Produced for use by school administrators, supervisors, and teachers involved in the supplemental skill development program, this handbook provides assistance to school divisions who wish to implement it at the local level. The program is characterized by intensive individualized instruction in reading and mathematics to underachieving fifth and sixth graders. Minimal objectives, thirty for reading and thirty-five for mathematics, give direction to pupil learning. An integral part of the regular instructional program, this project also calls for parental involvement. A section describing the administration and supervision of the program at the state level addresses the role of the state department of education, action program strategies, criteria for selection of pupils in the program, and program objectives and funding. A similar section focusing on the implementation of the program at the school division level addresses the role of the local school division, the selection of pupils for program participation, the design and execution of the local program plan, the administration of a specified testing program, the expenditure of allocated funds, the instructional program, and record keeping. A section on the evaluation component notes that since the program has the dual purpose of accomplishing the objectives, and demonstrating the pilot effort aspect of the project, evaluation includes provisions for assessment of both program practices and pupil progress. Appendixes include objectives, sample class record sheets, and a plan form. (Author/AM)
Supplemental Skill Development Program Handbook
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INTRODUCTION

The purpose of the Handbook is to provide assistance to school divisions in implementing the Virginia Supplemental Skill Development Program at the local level. The Handbook has been produced for use by school administrators, supervisors, and teachers who are involved in the program.

Standards of Quality for public schools in Virginia for the 1974-76 biennium were adopted by the Board of Education on July 20, 1973 and enacted, with some revisions, by the 1974 General Assembly. Of the nine standards adopted, the fifth standard sets forth the requirement that each school division shall provide a supplementary program in reading and mathematics skill development for low-achieving students in grades K-6 acceptable to the Board of Education.

Additionally, certain performance objectives for State and local divisions to achieve were specified. The first performance objective for the State speaks to student achievement in reading and mathematics.

Whereas, the State Board of Education has set standards of quality for public schools in Virginia; and
Whereas, the General Assembly has revised these standards of quality; and
Whereas, it is desirable to designate certain objectives for State and local school divisions to achieve; now, therefore, be it
Resolved by the House of Delegates, the Senate concurring, That the State and local school divisions shall undertake to achieve the following objectives:
PERFORMANCE OBJECTIVE

STATE

The average achievement level of the student population in reading and mathematics as measured by standardized achievement tests should equal or exceed the average ability level of the student population as measured by scholastic aptitude tests.

The 1974 session of the Virginia General Assembly appropriated funds for the Supplemental Skill Development Program in reading and mathematics for a selected number of potentially capable fifth and sixth grade pupils who show a disparity between ability and achievement as indicated by scores on standardized tests. The Supplemental Skill Development Program is designed to assist in the achievement of the cited performance objective.
I. DESCRIPTION OF THE PROGRAM

The Virginia Supplemental Skill Development Program, mandated by the 1974 session of the Virginia General Assembly, is a demonstration project providing for intensive instruction in reading and mathematics for 17,210 low-achieving fifth grade pupils in the 1974-75 school year, and for 30,978 fifth and sixth grade pupils in the 1975-76 school year. Pupils achieving below the 50th percentile in reading or in reading and mathematics on the Science Research Associates Achievement Test are eligible for the program. The purpose of the program is to raise the reading and mathematics performance of underachieving pupils to a level consistent with measured ability.

The Legislation

Legislation mandating the skill development project establishes the parameters of the program and is found in the 1974 Appropriation Act passed by the General Assembly:

"an additional State payment for each pupil in ADM who is selected, in accordance with criteria of the Board of Education, for and who participates in a fifth- or sixth-grade supplemental skill development program in reading and mathematics, approved by the Department of Education. The payment for each year of the biennium shall be $300 per pupil so selected for and participating in this demonstration or pilot effort. The amount of reimbursement in 1974-75 for a school division shall not exceed $300 times the number of 1972-73 fourth-grade pupils who scored at or below the twelfth
percentile, national norm, on the Science Research Associates Achievement Tests of Reading (and/or criterion-referenced tests). The amount of reimbursement in 1975-76 for a school division shall not exceed $300 times the number of 1972-73 fourth graders who scored at or below the twelfth percentile, national norm, on the Science Research Associates Achievement Tests of Reading (and/or criterion-referenced tests) plus 80 percent of those who participated in the skill development program in the prior year.

For this payment the appropriation includes $5,163,000 for a maximum of 17,210 pupils (fifth-grade low achievers) in ADM for 1974-75 and $9,293,400 for a maximum of 30,978 pupils (fifth- and sixth-grade low achievers) in ADM for 1975-76."

Definition of Terms

The following terms are defined as applicable to the Supplemental Skill Development Program:

1. **Supplemental**
   "Supplemental" in the Supplemental Skill Development Program means in addition to the pupil's regular class instruction in reading and mathematics.

2. **Demonstration or pilot effort**
   A "demonstration or pilot effort" provides practical experiences for teachers, administrators, and pupils for carrying out a successful educational program.

3. **Low-achievers**
   "Low-achievers" selected for the program refer to those pupils scoring below the 50th percentile in the areas of reading and mathematics.

4. **Skill development**
   "Skill development" implies acquisition of, and
growth in, the basic skills of reading and mathematics.

5. Individualized instruction

"Individualized instruction" means instruction based on the unique learning needs of the pupil. Individualized instruction can imply instruction for a small group of pupils with common learning needs as well as instruction on a one-to-one basis.

Characteristics of the Supplemental Skill Development Program (SSDP)

The SSDP is an integral part of the regular school program. The SSDP is considered an integral part of the existing instructional program and should be concerned with an intensification of efforts for identified pupils in the areas of reading and mathematics.

The SSDP provides supplemental instruction. The SSDP requires instruction that is in addition to the regular classroom instruction.

The SSDP provides intensive instruction in reading and mathematics.

Selection into the program is based on low reading achievement. After a pupil has been selected on the basis of reading, and it is determined that he also exhibits a low mathematics test score, he should also be given help in mathematics. (See section on criteria for selection).
The SSDP provides individualized instruction. Instruction is directed to the assessed learning needs of each pupil.

The SSDP provides instruction on minimal objectives in reading and mathematics.

Minimal objectives, thirty for reading and thirty-five for mathematics, give direction to pupil learning. Instruction and practice are provided on the objectives the pupil has not mastered. (See lists of objectives in appendix).

The SSDP calls for the involvement of parents.

Parental involvement is a key aspect in the program. Keeping parents posted relative to the intent of the program and of the progress their children are making is of prime importance.
II. ADMINISTRATION AND SUPERVISION OF THE PROGRAM AT THE STATE LEVEL

The Role of the State Department of Education

Divisions within the State Department which are involved in the planning, implementation, and evaluation of the SSDP include the Division of Administration and Finance, the Division of Educational Research and Statistics, the Division of Elementary Education, and the Division of Program Evaluation. The responsibility for giving general direction and supervision to the program is assigned to the Division of Elementary Education.

Action Program Strategies

In order to give support to the SSDP, strategies were established for both the State and local school divisions. Strategies were set forth in the Action Program for achieving certain measurable objectives for 1974-76. Strategies for which the State Department of Education has been responsible include:

* Developing and distributing pupil selection criteria as approved by the Board of Education

* Developing and distributing guidelines for local school division program plans, and to review and approve submitted plans

* Distributing criterion-referenced tests for use in the program

* Conducting inservice conferences for local school personnel working in the program

* Visiting school divisions to observe, consult, and make recommendations concerning the program
*Preparing a report on the program for the State Board of Education.

Appropriate strategies were also delineated for local school divisions.

Criteria for Selection of Pupils in the Program

The legislation for the SSDP specifies that selection of pupils into the program should be in accordance with criteria of the State Board of Education. The criteria for the selection of fifth grade pupils for 1974-76, and for sixth grade pupils in 1975-76 as approved by the Board are:

Fifth Grade:

1. Only those fifth grade pupils who, as fourth graders, scored below the fiftieth percentile, national norm, on the Reading Test of the Science Research Associates Achievement Series may be considered for this demonstration project.

2. Priority will be given to those pupils having the greatest disparity between scholastic ability and reading achievement.

3. Forty percent of each school division's quota shall be selected from fifth grade pupils who, as fourth graders, scored at the twelfth percentile or below on the Reading Test of the Science Research Associates Achievement Series and reflect the greatest disparity between reading achievement and scholastic ability scores as shown by the Science Research Associates Short Test of Educational Ability (STEA).

4. Thirty percent of each school division's quota shall be selected from fifth grade pupils who, as fourth graders, scored from the thirteenth through the twenty-fifth percentile inclusive on the Reading Test of the Science Research Associates Achievement Series and reflect the greatest disparity between reading achievement and scholastic ability scores as shown by the Science Research Associates Short Test of Educational Ability (STEA).

5. Thirty percent of each school division's quota shall be selected from fifth grade pupils who, as fourth
graders, scored from twenty-sixth through forty-ninth percentile inclusive on the Reading Test of the Science Research Associates Achievement Series and reflect the greatest disparity between reading achievement and scholastic ability scores as shown by the Science Research Associates Short Test of Educational Ability (STEA).

6. If the distribution cannot be fully achieved under regulations 3, 4, and/or 5, the school division shall make the minimum adjustments necessary in the percentages to arrive at the allotted quota.

The selection shall be made from fifth grade pupils who, as fourth graders, scored below the twelfth percentile, from the thirteenth through the twenty-fifth percentile inclusive, and from the twenty-sixth through the forty-ninth percentile inclusive on the Reading Test for the Science Research Associates Achievement Series. The distribution should be made for the school division as a whole according to the following procedures:

Step 1: List those pupils who scored at the twelfth percentile or below on the SRA reading test.

Step 2: Beside each name place the reading percentile score and the educational ability percentile score as provided by the Science Research Associates Tests administered to the current fifth grade pupils when they were fourth graders.

Step 3: Subtract the reading percentile score from the educational ability percentile score in order to obtain point disparity.

Step 4: Arrange the list of pupils in rank order from the highest point disparity to the lowest.

Step 5: Select those pupils with the greatest disparity up to forty percent of the school division's quota and only those whose reading achievement percentile scores are less than educational ability percentile scores.

Step 6: Repeat this process for pupils whose reading
percentile scores fall between the thirteenth and twenty-fifth percentiles inclusive and the twenty-sixth and forty-ninth percentile inclusive.

The above procedure should be used to select the thirty-percent of pupils who scored from the thirteenth through the twenty-fifth percentile, and thirty-percent of pupils who scored from the twenty-sixth percentile through the forty-ninth percentile.

Pupils participating in the mathematics program are to be selected from those pupils selected for reading. Selection of pupils to participate in the mathematics program should be on the basis of a disparity between the SRA percentile score on mathematics and the STEA percentile score. The SRA percentile score on mathematics should not exceed the 49th percentile.

Sixth Grade:

Criteria for selection of sixth grade pupils for continuation in the Supplemental Skill Development Program for 1975-76 are based on provisions set forth in the 1974 Appropriation Act specifying that 80 percent of those who participated in the program in the prior year shall be continued.

For the purpose of this demonstration program, fifth grade pupils who participated in 1974-75 shall be identified as sixth graders in 1975-76, regardless of actual 1975-76 grade placement.
The procedures to be followed in selecting 80 percent of the division's 1974-75 fifth grade pupils who should be continued in the program in the sixth grade are:

Step 1: On a division-wide basis, rank pupils from the highest percentage of performance objectives mastered in reading to the lowest, on the Westinghouse Learning Corporation objective-referenced posttest, Form 2.

The lower 80% of a school division's fifth grade quota (participants in the program during the 1974-75 school year) shall be selected for continuation in the program at the sixth grade for the 1975-76 school year. The top 20% of the quota shall be dropped.

Step 2: In the event that two or more pupils have the same percentage mastery score, and a division's cut-off number (sixth grade quota) falls within the group of identical scores, the school division will determine which pupil(s) will be selected for continuation.

Example: School Division Q has a fifth grade quota of 100 pupils. Eighty percent, or 80 pupils, are to be continued as sixth graders in the program. Rank pupils from highest percentage score to lowest in reading. Identify lowest score as pupil #1, continuing to identify pupils to the 79th pupil. The school division is to decide which pupil will be the 80th child when two or more pupils have identical scores.

Pupils participating in the mathematics program are to be identified from those selected for continuation in the program for reading. Selection of pupils to participate in the mathematics program should be on the basis of: 1) participation in the mathematics program during 1974-75, and 2) a lack of mastery of one or more of the mathematics objectives.
Program Objectives

Thirty performance objectives in reading and 35 performance objectives in mathematics give direction to pupil instruction and form the basis for criterion-referenced tests which are used in the program. Two statewide committees compiled extensive lists of objectives which in turn were evaluated by approximately 250 educators throughout the State. The objectives comprising the finalized lists are considered minimal in number and critical to achievement in reading and mathematics. The lists of objectives are found in the appendix of the Handbook.

Program Funding

The Division of Administration and Finance is responsible for the disbursement of appropriated program funds. Reimbursement to local school divisions is made on the basis of $300 per pupil in the program. Pupil quotas and accompanying allocations are specified for all divisions. At the end of the school year local divisions must certify to the Division of Administration and Finance, State Department of Education, that allocated funds have been spent.

The State appropriation includes $5,163,000 for a maximum of 17,210 fifth grade pupils in ADM for 1974-75 and $9,293,400 for a maximum of 30,978 fifth and sixth grade pupils in ADM for 1975-76.
III. THE IMPLEMENTATION OF THE PROGRAM AT THE SCHOOL DIVISION LEVEL

The Role of the Local School Division

School divisions are assigned the responsibility for implementing the SSDP at the local level. Program legislation and Action Program strategies provide direction to the program and set forth the parameters for its implementation. Building upon the established constraints, school divisions are empowered to design and carry out local programs.

The local school division implements the program through four major aspects: 1) the selection of pupils for program participation, 2) the design and execution of the local program plan, 3) the administration of a specified testing program, and 4) the expenditure of allocated funds.

The selection of pupils for program participation

Criteria for selection of pupils for the program as approved by the Board of Education have been presented in the previous section of the Handbook and should be applied on a division-wide basis. In order that control may be maintained over variables pertaining to the selection of the target population, deviation from the specified selection procedures should be avoided.

It is important that each school division maintain its full quota of pupils during the school year. When a pupil leaves a school division another pupil should be
selected from a reserve list to fill the vacancy. A reserve list is created when all pupils eligible for the program cannot be selected due to limitations of the division's quota. When a pupil leaves one school division and enters another within the State, the receiving division should be alert to the fact that the pupil has been an SSDP participant. If the receiving division does not have its quota, the pupil may be included; however, if the division does have its quota, the pupil's name should be added to the reserve list for future consideration.

The design and execution of the local program plan

School divisions are permitted much latitude in designing and executing local program plans. School divisions are instructed to assess local resources and needs, and to design programs which observe the general guidelines established for the program at the State level. An Action Program strategy indicates that the local school division superintendent shall submit a plan for conducting the SSDP to the Division of Elementary Education, State Department of Education. A copy of the program plan form is found in the appendix of the Handbook.

The administration of a specified testing program

Tests to be administered in the program are described in the section on evaluation. In brief, criterion-referenced tests and standardized achievement and ability tests comprise the testing component of the program.
The criterion-referenced test administered at the beginning of the fifth grade provides vital assessment data regarding learning needs of pupils. If pupils are to learn the specified basic skills in reading and mathematics, it is important that the teacher know what the pupil has or has not learned to date. Instruction can proceed in an effective manner when both teacher and pupil know what is to be accomplished.

The expenditure of allocated funds

The local school division determines the way in which allocated funds are to be used. Monies may be expended for personnel, instructional materials and equipment, inservice training, consultative services, correction of pupil defects of vision and hearing, and additional items considered necessary to carry out the program. At the end of the school year the division superintendent must certify to the Division of Administration and Finance, State Department of Education, that allocated funds have been spent for the program.

The Instructional Program

The prime characteristics of the SSDP have been previously stated in the Handbook. The essential features of the program indicate the SSDP should be an integral part of the regular-school program and provide supplemental, individualized instruction for the selected pupils. The individualized instructional systems instituted by school divisions throughout the State vary greatly, de-
pending upon local resources and needs. In order to create an effective delivery system for the program, each school division should give consideration to the following questions:

1. What facilities will be used for the program?
2. What professional personnel will be used and how deployed?
3. What organizational patterns will be feasible and effective?
4. What instructional materials will be used?
5. How will pupils be scheduled into the program and for how long a period of time, per week?
6. How will test results be used?
7. What records of pupil progress will be maintained?
8. How can all elementary school instructional personnel be made cognizant of the program?

When decisions are finalized regarding the above mentioned aspects of the program, instruction can be planned and carried out. Integral to the SSDP is the concept of mastery learning. Criterion-referenced test results provide the teacher and pupil with information as to which objectives specified for the program the pupil has not learned. Individualized instruction based on assessed learning needs calls for strategies which provide instruction on nonmastered objectives. "Individualized instruction" does not necessarily imply a one-to-one teaching situation. When two or more pupils exhibit a common learning need, instruction can be given to a group of pupils more efficiently than to pupils singly.
In planning instruction, the teacher should be aware of the sequencing of skills that is needed for effective learning. Additionally, teachers should be aware of the pupil's rate of learning. Some pupils may display mastery of the specified objectives by the end of the fifth grade, whereas other pupils may require a second year in the program.

For additional assistance in creating an effective instructional program, teachers are referred to the two resource books, "Reading: Activities That Work" and "Mathematics: Activities That Work," which have been published for teachers who are working in the SSDP.

Record Keeping

It is necessary that teachers utilize a record keeping system for monitoring pupil progress. The teacher will find it helpful to transfer results from criterion-referenced test print-out sheets to an individual class record sheet. When a skill is mastered by a pupil, this fact is recorded on the progress sheet. Maintaining an ongoing record of progress will be helpful not only to the teacher currently working with the pupil, but will also assist the sixth grade teacher who is responsible for instruction during the second year of the program. It is suggested that transfer of pupil records from one school to another be facilitated as needed.

Sample class record sheets for reading and mathematics may be found in the appendix of the Handbook.
IV. EVALUATION

It has been pointed out that the purpose of the Supplemental Skill Development Program is two-fold in nature: 1) the accomplishment of the stated performance objective, and 2) the demonstration or pilot effort aspect of the project. The evaluation component of the SSDP, therefore, includes provisions for assessment of both program practices and pupil progress.

Program Evaluation

Evaluation is the process of gathering useful data on which to judge the merit of a program. The types of data to be included for the assessment of the SSDP are: 1) an analysis of pupil gains, as derived from pre- and posttest scores, at local and State levels; 2) an analysis of annual SSDP reports submitted by local school divisions; 3) data derived from observations and consultations by Division of Elementary Education staff personnel of local SSDP programs in action; and 4) other data deemed useful. Such data will assist in determining whether program goals have been achieved. Evaluation information will be used for decisions about the program.

Pupil Evaluation

Instruments for assessing pupil progress in the SSDP include norm- and criterion-referenced tests. A norm-referenced test provides information regarding a pupil's relative standing in comparison with others, whereas a criterion-referenced test provides information regarding
the level of performance a pupil will be expected to achieve in a specified area of learning.

The norm-referenced tests utilized for the SSDP are the SRA Achievement Tests, in reading and mathematics, and the Short Test of Educational Ability (STEA), by Science Research Associates.

The criterion-referenced tests utilized are the School Curriculum Objective Referenced Evaluation (SCORE) tests for reading and mathematics, designed by Westinghouse Learning Corporation especially for the Virginia Supplemental Skill Development Program. The criterion-referenced tests provide teachers with information indicating which of the 30 reading and 35 mathematics objectives pupils have or have not mastered. The tests present five items per State objective with four out of five correct responses indicating mastery of an objective. Computer print-out sheets provide information on the percentage of objectives mastered on a pupil, school, division, and State basis.

In addition to criterion-referenced tests, the norm-referenced tests selected for the program provide needed data. Norm-referenced tests administered in the fall of the fourth grade, serve as the basis for pupil selection for the program. On a ten percent random sampling basis, they serve as pre- and posttests at the fifth grade level. Pupils in the SSDP also participate in the State testing program at the sixth grade level.
The testing schedule is:

**SRA Achievement Test** and **STEA**, administered in
October, Fourth Grade
October, Sixth Grade

10% random sampling, **SRA Achievement Tests** in reading
and mathematics, administered in
September, Fifth Grade
May, Fifth Grade

**SCORE**
administered in
September, Fifth Grade, Form 1
May, Fifth Grade, Form 2
May, Sixth Grade, Form 3

The Division of Program Evaluation, State Department of Education, is assigned responsibility for the
SSDP testing program. Periodic memoranda and directives
to local school divisions give needed information regarding
the details of test administration and scoring. Sub-
sequently, the technicalities of the testing program are
not included in the Handbook.

It is not to be construed that only measurements in
the cognitive domain are to be used for the program.
During the initial year of the SSDP, several school di-
visions over the State used selected instruments to
determine pupil growth or change in the affective domain.
School divisions are encouraged to gather data on pupils,
not only relative to gains in cognitive skills for reading
and mathematics, but also on improvement of attitudes and
behavior.

**Dissemination of Program Results**

Of utmost importance is the dissemination of effective
practices which may be used to implement a skills program
in the classroom. Program results and successful practices will be disseminated to local divisions at the conclusion of the SSDP demonstration project.
V. APPENDIXES

A  SSDP Plan Form

B  Cross Index for Westinghouse Learning Corporation
   Test Information and State Minimal Objectives

C  Sample Class Record Sheets
APPENDIX A

PLAN FOR
SUPPLEMENTAL SKILL DEVELOPMENT PROGRAM
IN
READING AND MATHEMATICS
1975-76

PART I

School Division

Name and title of person with overall responsibility
for supervision and administration of the Supplemental Skill Development Program:

Name

Title

Number of pupils participating in the 1975-76 Supplemental Skill Development Program in the school division:

5th (SUPTS. MEMO. NO. 7452, dated April 1, 1975.)

6th

TABLE I

<table>
<thead>
<tr>
<th>FIFTH GRADE</th>
<th>SIXTH GRADE</th>
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<td><strong>Total No. of Pupils in Reading</strong> (Only)</td>
<td><strong>Total No. of Pupils in Both Reading &amp; Math</strong></td>
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*Name of School*

*Attach additional sheets if necessary.*
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<th>Total No. of Pupils in Both Reading &amp; Math</th>
<th>Total No. of Pupils in Reading (Only)</th>
<th>Total No. of Pupils in Both Reading &amp; Math</th>
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*Attach additional sheets if necessary.*
PART II*

A. State briefly the major objectives of the school division for the Supplemental Skill Development Program.

Reading:

Mathematics:

B. Indicate provisions made for having physical needs of participating pupils diagnosed, especially vision and hearing.

*Use additional pages if necessary.
C. Indicate procedures for individualizing instruction in the program, including the minimum amount of time to be utilized for individualized instruction per pupil, per week.

Reading:

Mathematics:
D. List major types of materials and equipment currently on hand that will be used in the program.

E. List major types of materials and equipment expected to be purchased for use in the Supplemental Skill Development Program.
F. Indicate evaluative instruments and procedures to be used in the program, other than State testing.

G. Indicate personnel to be utilized in the program:

**TABLE II**

DIVISION-WIDE PERSONNEL

<table>
<thead>
<tr>
<th>Name of Person</th>
<th>Position</th>
<th>Hrs. in Program*</th>
<th>Responsibility in Program</th>
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*Proposed hours spent per week in program.
INDIVIDUAL SCHOOL PERSONNEL**

TABLE III

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<tr>
<th>Name of School</th>
<th>Name of Person</th>
<th>Position</th>
<th>Grade</th>
<th>Hrs. in Program*</th>
<th>Responsibility in Program</th>
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*Proposed hours spent per week in program.
*Attach additional sheets, if necessary.
H. Indicate anticipated expenditures for Supplemental Skill Development Program for 1975-76:

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<th>Description</th>
<th>Amount</th>
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<td>Materials and Equipment</td>
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<td>Other Expenses (Specify)</td>
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TOTAL $________

Date_________________ School Division_________________

Superintendent's Signature_________________
APPENDIX B
SUPPLEMENTAL SKILL DEVELOPMENT PROGRAM
Reading Objectives
(with cross index for Westinghouse information)

Reading Objectives

11/25/74

Westinghouse Information
Obj. # | Booklet # | Test Item #
---|---|---
19 | 2 | 16, 17, 18
24, 25
20 | 2 | 19, 20, 21
22, 23
04 | 2 | 37, 38, 39
43, 61
31 | 2 | 44, 45, 46
47, 48
06 | 2 | 36, 67, 68
69, 70
02 | 2 | 26, 27, 28
29, 30
21 | 2 | 7, 8, 10
11, 13
01 | 1 | 40, 42, 52
53, 54
05 | 1 | 45, 46, 47
69, 70
17 | 1 | 63, 64, 65
66, 67

I. WORD ANALYSIS

A. The student will be able to look at a picture of an object which represents a word beginning with a consonant sound and select from a list of words the one beginning with that same sound.

B. The student will be able to recognize final consonants by choosing from a list of words the one that has the same final consonant as a given word that is represented by a picture.

C. The student will recognize the sound of a long vowel in a given written word by choosing from a list of words the one which has the same vowel sound as the given word.

D. The student will recognize the sound of a short vowel in a given written word by choosing from a list of words the one which has the same vowel sound as the given word.

E. The student will be able to recognize diphthongs by identifying the words in a given list that have the same diphthongs as the first word in the list.

F. The student will demonstrate a knowledge of letter symbols for consonant blends by choosing from a group of blends the one that begins the word which names a given picture.

G. The student will demonstrate a knowledge of consonant digraphs by choosing a digraph from the list which completes the name of the object represented by the picture.

H. The student will demonstrate the ability to identify symbols for medial consonant sounds by selecting from a list the words having the same medial consonant sounds as a word illustrated in a picture.

I. The student will demonstrate the ability to recognize silent consonants in a word by selecting each silent consonant in a given list of words.

J. The student will demonstrate the ability to recognize silent vowels in words by choosing the words that have silent vowels in a given group of words.

K. The student will be able to identify the singular nouns when given a set of singular and plural nouns.
Reading Objectives

L. The student will be able to identify the compound word in a list of words containing one compound word.

M. The student will demonstrate an understanding of root words by identifying the roots of given words to which beginnings or endings have been added.

N. The student will be able to select a word containing a prefix from a list of words.

O. The student will be able to select a word containing a suffix from a list of words.

P. The student will demonstrate a comprehension of contractions when presented given pairs of words by identifying contractions formed by combining each pair.

Q. The student will demonstrate an understanding of the use of the apostrophe showing possession by selecting the correct singular or plural possessive form to fill the blank in given sentences.

II. VOCABULARY

A. The student will demonstrate knowledge of the 220 most frequently used words (Dolch Basic Word List) by saying the given word.

B. The student will be able to match given words with their correct definitions.

C. The student will be able to demonstrate a comprehension of synonyms, antonyms, and homonyms by identifying words that have the same meaning, the opposite meaning, or words that have the same sound but which are spelled differently.

III. LITERAL COMPREHENSION

A. The student will demonstrate the ability to recall specifics about a story he has read by choosing the correct answers to questions based on the story.

B. The student will be able to identify from a list of responses the response which indicates that specific directions have been correctly followed.

C. The student will be able to arrange a series of statements about a given story into correct order.
Reading Objectives

I. INTERPRETATIVE COMPREHENSION
A. The student will demonstrate comprehension of the given definitions of a word having multiple meanings by choosing one which applies in a given sentence.
B. The student will be able to select the topic sentence of a given paragraph from a list of sentences.
C. The student will be able to identify the main idea in a reading selection.

II. CRITICAL COMPREHENSION
A. The student will be able to distinguish fact from fiction in particular sentences from a given story by categorizing them as such.
B. The student will be able to distinguish fact from opinion by categorizing given statements based on a passage the student has read.

III. STUDY SKILLS
A. The student will be able to locate the page number in a given table of contents that tells where to find information on a subject or where a story begins.
B. The student will be able to identify the correct alphabetical order of several words whose first and second letters are the same.
# Mathematics Objectives

## I. WHOLE NUMBERS

### A. Numeration

1. The student will be able to identify or write the correct place value for a digit in a given seven place number.

2. The student will be able to identify or write the relationship between two one- to four-place numbers, as greater than, less than, or equal to. (Note: Symbols are not used.)

### B. Operations

1. **Addition**
   - a. The student will be able to identify or write the sum of two one-place numbers.
   - b. The student will be able to solve a one- to four-place addition problem without regrouping.
   - c. The student will be able to solve a one- to four-place addition problem with regrouping.
   - d. The student will be able to identify or write the solution to a word problem which involves addition of one- to four-place whole numbers with regrouping.

2. **Subtraction**
   - a. The student will be able to identify or write the difference of a one- or two-place number and a one-place number where the two place number is less than 19.
   - b. The student will be able to solve a one-to four-place subtraction problem without regrouping.
   - c. The student will be able to solve a one-to four-place subtraction problem with regrouping.

### Westinghouse Information

<table>
<thead>
<tr>
<th>Obj. #</th>
<th>Booklet #</th>
<th>Test Item #</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>1</td>
<td>84, 87, 88</td>
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<td>84, 85</td>
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</table>
Mathematics Objectives

d. The student will be able to identify or write the solution to a word problem which involves subtraction of one- to four-whole numbers with regrouping.

3. Multiplication
   a. The student will be able to identify or write the product of any two one-place numbers.
   b. The student will be able to identify or write the product of a one-place factor times a two-, three-, or four-place factor without regrouping.
   c. The student will be able to identify or write the product of a two-place factor times a two-, three-, or four-place factor with regrouping.

4. Division
   a. The student will be able to divide a one- to four-place number by a one-place divisor and identify or write the quotient without a remainder.
   b. The student will be able to divide a one- to four-place number by a one-place divisor and identify or write the quotient with a remainder. (Note: The remainder to be expressed as $\frac{21}{6} \equiv 5$.

II. FRACTIONAL NUMBERS (FRACTIONAL FORM)

A. Numération
   1. The student will be able to identify or write the fraction which represents the shaded part of a diagram.

B. Operations
   1. Addition
      a. The student will be able to identify or write the sum of fractional numbers with like denominators. (Note: No simplification to be performed.)
      b. The student will be able to identify or write the sum of an addition problem of mixed numbers with like denominators. (Note: No simplification to be performed.)
Mathematics Objectives

MEASUREMENT

A. The student will be able to measure a given line segment and identify or write the measure as a mixed number. (Note: The given line segment will be 1 1/2, 2 1/2, 3 1/2, or 4 1/2 inches.)

B. The student will be able to measure a given line segment and identify or write the length to the nearest inch.

C. The student will be able to identify or write the area of a rectangular region by counting the number of square units in a given diagram.

D. The student will be able to identify or write the time to the nearest quarter hour, given the diagram of a clock showing time.

E. The student will be able to order any subset of the set: ounce, pint, quart, gallon in terms of volume.

F. The student will be able to identify or write the indicated temperature given a diagram of a thermometer.

VI. GRAPHING

A. Interpreting Graphs

1. The student will be able to identify or write a specific fact, according to the information given on a simple bar graph.
2. Subtraction
   a. The student will be able to identify or write the difference in a given subtraction problem of like fractions less than one. (Note: No simplification to be performed.)
   b. The student will be able to identify or write the difference in a given subtraction problem of mixed numbers with like denominators. (Note: No simplification to be performed.)

3. Multiplication
   a. The student will be able to identify or write the product of a whole number and a fractional number without simplifying the product. (Example: $6 \times \frac{3}{5} = \frac{18}{5}$.)
   b. The student will be able to identify or write the product of two fractional numbers less than one. (Note: No simplification to be performed.)

III. FRACTIONAL NUMBERS (DECIMAL FORM)

A. Operations
1. The student will be able to identify or write the sum of an addition problem of mixed numbers with decimal fractions of tenths or hundredths with regrouping.
2. The student will be able to identify or write the difference of a subtraction problem of mixed numbers with decimal fractions of tenths or hundredths with regrouping.
3. The student will be able to identify or write the solution to a word problem which involves multiplying an amount in dollars and cents (decimal notation) by a one-place factor.

IV. GEOMETRY

A. The student will be able to identify a specific plane figure in a set of plane figures including a line, a line segment, a ray, and/or an angle.
B. The student will be able to identify a given pair of lines as parallel, perpendicular, and/or intersecting.
C. The student will be able to identify a specific plane figure in a set of plane figures including a triangle, a square, a rectangle, a non-rectangular parallelogram, and/or a circle.
### Mathematics Class Record Sheet
Virginia Supplemental Skill Development Program

**Score - Form**

| State Obj. # | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I | III | III | III | III | IV | IV | IV | IV | V | V | V | V | V | V | VI |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|              | 1 | 2 | 1a| 1b| 1c| 1d| 2a| 2b| 2c| 2d| 3a| 3b| 3c| 4a| 4b| 1  | 1a| 1b| 2a| 2b| 3a| 3b| 1  | 2  | 3  | 1  | 1  | 1  | 1  | 1  | 1  |

*W.L.C. Obj. #: 02 17 14 15 16 12 18 19 20 13 03 21 04 05 06 01 07 22 08 09 26 23 24 25 27 28 11 29 30 31 32 10 33 34 35

**Pupils' Names**

*Westinghouse Learning Corporation Objective Number*