of Contents

1. Using table of contents
2. Recognizing the title and author of a book

I = introduce, E = introduce, - = Maintain concept of skill

DIFFERENTIATED STAFFING

ROLE DESCRIPTIONS OF THE MORELAND NONGRADED DIFFERENTIATED TEAM

June 1971

The teaching team of the Moreland Nongraded Quad is organized as a differentiated staff. The team, during the first year of operation, was composed of a team leader, three teachers, an instructional intern, two instructional aides and a clerical aide.

DIFFERENTIATED STAFFING

Differentiated staffing is an outgrowth of team teaching which recognizes the diversity of teaching tasks, individual differences of staff members in their abilities and skills in functioning in the educational program, and sets forth an order in working relationships and decision making in the educational staff which manages a single group of students. The 100 students in the Moreland Nongraded Quad range in age from five to nine and are housed in a single, large open area called a quad. The children are heterogeneously grouped and the application of the curriculum is generally individualized or given to children in need groups according to the individual diagnosis and assessment of each child.

The staffing pattern plays a major role in the program. Differentiated staffing is a way to achieve efficiency and flexibility in the use of staff resources. People have been hired to perform such specialized tasks in the educational program as to plan and manage the educational program, assess the needs of children, and prescribe the materials, methods, and procedures for implementing the program to the satisfaction of each child's educational needs. Other people prepare instructional materials, administer tests, supervise children and assist in carrying out the instructional prescription. This allows a much broader range of manpower in the educational program than was previously possible.

Differentials in the salary are based on differences in degree of responsibility and the performance of specific roles. Differentiated staffing need cost no more than regular staffing. Those with greater skills and responsibility such as team leaders or teachers, are paid more and expected to perform efficiently and effectively in those roles and do so with accountability according to specific objectives. Those with less skills such as aides, have less responsibility but are expected to perform their roles according to performance criteria with accountability.

Another objective of differentiated staffing is to provide an effective training program where those who are developing skills can do so through watching and performing under the direction of an educational specialist. Arrangements in the nongraded program facilitate individual professional development for increased expertise and responsibility as functioning team members through operation of the intern program. An intern coming into such a team performs clerical and routine supervisory duties while learning the functioning responsibilities of instructional aides, teachers and team leader.

Children receive the benefits of having teachers with talent and ability who stay in the classroom rather than being moved up an administrative ladder to receive higher salaries when a promotion is in order. Children also benefit from having a more individualized program with more help and closer supervision.

Differentiated staffing fosters good teaching, teacher satisfaction, and a more effective use of human resources. With this system of staffing it is also easier to require accountability of each staff person because his role is spelled out in performance objectives against which his performance can be compared.

Following are general role descriptions of the Moreland Nongraded differentiated staff members.

Team Leader

The team leader is the instructional leader on the team. She keeps abreast of research into new methods, content and materials for instruction, and has line authority over other team members and is responsible for their performance. Her role involves management of classroom and responsibility for development of good team rapport. The team leader participates with the principal in making recommendations for employment and/or dismissal of team members, evaluates their performance and assigns specific roles to them. She is responsible for the team carrying out self-evaluations. The team leader is responsible for the development of curriculum, for evaluating its ongoing ability to meet children's individual needs, and for its revision. She is capable of organizing and conducting workshops for the purposes of curriculum development and/or personnel training.

The team leader is responsible for the assignment and management of interns and/or student teachers within the team. She participates with team members in evaluating intern performance.

The team leader is an acknowledged master teacher, learning engineer, and a skilled diagnostician. She has demonstrated ability to write Program Management Units and units for individualization of curriculum. The major part of her time is spent with children in assessment, conferencing and instructing. The team leader is responsible for the planning and coordinating of the educational program within the team and serves as a member of the Building Faculty Council which is responsible for total building planning and decision making. The team leader manages the appropriate planning and instructional activities according to student need and provides for space, time, material, and equipment utilization by the team in an advantageous manner. She is responsible for supervising and directing the requisitioning of materials, and manages their implementation and use.

She is responsible for directing the assessment of students, prescription of program according to each child's needs, for managing the individualized educational program within the team, for the maintenance of records which reflect the achievements of each child, and for evaluation of each child in the program. Much of this is done by teachers under the management of the team leader.

The team leader is also responsible for communicating needs of the educational program to the principal and coordinating with other educational resources utilized by the team. In conjunction with the Title III program, the team leader has the responsibility for visitors and description of the program to them.

Teacher

Because of the broad scope of the teacher's role in the differentiated staff, only general descriptions of role activities will be given at this time. The

teacher's role is described here in four general areas: (1) Diagnostician for learning and manager of individual student assessment, (2) Organizer, prescriber, and implementer of learning experiences, (3) Manager of the learning program and the physical environment, and (4) Communicator to students and to parents. Following is a listing of sample activities performed by the teacher in each of the above areas:

1. Diagnostician for learning and manager of individual student assessment
 - A. Assesses individual students to determine achievement levels and student needs.
 - B. Evaluates individual student progress in terms of objectives determined in prescription.
 - C. Observes children with peers on playground and other social situations.
 - D. Administers teacher made and standardized achievement tests. She also administers and makes judgements from such specialized tests as informal reading inventories.
 - E. Checks and evaluates student work.
 - F. Maintains group and individual records of students with whom she works.
 - G. Carries out teacher self-evaluations.

2. Organizer, prescriber, and implementer of learning experiences
 - A. Assists in development of curriculum objectives and materials.
 - B. Writes behavior objectives for each skill as an implementation of goals.
 - C. Writes learning packets which can be used for individualizing skill program.
 - D. Develops instructional methods within the framework of objectives.
 - E. Prescribes the educational program according to each child's individual needs as determined in the assessments and evaluations.
 - F. Applies curriculum to each individual student based on assessments and evaluations.
 - G. Instructs groups and individuals according to prescription, individually, in small group, or in large group.
 - H. Organizes students for individual or group instruction.
 - I. Each teacher is responsible for adequate planning to carry out program.

- J. Each teacher is responsible for the establishment of a positive relationship with each child.
 - K. Each teacher is specialized in an area of the curriculum or in child development and acts as a specialized advisor to the team in such areas.
 - L. Each teacher is responsible to the team leader for carrying out the program.
3. Manager of the learning program and physical environment
- A. Is responsible for classroom management.
 - B. Is responsible for carrying out school district policy.
 - C. Is responsible for communication with other team members in regular team meetings.
 - D. Is responsible for carrying out the program determined through team planning.
 - E. Regulates classroom environment by coordinating activities, disciplining students and arranging of learning areas.
4. Communicator to students and parents
- A. Communicates with students in individual conferences about setting of goals, about progress, for checking areas of assessment and evaluation, and to discuss any problems which arise.
 - B. Communicates with parents about each child's progress and problems, both academically and socially. This is done in regular conferences and intermittently as the need arises.

Instructional Aide

The basic role of the instructional aide is that of supervising, motivating, and tutoring children who are engaged in individualized seat work or small group work, under the direction of a teacher. The basic difference between the instructional aide and the teacher is that the instructional aide carries out instructional activities and supervision of children which is planned by the teacher. The instructional activities are based upon the assessment which is done by the teacher and coordinated in team meetings.

The instructional aide also checks papers, keeps records updated, supervises children on the playground, in the lunchroom and during bus loading.

The instructional aide is engaged in a training program that automatically teaches the skills utilized by the teacher to the aide through the working together, teacher instruction and aide emulation of her activities.

Following are some sample activities which indicate the support role which the instructional aide plays:

Conduct small group work on activities and help children individually under direction of teacher (this is the major function)

Preparation of bulletin boards

Preparation of instructional materials

Operation of audio-visual equipment

Supervision of children

Correction of papers

Record keeping, including attendance

Administer first aid

Locate reference material for students

Keep supplies on hand and organized for students

Attend and participate in planning meetings of the team

Clerical Aide

The clerical aide prepares instructional materials for use by students and teachers. This consists mainly of typing, operation of offset printing equipment and collating printed materials. She also has responsibility for preparation, organization and mailing of dissemination materials.

During the individualized math and reading programs, the clerical aide assists in the distribution of materials to children, checking of tests, and management of materials used in the individualized program. She also has responsibility for the management of the learning resource center in the classroom.

The clerical aide is also involved in the supervision and management of children during bus loading and recess times.

PHILOSOPHY AND PROGRAM
OF THE
HANDICAPPED CHILD

It is the philosophy of the Snake River School District that the handicapped child has the same basic needs as other children. He is a child first, and second, a child with a handicap. We are working towards the fact that it's better to have the children associate with children of their own age and the longer a person remains in a special setting the less his chances are of leaving this environment. With this philosophy a continual effort is being made to integrate the child back into the regular classroom. In this case, a resource room is provided where the handicapped student may be taken for special help for one or two hours a day or as needed and remain in the regular class the rest of the day. The special education teacher will run the resource room and will also work with the regular teacher in developing an individual program of study for the handicapped student which will meet his specific needs. The social and academic program for each student will be the combined responsibility of the regular and special teachers.

Recently, we have come to understand that under appropriate learning conditions, students differ in the rate at which they can learn - not in the level to which they can achieve or in their basic capacity to learn. Studies in which these ideas have been applied to actual school subjects reveal that as many as 90 percent of the students can learn these school subjects up to the same standard that only the top 10 percent of students have been learning under usual conditions. (Bloom, 1972)

We are attempting to meet the individual needs of the handicapped student by arranging school conditions that will provide a conducive

environment for learning in the regular classroom. Remaining in the regular classroom to associate with other children and participating in regular school activities helps the handicapped child to become a functioning, participating member of the school community which should help to prepare them for a more complete and normal life.

Bloom, Benjamin S.; *Innocence in Education*
School Review May 1972, Vol, 80 #3, 333-351

The Multi-District Program for Handicapped Children was established between the five school districts in Bingham County Idaho. Shelley, Firth, Blackfoot, Snake River and Aberdeen school districts cooperate to provide supplementary educational services to schools, which would otherwise not be available to them. With a total of approximately 10,000 students enrolled, it is estimated there are approximately 1,200 students in the handicapped categories. The Snake River School District acts as agent district in this cooperative program. The program for handicapped students is built around a Multi-District staff: special education coordinator, psychologist, social worker, and secretary. The present district staff also coordinates services with four speech therapists and four school nurses who travel to the schools in Bingham County to provide special services. In addition the the health and speech and hearing services, seventeen special education teachers provide instructional services. Current approximations of students served in direct treatment are 500.

The goals of the Multi-District Program is to coordinate medical, intellectual, social, emotional, educational, and environmental services to the handicapped children in Bingham County.

The exceptional child by definition is that child who requires a modification of the regular school program to meet his/her unique needs. This is due to the mode or rate of learning of the exceptional child.

The needs are met when the regular teacher identifies a child with special problems or a problem that he is unable to solve at the time, will evaluate the child to determine where the deficits might be and where the child is in most need of help. After his evaluation a Referral is filled out and sent to the principal. The principal and the teacher evaluate the child, talk about the possibilities of placing or recommending that he be placed in the Multi-

District Program. Once the principal and the teacher are in agreement, the principal will then secure from the parents of the child, permission for testing and special services to be performed for the child. After receiving parental permission, the principal will forward the Referral Form and the Permission slip from the parent to the Title VI Staff. The child is then observed in the classroom by the psychologist to get an idea of the behavioral patterns which the child might display. Several samples of behavior and different settings are preferred. Once this information is obtained a psychological evaluation may be given to determine the child's present level of function and to assist in a better and more complete diagnosis of the child's problem. Once all the information has been gathered an Admissions and Discharge Staff Committee Meeting is called. The meeting is conducted to evaluate the child's strengths and weaknesses, and will include but not be restricted to (a) a certified school psychologist, psychological examiner or licensed psychologist; (b) the school or public health nurse; (c) a certified teacher of exceptional children; and (d) the school superintendent or his designated representative. During the Staffing a program is outlined which is felt will be most beneficial in remediating the deficit which the particular individual may have. A recommendation will be made to the superintendent as to further actions to be taken for the child. This recommendation may include leaving the child in the regular classroom, placing him in a special approved class of either learning disabilities or perceptual impairment or recommending the child be withdrawn from school and referred to another agency for evaluation and education. Behavioral Objectives are established for the child in the Staffing which will consist of the recommendations that should be followed by the regular teacher as well as the resource teacher. The Behavioral Objectives will be the main source of emphasis which the resource teacher will use in carrying out the education program for the individual during the coming year.

INTERN TRAINING PROGRAM

Snake River District #52
INTERN TRAINING PROGRAM GUIDELINES

The intern program is an on-the-job teacher training program which is not shorter than one semester in length. Its purpose is the professional training of teachers. It may be broadened to include the training of administrators, team leaders, special education teachers, instructional aides, and clerical aides.

Rationale

The reason for the intern program is to provide a meaningful on-the-job training program for educational leadership. One of the basic purposes for instituting the program is to increase the length of time the prospective teacher spends working with children under the tutorship of a professional teacher. Different people develop and learn to operate in a professional program at different speeds. It is felt that the semester length is probably the shortest time in which an adequate training program can be carried out. It is preferred that interns spend two semesters interning to receive a well rounded program. While most interns will be able to develop minimal basic competencies in one semester, it will be the prerogative of the principal and the college supervisor to jointly recommend, after conferring with the superintendent and cooperating teacher, that those who are inadequately prepared at the end of one semester spend additional time in the program. Option will be given any intern to continue a second semester, if desired.

Another basic provision of the intern training is to provide experience in at least two settings. Because the intern program is carried out in the Snake River School District only in team arrangements, the intern will be assigned to two different instructional teams. The intern will generally spend a longer block of time with the first team than the second because of the "orientation"

and "aide role" phases of the program. A longer block of time will also be scheduled the intern's first experience in the fall than in the spring because of the types of activities in which the school is engaged at those times.

Interning in the team teaching programs of the Snake River School District provides excellent opportunities for interns to view the roles of different people operating as a team unit to affect an educational program geared to the individual needs of children and to emulate practices which are desirable. Through provision for the intern to play roles as team members under the supervision of professionals, it is expected that greater proficiencies are learned than can be mastered without such experience. The interns will participate in directed teaching and role playing that will make them competent to function as independent professionals and provide opportunity for independent functioning with evaluation prior to leaving the training program.

Purposes

The basic purpose of the Intern Program operated through the joint efforts of Idaho State University and Snake River School District 52 is that of providing a developmental program leading to a level of teacher competency which is adequate for professional practice in Idaho schools. Primary consideration will be the development of the interns according to each one's individual needs.

In conjunction with the satisfying of the interns' developmental needs toward professional competency will be an improved instructional program. It is expected that through the teacher input of directing, evaluating, and re-directing the efforts of interns, that an on-going improvement will accrue to the benefit of children as well as to the increased professional competency of interns.

It is desirable that a trade-off will exist between the time the cooperating teachers spend with interns and the time the interns spend with children as they become more independent and proficient in their professional role as teacher.

It is expected that the intern program will accrue net benefits to children in the long run, not only through dealing directly with children, but also through net improvement in cooperating teacher competencies and the total improvement in the teaching profession from improved training practices.

GUIDELINES FOR INTERN PROGRAM

The purpose of these guidelines is to guide the involvement of the intern and assist the cooperating team by insuring that criteria are defined and behavioral objectives specified for the development of each intern toward the goal of teacher competence.

Role Development

Teacher competencies encompass performance in several areas, i.e., (1) the teacher must be able to prepare materials, (2) check papers, (3) develop materials, (4) manage student behavior, (5) assess student needs, (6) prescribe educational activities for student development according to individual needs which are consistent with student abilities, (7) evaluate student progress, (8) communicate to parents the developmental level of students and other activities--all within the framework of school district and building policy. In the team teaching framework and especially where differentiated staffing exists, the teacher does not perform in all areas of operation. Other staff members perform support roles to the educational program. It is felt that interns can develop teaching competencies more readily through performance of the various team member roles than studying them in an abstract way. Because the intern may select implement in a self-contained classroom and to insure competence and understanding in various roles, the following schedule will be followed for a student serving a single semester internship. The schedule will be flexible to provide for individual intern differences. The following times will be calendared, however, exceptions may be made upon recommendations of the building principal and/or the college supervisor.

INTERN SCHEDULE

<u>ROLE</u>	<u>FALL INTERNSHIP</u>	<u>SPRING INTERNSHIP</u>
Observation Role	3 days	3 days
Clerical Aide	6 days	6 days
Instructional Aide	4 weeks	4 weeks
Teacher (1st Team)	5 weeks	3 weeks
Orientation (2nd Team)	3 days	3 days
Teacher (2nd Team)	6 weeks	8 weeks

Scope of Training

During the internship each intern will actually play the roles of the various team members under the direction of the team leader and the cooperating teacher to which the intern is assigned. This is to acquaint the intern with the entire workings of the school and thus facilitate the intern learning to bring all facets of the school program into play in teaching children. A limited amount of time will also be spent reviewing roles of central office administrative staff, school board and school support service personnel such as custodians and cooks.

Each intern will be assigned to a cooperating teacher who has proven competencies in teaching to the satisfaction of the administration and college supervisor. No intern will be assigned until the cooperating teacher has demonstrated adequate teacher competencies. Not more than two interns will be assigned a cooperating teacher until past experience of the cooperating teacher with interns has shown that he/she might successfully direct the activities of two interns without bringing ill effects to children under his/her direction. At any time that the training program of the intern becomes ineffectual or that children's education is suffering because of the cooperating teacher's time in the intern program, consideration will be given to re-assignment of the intern. This will be done through the cooperative direction of the principal and the college supervisor, and only after they have conferred with the intern and

the the cooperating teacher. The direction of the intern through each step of the training program, the evaluation and re-direction at various points will be the combined responsibility of the cooperating teacher and college supervisor. The cooperating teacher should develop the attitude of friend and advisor to the intern and help and assist him/her to progress and accomplish personal goals. The cooperating teacher should direct the intern to other staff members in the school for help advice and direction as needed.

Time Requirements of Intern

The intern will be expected to work the same basic hours as the teacher. The intern will not, however, be assigned full days of instructional duties except during the latter part of the internship, (perhaps four weeks) when carrying out the role of a teacher and independently managing the classroom or group of students on a full day basis.

COMPETENCIES AND ROLE DESCRIPTIONS

Observation Role Activities

It is expected that each intern will complete the following activities while functioning in the observation role under the direction of the cooperating teacher.

1. Identify all areas of the building and become knowledgeable of school rules concerning such.
2. Identify playground areas and restrictions and rules pertaining to students in various areas.
3. Identify persons by name and role who are operating in the various positions in your team. Also identify all back-up or resource people outside your team by name and write a sentence describing each person's role.
4. Identify and give your opinion of the objectives of each area of instruction and its effect upon students.
5. Read the curriculum guides for each subject area available and write statements denoting differences between the written objectives and your opinion of what appeared to be the objectives.
6. Identify the range of student abilities by grade levels, the range of application of skills to students, and note discrepancies to discuss with team. (Refer to cumulative folders on children.)

7. Note the type of work each team member performs with students and list at least 10 operational objectives for each role identified on your team.
8. Explore and list "job satisfactions" for each role on your team.
9. Explore and list areas for improvement or problems which you feel exist in the educational program with the functioning of your team.
10. Identify and be able to call by name at least 5 students each hour.
11. Write a brief descriptive comment about each student who will be in your home room group.
12. Observe students as buses load and note the infraction of specific rules not being followed.
13. Visit another room and write a descriptive comparison of the differences and similarities between the two instructional teams.

Clerical Aide Role Activities

The following activities are to be carried out under the immediate supervision of the clerical aide responsible for the duties and under the general direction of the cooperating teacher.

1. Check papers for one home room for at least 4 consecutive days, summarize markings and mark appropriate records.
2. Supervise children in the lunch room, receive lunch tickets from children and follow up on lunch room problems for at least 2 days.
3. Supervise children on the playground during recesses and noon hour for at least 3 consecutive days.
4. Supervise the bus loading/unloading of children during two consecutive mornings.
5. Supervise the loading/unloading of children during two consecutive evenings.
6. Prepare worksheets for team. Operate spirit duplicator, thermofax, typewriter and at least one lettering set in preparation.
7. Prepare at least one spirit duplicator master--demonstrate typing, handwriting, and making of lines with use of typewriter on duplicator master and at least two methods of correcting errors.
8. Review with a teacher a system for filing and managing materials for operation of a classroom.
9. Discuss with librarian the use of materials in implementing educational program. This is to be done as a group of interns with the librarian. One intern is to take responsibility for the arrangement of a group discussion.

10. Describe in a brief paragraph the system used in the school in procurement of supplies.
11. Briefly describe the techniques and procedures which you feel would be most appropriate in handling a student on the playground who deliberately struck another student. Discuss these with a clerical aide and with a teacher and note any differences in philosophy and/or methods.
12. "Tour" the classroom, workroom and faculty reference area with a clerical aide or teacher and identify places where materials are kept and checkout procedures used.

Teacher Activities

The following activities are listed only as representative activities in the development of the intern and should not be interpreted as inclusive. It is the cooperating teacher's responsibility to give instructions in teaching methods and for developing rapport within the team on which the intern serves.

1. Establish a working rapport with the entire team of teachers in each area where given responsibility.
2. Maintain communications with cooperating teacher to receive guidance in carrying out instruction.
3. Establish solid rapport with the group of students directed by the intern.
4. The intern will implement the individualized educational program according to each child's needs by carrying out the following general types of activities:
 - A. Assess children's needs - educational, physical, social, self concept and attitude.
 - B. Plan and prescribe educational program to meet individual needs.
 - C. Locate and utilize adequate resource materials to implement prescription.
 - D. Conference with students about goals, assignments, and help student to accept and internalize assignment goals.
 - E. Organize and manage the learning experiences to help each child accomplish goals.
 - F. Evaluate students' work in terms of goals achieved and skills developed, then re-assess, prescribe and evaluate.
 - G. Maintain adequate records which indicate the performance of students in each area of instruction or activity and provide evaluative information upon which the prescription can be based.
 - H. Manage the classroom to efficiently carry out the learning program while helping students develop healthy self concepts and positive attitudes including an acceptable physical environment.
5. The intern will assist in conferencing with parents and communication of educational program to the public.

6. Participate in team conferences, staff planning meetings, conferences with principal, college supervisor and intern seminars with university staff.
7. Participate in self evaluation with other team members.
8. Learn the operation of individualization with multiple types of materials.
9. Learn operation and minimum maintenance requirements of: tape recorder, filmstrip and slide projector, listening station, record player--and actually use in teaching and self evaluation.
10. Develop and supervise the use of a student self instructional packet or unit.
11. Learn different techniques for the need-grouping of children.
12. The intern should have read the policy handbook and be prepared to discuss pertinent policies in the orientation meeting with the cooperating school district's administrative personnel.
13. The intern should develop a set of objectives which he desires to accomplish and these should be given to the cooperating teacher and coordinated with the college supervisor.

EVALUATION

Evaluation will be an ongoing part of the intern program. As the intern first commences to be involved in activities under the direction of a cooperating teacher, there will be a daily evaluation time at the end of each experience. As the intern becomes independent with the group and takes over the operation of a group by himself/herself, the evaluation will be no less often than weekly with the recommendation that it be done daily. In this evaluation, goals will be set for the intern to achieve and evaluation will be made of the previous goals met. The intern should participate in the setting of goals along with the teachers in the evaluation and should frequently be asked to self-evaluate how well he/she performed in the specific situation. The cooperating teacher shall be responsible for this phase of evaluation.

Team ground rules will be reviewed after the intern has been involved for about a week so that he/she becomes an integrated member of the team. During planning sessions the intern should be made to feel as an equal on the team as far as ideas are concerned, and frequently should be called upon to give

rationale for his/her ideas. They should also feel free to call upon teachers for the same thing.

Evaluation will be directed toward the intern's achievement of the goal of being adequately prepared to accept employment and to be accountable in the performance of the teacher role.

UNIVERSITY RESPONSIBILITY

It is recommended that the university accept the following responsibilities to implement the intern program.

1. Assign a college supervisor to the intern program who will have responsibility for carrying the university responsibilities and supervising the program.
2. Provide an outline syllabus for each class for which the intern may receive credit in the internship. Each class should have objectives specified in performance terms which are clear enough to measure the interns accomplishments. Required reading should be specified with additional references listed for each course. Evaluation and grading criteria should be determined for each course.
3. Advertisement and arrangements for intern involvement should be carried out by the director of student teaching. Information about the internship option should be provided to university education majors at a time which will allow for them to plan for an internship in their long range plans.
4. The university should provide for supervision and coordination in setting up objectives for interns by the cooperating school and the intern himself.
5. Arrangement should be made for seminars to be held at the cooperating school on a bi-weekly basis. A syllabus should be developed which defines seminar activities to be accomplished. Three-way conferences which include the college supervisor, interns and cooperating teacher should be held at least bi-monthly.
6. Provision should be made for interns to be involved in weekly seminars during the afternoons they are released from their cooperating school. The weekly seminars should be arranged so that the instructor for each course in which the intern is registered meets monthly with the interns on a group basis.
7. The ongoing internship should be supervised and evaluated by the university.
8. Final internship grades and recommendations by cooperating school and cooperating teachers should be correlated by the university advisor. All evaluation reports to the university should be routed through the college supervisor to the director of student teaching.

COOPERATING SCHOOL RESPONSIBILITIES

The cooperating school will assume the responsibility for interviewing candidates recommended by the university and enter into contract with the interns individually. Some specific responsibilities of the cooperating school's administration and cooperating teacher are listed below.

Administrative Functions

1. An orientation meeting will be held under the direction of the superintendent.
 - a. Philosophy of district and policy will be reviewed and discussed with interns.
 - b. The intern will be made aware of general operational function of school district policies.
 - c. The contract and benefits from the school district to the intern will be reviewed.
2. Principal's Role
 - a. The building orientation shall be conducted formally by the principal.
 - b. He will maintain liason between university and school.
 - c. He will maintain normal teacher-principal relationship with interns.

Cooperating Teacher Responsibility

1. Each intern or student teacher is to be assigned to one teacher who will be responsible for communication to the intern as to his/her role and assignment and for follow-up on completion of intern activities which are the responsibility of the cooperating school. This does not mean that the intern will be working with only one teacher, but that one teacher is responsible for the activities and is a person to whom the intern can turn for advice and help.
2. The first teaching experience of the intern will be in directing a group under the immediate direction of the teacher. Probably, it should involve the intern taking over an established group and carrying out an activity under the direction of the regular teacher with the regular teacher assisting. Later, as the intern becomes more accustomed to the handling of a group and independent in the handling of a group, the intern may operate by himself/herself in the direction of a group of students under the direction of the cooperating teacher.

METHODS FOR CHANGING INTERN TRAINING PROGRAM GUIDELINES

These guidelines may be changed at any time through mutual agreement of the Snake River School District and Idaho State University. Such changes or additions which may be initiated by either party will become part of these guidelines and attached herewith or be substituted in place of any part of these guidelines upon mutual agreement.

ACCEPTANCE OF INTERN TRAINING PROGRAM GUIDELINES

The parties whose signatures are affixed to this set of intern training program guidelines certify that they do represent the institutions named as parties to this agreement and that they do agree that the program will be directed and operated according to the criteria specified within this instrument. Idaho State University further accepts this instrument as setting forth the guidelines for an acceptable intern training program to be operated jointly between the two parties and to give university credit which is consistent with policies at Idaho State University for work successfully completed under this program.

DATED _____

“
SNAKE RIVER SCHOOL DISTRICT NO. 52

by _____
(Signature of Authorized Representative)

Superintendent of Schools
(Representative's Title)

AND

IDAHO STATE UNIVERSITY, COLLEGE OF EDUCATION

by _____
(Signature of Authorized Representative)

(Representative's Title)

AN ADMINISTRATOR'S OBSERVATION

AN ADMINISTRATOR'S OBSERVATION

Enclosed in this dissemination packet you will find detailed explanations of Individualized Reading, Individualized Math, Team Teaching, Differentiated Staffing, Internships, and Nongradedness. Questions often asked, especially by administrators visiting the nongraded program, relate to the cost of implementing this type of program. Other questions relate to building facilities and to In-Service training of staff as part of the process. Following are some observations on these subjects:

1. The types of programs mentioned above can be implemented at a comparable rate to a so called "traditional" type program. For example, it has been said that an individualized approach necessitates more staff members. The lower the student-adult ratio, the better opportunity for individualized instruction. Perhaps this could occur through a Differentiated Staffing Pattern. Let us illustrate:

Traditional Program (100 students)

4	Teachers @ \$7,877	\$31,508	
1	Aide	2,646	5 staff members
		<u>\$34,154</u>	

Differentiated Team (100 students)

1	Team Leader	\$ 9,000	
2	Teachers @ \$7877	15,754	6 staff members
2	Instructional Aides (3200)	6,400	
1	Clerical Aide	2,646	
		<u>\$33,800</u>	

By this example you see one teacher position eliminated with one teacher receiving additional reimbursement as head teacher. With the salary of one teacher, two Instructional Aides and one Clerical Aide could be hired.

Certainly there are many variations of Differentiated Staffing patterns in existence, but as we have explained a differentiated staffing of 6 adults can be implemented as a comparable cost to a traditional type program.

2. The question often arises as to the cost of Instructional Materials in a nongraded-Individualized Program. To look at this question realistically, it is interesting to take the cost you are presently spending on Textbooks and Supplies. This amount can be categorized as SOFTWARE items. With the inflationary cost of textbooks increasing to an average of \$7.00 per text, there could be many INDIVIDUALIZED PACKETS developed and material purchased that can be used in an individualized program.

THE EXPERIENCE OF THE SNAKE RIVER SCHOOL DISTRICT HAS BEEN THAT INDIVIDUALIZED MATERIALS CAN BE DEVELOPED AT A COMPARABLE COST TO PURCHASE OF TEXTBOOK MATERIALS.

3. What about the building facilities? There are as many individualized programs presently functioning in remodeled older buildings as there are in buildings designed for Nongraded Individualized Programs. Certainly, any new construction should be designed flexible enough to accommodate any type of curriculum implementation.
4. What about In-Service Training? It is important to adequately prepare teachers to teach in a Nongraded-Teaming Program. Two programs of the Snake River District will illustrate:
 1. School is dismissed at 2:00 P.M. each Monday. This gives teachers an opportunity to develop curriculum materials, and to plan together.
 2. One percent of the Maintenance and Operation Funds are allocated for Summer Workshops. During the 1972-73 school year this amounts to \$9,400. Many of the teachers make application to develop their educational programs during the summer. This amount is equivalent to approximately \$100 per teacher in the District.

It is realized that most districts are on extremely limited budgets, Snake River included. However, it is also our philosophy that perhaps there are many excellent innovations that can be implemented with presently existing funds.

We hope that anyone interested will visit our program. We welcome you and will do whatever necessary to make your visit interesting and informative.

Dr. Darrell K. Loosle, Superintendent