Content Analysis of the Florida State Assessment Test and the Duval County Essential Skills Test

Carol V. Slack
Content Analysis of the
Florida State Assessment Test
and the
Duval County Essential Skills Test

Carol V. Slack
May, 1978
EDU 690
Table of Contents

Chapter I
Introduction
Statement of the Problem
Definition of Terms

Chapter II
Review of Related Literature

Chapter III
Methodology

Chapter IV
Results
Communications and Mathematics Areas - 2nd and 3rd grades
Communications and Mathematics Areas - 4th and 5th grade
Communications and Mathematics Skills - 2nd and 3rd grades
Communications and Mathematics Skills - 4th and 5th grade

Chapter V
Implications and Significance

Bibliography

Appendix
Chapter I
Introduction

During the 1970's, the public has been demanding higher scores of its public school students; which would in turn produce individuals that could function in the world today. In essence, the public wants education to be answerable for the amount of money being spent on the public schools. As a result of these demands, the Educational Accountability Act of 1971 was mandated by our state lawmakers. The back-to-basics movement had begun in Florida.

The Educational Accountability Act required the establishment of statewide objectives which placed emphasis on the achievement of basic skills in reading, writing, and mathematics. As a result of the passage of the act, the state of Florida developed the Florida State Assessment Test which is "designed to measure whether or not each student tested possesses certain minimal skills in reading, writing, and arithmetic." (Cangelosi, 1976)

Realizing the Educational Accountability Act would require testing for the purpose of assessment of the objectives, Duval County developed the Essential Skills Tests (EST) in order to become the first county in Florida to require such a test. The purpose of the EST is similar to the State Assessment Test in that it "compares students to a level which is believed necessary for everyday living." (Cangelosi, 1976)
Statement of the Problem

As stated before, both the Florida State Assessment Test and the EST measure the achievement of students on minimal objectives in the areas of communications and mathematics. One might therefore ask the question, "Why is there a need to administer both tests?"

It would seem that both tests evaluate similar subject areas. This study is designed to explore this similarity of test items. Its purpose is to examine the relationship between the tests in terms of the test items. It is assumed that if there is a high degree of semblance between test items, there may not be a need for the administration of both tests. Specifically, the project is designed to analyze the contents of the State Assessment Test and the Essential Skills Test to determine if the test items measure different learnings or similar areas. This examination of items will be studied through a content analysis procedure to be developed by the author.
Definitions of Terms

Accountability- Schools being held responsible for student achievement

Back-to-basics education- An approach to education, usually a hierarchey of skills and objectives, in which learning stresses reading, writing, and mathematics

Comprehension- Understanding the author's meaning in printed language

Content Analysis- "... a method of studying and analyzing communications in a systematic, objective, and quantitative manner to measure variables." (Kerlinger, 1973)

Language- Skills concerning punctuation, alphabetical order, capitalization, and spelling

Measurement- That area of mathematics concerned with inches, centimeters, callenders, money, time, and graphs

Numeration- That area of mathematics concerned with the relationship of numbers

Objectives- Goals narrowed to specifics

Operations- The application of mathematical facts

Study Skills- Skills related to the use of reference materials

Vocabulary Skills- Skills related to word reading and identification

Word Analysis- Skills related to consonants, vowels, tense, blends, and digraphs
Chapter II
Public opinion of state funded education seems to be at an all time low. The public is demanding results from education. Nationwide procedures are being formulated for holding teachers responsible for the performance of students (Florida Accountability Plan, 1970). As a result of this demand from the public, many states and counties are adopting accountability acts which usually result in wide spread testing.

In Florida, the Educational Accountability Act of 1971 was mandated by our state lawmakers. As a result of the passage of this act, the state developed the Florida State Assessment Test. Realizing the 1971 mandate would require testing for the purpose of assessment of objectives, Duval County also developed a county wide test that would compare "... students to a level which is believed necessary for everyday living." (Cangelosi, 1970) The result of this development is the Duval County Essential Skills Tests, EST.

Educational accountability can be defined in many ways depending upon the expert cited. Some define accountability as the task of establishing goals and seeking results. Others include a cost analysis approach. Still others define accountability as informing the public about educational goals, results, and cost (Mohrens, 1973).
One question that can be raised is, "For what is education accountable?" A simple answer to this question is that it is accountable for pupils' achievement of educational goals. The argument then arises as to which goals are to be selected for the education of pupils. Some consider citizenship and self-concept more important than reading. Others consider reading the most valuable objective to be obtained (Mehrens, 1973).

According to experts, an accountability program should include several fundamental objectives. These include the setting of goals, the evaluating of achievement, the cost of implementing the program, interpreting and presenting the information to the public, and accepting the responsibility for the outcome (Mehrens, 1973).

The subject of accountability also raises another question, "Who is accountable?" The public as a whole tends to agree that teachers are the persons held responsible for students' achievements. Another view is held by some educators who define the persons accountable as parents, students, and teachers. Barro states that "... each participant in the educational process should be held responsible only for those educational outcomes that he can affect by his actions or decisions and only to the extent that he can affect them."
The 1970's have been called the decade of accountability (Mehrens, 1973). A back-to-basics program as part of an effort toward accountability provides a quick and easy answer to the question of educational accountability (Jordan, 1977).

According to George Gallup, 83% of the nation favors a back-to-basics education, which is thought of in terms of reading, writing, and mathematics (Gallup, 1977). In keeping with the nation's demands, states throughout the country are developing as assessment programs based on the basic subject areas. These tests measure skills in the areas of communications and mathematics. As a result of these tests, states and counties realize a need to develop a basic skills curriculum.

It is believed that with a set of listed minimal objectives, a basic program can be easily established for all grade levels (Jordan, 1977). Eliminating anything controversial and streamlining the curriculum so as to eliminate "frills", a basic program would seem to cost less to operate than a traditional one, which may be one reason that a core curriculum based on reading, writing, and mathematics appeals so much to the public (Hechinger, 1977 and Brodinsky, 1977).
The benefits of a basics program appeal to not only the public but also to educators. According to the recent Gallup poll, the biggest problem in education, as perceived by the general public, is the lack of discipline (1977). Bordinisky suggests that a back-to-basics program would restore the authority of the teacher in the classroom. This obviously appeals to teachers who are often heard complaining about the lack of order in the classroom. He also notes that with emphasis on reading, writing, and mathematics, this type of program would also presumably produce better readers and students skilled in computation. Better readers, students skilled in computation, and restored authority would increase teacher morale.

Along with curricular emphasis on basic education comes state-wide or district wide testing of the attainment of that education. In 1971, Florida began developing its assessment program with the formation of the State Assessment Test which is designed to measure students' achievement of minimal objectives. Duval County, during this same time period, was also developing a series of tests to be used at the district level.

The common curriculum is becoming a reality in the state of Florida through the use of the State Literacy Test. On the county level, interest in common curriculum is re-
voiced by Duval County's decision to use the same series of textbooks and materials in all elementary schools during the 1973-1979 school year. One can also cite the Florida University System's interest in developing a common curriculum by its decision to declare all state funded universities convert their course numbering process to one which is common to all.

There are several disadvantages to the establishment of state or district wide testing. One disadvantage is that of the growth of state power over local educational authority (Brodinsky, 1977). This implies that the state may take over the right to grant diplomas no matter what the district may require (Harlow, 1976). Another danger is that of teachers "teaching the test" (Brodinsky, 1977) instead of using educational objectives as a foundation for the educational program.

Accountability programs are a fairly new concept; the research of the effects on achievement outcome is incomplete. One research expert states that if "... all variables were taken into account over which school has no control, schools could probably end up accounting for as little as 50% difference between achievement outcomes." (Schrama, 1976)

Mohrens also reminds us of something which must be kept in mind: "We must remember that the purpose of accounta-
bility programs should not be punitive in nature, but rather should be accepted as a means of quality control." (1973, p. 622)

Research leads to the conclusion that education must move carefully in the direction of accountability so that students can reap the full benefits of a well rounded and carefully evaluated program, and not suffer from the effects of simplistic curriculum decision-making.
Chapter III
Methodology

The purpose of this study was to examine the relationship of the test items on the Florida State Assessment Test and the items on the Duval County Essential Skills Test, regarding content similarity. The process used in accomplishing this task was content analysis, "... a method of studying and analyzing communications in a systematic, objective, and quantitative manner to measure variables." (Kerlinger, 1973) Questions related to test items, the subject matter of items, and the number and types of skills were asked to determine the content relationship of the tests.

The State Assessment Test is administered to grades three, five, eight, and eleven during the fall of each year and the Essential Skills Test is given to grades Kindergarten through grade ten in the spring of each year. For the purpose of this study, the elementary levels of each test were analyzed. As a result of the scheduling of the tests, levels two and four of the Essential Skills Test and levels three and five of the State Assessment Test were examined.

An item tally was used as the first step in examining the contents of each test. Using the categories defined in each test, communications was divided into six areas—vocabulary, word analysis, comprehension, language, following directions, and study skills. Each area was then subdivided
into skills related to these areas.

Mathematics was examined in the same manner. The areas include numeration, measurement and operations. Related skills were assigned to these areas with various skills being further differentiated.

After the item tally was taken, a graph was used to show the relationship of test items according to area, skill, and number of items. Percentages were then calculated to show the relationship of the number of items to the total test and to each area. At this point it was obvious the hypothesis, a high degree of semblance, was incorrect. This difference can be seen in the percentage of items graphs (Chapter IV) and in the item tally (appendixes).
Chapter IV
Results

The purpose of this study was to determine if there were a high degree of similarity between test items on the Laurel County Essential Skills Test (EST) and the Florida State Assessment Test. The project was designed to analyze the contents of each test to determine if the test items measure different learnings or if they measure the same areas of learning. After studying the results of the item tally, percentage of items both within an area and compared to the total number of items on the test, it became evident the EST and the State Assessment Test did not exhibit a high degree of semblance in test items.

Using the percentage of items in relationship to the total test, in the area of comprehension, it was found 59% of the 2nd grade EST covered vocabulary skills while only 23% of the 3rd grade State Assessment covered these skills. The largest discrepancy was found in the areas of language skills, following directions, and study skills. In these skills areas, the State Assessment showed 35%, 9%, and 6% respectively; while the EST showed no items in all of these areas. The only skill in which the State Assessment Test showed no items was word analysis, EST 20%.

The difference in percentages did not seem as great in the area of mathematics. The 2nd grade EST showed 58% of the total test items in the area of numeration, 13% in the
area of measurement, 39\% in the area of operations, and 0\% in the area of problem solving. The 3rd grade State Assessment showed 33\% in numeration, 8\% in measurement, 39\% in operations, and 17\% in the area of problem solving.

The difference in mathematics showed up when looking at the percentage of items tested in the skills in each area. Measurement for example showed that the EST tested time and the State Assessment tested the concept of money. In the area of operations, 81\% of the items in this area tested for facts in addition and subtraction. The State Assessment tested only subtraction facts, 22\%.

For the purpose of comparison, an item tally and percentage graph was run on the 3rd grade EST, given in the spring of the year. When compared with the State Assessment Test, there seemed to be little similarity between test items. Comprehension on the 3rd grade EST showed an even testing of nine areas. The State Assessment tested four areas of comprehension. Again, as in the 2nd grade EST, there was no testing for language skills, following directions, or study skills as tested on the State Assessment.

In the area of mathematics, there was a marked difference in the skills tested. Measurement skills tested on the 3rd grade EST totaled five areas; the State Assessment tested one. Operations was again the dominant skill tested
on the EST.

The 4th grade EST and the 5th grade State Assessment were similar in the areas of vocabulary and comprehension. Again, word analysis was not tested on the State Assessment Test; and the areas of language skills, following directions, and study skills were not tested on the EST.

Mathematics in the area of operations showed the greatest degree of difference. Addition, subtraction, multiplication, and division facts controlled 92.3% of the items tested in the area of operations on the EST. The State Assessment tested no facts but did place emphasis on the application of facts.

Numeration also showed a great degree of difference. The EST placed emphasis on expanded notation and fractions, while the State Assessment tested fractions, reading numbers, rounding numbers, place value, and number order.

Measurement was similar in the skills of money and time, but no actual measurement was used on the State Assessment. No reading of a calendar or graph was found on the EST as it was on the State Assessment. Problem solving was tested on the State Assessment but was not on the EST.

Both the Florida State Assessment Test and the Essential Skills Test measure the achievement of students on minimal objectives in the areas of communications and mathe-
matics. The results of this study seem to imply a difference of opinion concerning which skills are to considered in the education of the students of Florida and Duval County.
Communications and Mathematics Areas
2nd gr. EST; 3rd gr. State Assessment; 3rd gr. EST

Communications and mathematics areas are shown in figures A and B. The percentages of total items were calculated to show the relationship of the number of items per area to the total number of test items.
Communication Areas
2nd gr. EST; 3rd gr. State Assessment; 3rd gr. EST

AREAS TESTED

Vocabulary
Word Analysis
Comprehension
Language
Following Directions
Study Skills

100 65 60 55 50 45 40 35 30 25 20 15 10 5 0

Percentage of Total Items

figure A

K.M.: 2nd gr. EST
3rd gr. State Assessment
3rd gr. EST
Mathematics Areas

2nd gr. EST: 3rd gr. State Assessment; 3rd gr. EST

AREAS TESTED

- Numeration
- Measurement
- Operations
- Problem Solving

100 65 60 55 50 45 40 35 30 25 20 15 10 5 0

Percentage of Total Items

Figure B

KEY: 2nd gr. EST
3rd gr. State Assessment
3rd gr. EST
Communication and Mathematics Areas

4th gr. EST; 5th gr. State Assessment

Communications and mathematics areas are shown in figures C and D. The percentages of the total items were calculated to show the relationship of the number of items per area to the total number of test items.
Communication Areas

4th gr. EST; 5th gr. State Assessment

AREAS TESTED

- Vocabulary
- Word Analysis
- Comprehension
- Language
- Spelling
- Following Directions
- Study Skills

Percentage of Total Items

figure C

KEY: 4th gr. EST
5th gr. State Assessment
Mathematics Areas

4th gr. EST; 5th gr. State Assessment

AREAS TESTED

- Numeration
- Measurement
- Operations
- Problem Solving

100 60 65 55 50 45 40 35 30 25 20 15 10 5 0

Percentage of Total Items

figure D

KEY: 4th gr. EST
      5th gr. State Assessment
Communication and Mathematics Skills

2nd gr. EST; 3rd gr. State Assessment; 3rd gr. EST

Communication and mathematics skills are shown in figures 1 and 2. The percentage of items were calculated to show the relationship of the number of items per sub-area to the total items per area. For example, comprehension on the third grade EST had a total of 55 items. Main idea, a sub-area of comprehension, shows five items to be 9.5% of the total number of items for that area.
COMMUNICATION SKILLS

(contd.)

SKILLS

- Outcome
- Reality
- Irrelevant Statement
- Content Clues
- Fact & Opinion
- Alphabetical Order
- Sentence Punctuation
- Capitalization
- Spelling
- Oral Directions
- Written Directions
- Table of Contents

Percentage of Items
Mathematics Skills

2nd gr. EST; 3rd gr. State Assessment; 3rd gr. EST

SKILLS
- Writing Numbers
- Smaller - Larger
- Number Identification
- Writing 1-100
- Ordination
- 100 X 10's
- Expanded Notation
- One-to-One
- Reading Number Words
- Fractions
- Time
- Money
- Days of Week
- Inches
- Centimeters
- 3, 1 digit addition
- 2, 2 digit addition
- 3, 2 digit addition
- 2, 3 digit addition
- Facts - addition
- 2 digit subtraction
- Facts - subtraction

KEY: 2nd gr. EST
- 3rd gr.

State Assessment
- 3rd gr.

Percentage of Items

figure 2
Mathematic Skills
(contd.)

Subtraction - word
Honey - word
Addition - word

Percentage of Items
Communication and Mathemetic Skills

4th gr. EST; 5th gr. State Assessment

Communication and mathematic skills for the fourth grade EST and the fifth grade State Assessment Test are presented in figures 3 and 4. The percentage of items were calculated to show the relationship of the number of items per sub-area to the total items per area. For example, word analysis on the fourth grade EST had a total of 81 items. Vowel identification, a sub-area of word analysis, shows ten items to be 12% of the total number of items for that area.
Communications Skills

4th gr. EST; 5th gr. State Assessment

<table>
<thead>
<tr>
<th>SKILLS</th>
<th>Percentage of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Words in Context</td>
<td></td>
</tr>
<tr>
<td>Homonyms</td>
<td></td>
</tr>
<tr>
<td>Contractions</td>
<td></td>
</tr>
<tr>
<td>Synonyms</td>
<td></td>
</tr>
<tr>
<td>Antonyms</td>
<td></td>
</tr>
<tr>
<td>Classification</td>
<td></td>
</tr>
<tr>
<td>Compound Words</td>
<td></td>
</tr>
<tr>
<td>Identify Written Words</td>
<td></td>
</tr>
<tr>
<td>Vowel Identification</td>
<td></td>
</tr>
<tr>
<td>Vowel Variants</td>
<td></td>
</tr>
<tr>
<td>Prefixes</td>
<td></td>
</tr>
<tr>
<td>Suffixes</td>
<td></td>
</tr>
<tr>
<td>Blends</td>
<td></td>
</tr>
<tr>
<td>Root Words</td>
<td></td>
</tr>
<tr>
<td>Finding Facts</td>
<td></td>
</tr>
<tr>
<td>Main Idea</td>
<td></td>
</tr>
<tr>
<td>Cause &amp; Effect</td>
<td></td>
</tr>
<tr>
<td>Prediction</td>
<td></td>
</tr>
<tr>
<td>Similarity context</td>
<td></td>
</tr>
<tr>
<td>Facts &amp; Opinion</td>
<td></td>
</tr>
<tr>
<td>Similar Sentences</td>
<td></td>
</tr>
<tr>
<td>Conclusion</td>
<td></td>
</tr>
<tr>
<td>Inference</td>
<td></td>
</tr>
</tbody>
</table>

KEY: 4th gr. EST
5th gr. State Assessment

figure 3
Mathematic Skills

4th gr. EST; 5th gr. State Assessment

SKILLS

- hun. + one
- + + = 156

Fractions
Reading Numbers
Rounding Numbers
Place Value
Number Order

Money
Time
Inches
Centimeters
Calendar
Graphs

Addition
4, 3 digit addition
Addition Fractions
Addition Facts
4 digit sub. regroup
4 digit sub. no regroup
3 digit subtractions
Fraction subtraction
Subtraction Facts
3 digit x 2 digit
2 digit x 1 digit

KEY: 4th gr. EST
5th gr. State Assessment

Percentage of Items

100 65 60 55 50 45 40 35 30 25 20 15 10 5 0

figure 4
Mathematic Skills
(contd.)

SKILLS
Multiplication Facts
3 digit / 1 digit
Division Facts
Addition word prob
Subtraction word prob
2 step word prob.

Percentage of Items
Chapter V
Implications and Significance

This study seems to indicate a conflict between Duval County and the state of Florida concerning the skills to be emphasized in the education of students. This conflict between county and state presents several problems.

One problem is the under emphasis of some skills. An example of this under emphasis is in the areas of language, following directions, and study skills. As these skills are not found on the Essential Skills Test, it could pose a conflict when planning lessons with emphasis placed on the instructional implications of the EST. Teachers could overlook the importance of the skills on the State Assessment while emphasizing those on the EST.

Another problem which is indicated is that of more testing. For the purpose of promotion, students must achieve a certain percentage on the state test. There is an indication of the need for retesting during the spring of the year, the same period of time as the administration of the EST and the Sanford Achievement Test. This retesting would be an added burden not only for teachers but also for pupils.

To relieve the problems of underemphasized skills and over testing, it would seem more appropriate to combine the skills found on the State Assessment Test and the Essential Skills Test. This combination would result in two tests based on similar skills; one test to be administered in the
Fall, a pre-test, and one administered in the spring, a post-test. In this way, teachers could utilize the results of the pre-test in planning a program for each student. The test administered during the spring would indicate how far the student had progressed during the year.

As a result of the pre-test - post-test arrangement, skills would be equal in value; there would be a better utilization of test results; and proof of progress would be available for the purpose of accountability. Most important, students would reap the benefits of a well rounded and carefully evaluated program, and not suffer from the effects of simplistic curriculum decision-making.
Bibliography
Bibliography


Cangulosi, Jim, Ph.D., "Achievement Testing: What Does It Mean?" The Florida Times-Union, January 22, 1978 C-4

-----, "Florida Accountability Plan Focuses on the Principal" Nations Schools, 86 (November, 1970) 54-55

Gallup, George H., "Ninth Annual Gallup Poll of the Public's Attitudes Toward the Public Schools," Phi Delta Kappan, 59 (September, 1977) 33-43

Hochinger, Fred M., "Forward to the Basics," Teacher, May/June, 1977 22-26


Hinehart, and Winston, 1973 chapter 18


Pope, Hargo, "Basic Skills Test Below Student Levels," *Florida Times Union and Journal*, November 13, 1977 D-17

Schramm, C. F., "Comparing Schools by Academic Achievement Scores," *Phi Delta Kappan*, 58 (December, 1976) 324-326

Sheils, Herrill and Frederick V. Boyd, "Making Diplomas Count" *Newsweek*, May 24, 1976 50

Sheils, Herrill and William Cook, "The Dropout Exam," *Newsweek*, October 27, 1975 66

Appendix
## I. VOCABULARY

**skills**

<table>
<thead>
<tr>
<th>A. Word Recognition</th>
<th>oral</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. list 1</td>
<td></td>
</tr>
<tr>
<td>2. list 2</td>
<td></td>
</tr>
</tbody>
</table>

| B. Synonyms         |      |
|                     |      |

| C. Antonyms         |      |
|                     |      |

| D. Contractions     |      |
|                     |      |

| E. Word Identification |      |
|                       |      |

| F. Compound Words    |      |
|                      |      |

| G. Multiple Meaning  |      |
|                      |      |

| H. Classification    |      |
|                      |      |

### number of items

0 1 2 3 4 5 6 7 8 9 10 20 30 40 50 60 70 80 90 91 92 93 94 95 96 97 98 99
1. WORD ANALYSIS

tills

<table>
<thead>
<tr>
<th>number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 1 2 3 4 5 6 7 8 9 10 15 20 25 30 35 40</td>
</tr>
</tbody>
</table>

- Consonants

  1. beginning

  2. ending

- Vowel Identification

- Word Tense

- Blends

- Root Words

- Diagraphs
II. COMPREHENSION

skills

number of items

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Main Idea</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Finding Facts (detail)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Cause &amp; Effect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Inference</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Comparison</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. Sequence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. Outcome</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. Reality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. Irrelevant Statements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>skills</td>
<td>number of items</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J. Content Clues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K. Fact &amp; Opinion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
IV. LANGUAGE

<table>
<thead>
<tr>
<th>skills</th>
<th>number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15</td>
</tr>
<tr>
<td>A. Alphabetical Order</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Sentence Punctuation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Capitalization</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Spelling</td>
<td></td>
</tr>
</tbody>
</table>

V. FOLLOWING DIRECTIONS

<table>
<thead>
<tr>
<th>skills</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Oral</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Written</td>
<td></td>
</tr>
</tbody>
</table>
VI. STUDY SKILLS

Table of Contents

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
</table>
I. NUMERATION skills

number of items

0 1 2 3 4 5 6 7 8 9 10 15 20 25 30 40 50 60 70 80 90 100

A. Writing Numbers

B. Smaller - Larger

C. Number Identification

D. Writing 1 - 100

E. Ordination

F. Writing 10-100 by 10's

G. Expanded Notation

H. One-to-One

I. Reading Number Words

J. Fractions
I. MEASUREMENT

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Money</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Days of the Week</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inches</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centimeters</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
III. OPERATIONS

skills

number of items

0 1 2 3 4 5 6 7 8 9 10 20 30 40 41 42 43 44 45 46 47 48 49 50

A. Addition

1. 3, 1 digit numbers

2. 2, 2 digit numbers

3. 3, 2 digit numbers

4. 2, 3 digit numbers

5. facts

B. Subtraction

1. 2 digit numbers

2. facts
IV. PROBLEM SOLVING

skills

<table>
<thead>
<tr>
<th>number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
</tr>
</tbody>
</table>

A. Addition

B. Subtraction

C. Money
4th Grade EST
5th Grade State Assessment
I. VOCABULARY
skills

<table>
<thead>
<tr>
<th>number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20</td>
</tr>
</tbody>
</table>

A. Words in Context

B. Homonyms

C. Contractions

D. Synonyms

E. Antonyms

F. Classification

G. Compound Words

H. Identify Written Word

KEY: 4th grade EST
5th grade State Assessment
<table>
<thead>
<tr>
<th>II. WORD ANALYSIS</th>
<th>number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>skills</td>
<td>0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28</td>
</tr>
<tr>
<td>A. Vowel</td>
<td></td>
</tr>
<tr>
<td>1. Identification</td>
<td></td>
</tr>
<tr>
<td>2. Variant Spelling</td>
<td></td>
</tr>
<tr>
<td>B. Prefixes</td>
<td></td>
</tr>
<tr>
<td>C. Suffixes</td>
<td></td>
</tr>
<tr>
<td>D. Blends</td>
<td></td>
</tr>
<tr>
<td>E. Root Words</td>
<td></td>
</tr>
</tbody>
</table>
III. COMPREHENSION

skills

number of items

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

A. Finding Facts

B. Main Idea

C. Cause & Effect

D. Prediction

E. Similarity - in content

F. Facts - Opinion

G. Sequence

H. Similar Sentence Meaning

I. Conclusion
J. Inference

K. Irrelevent Statement

skills

number of items

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
IV. LANGUAGE

Skills

A. Capitalization-proper

B. Word Tense

C. Alphabetical Order

D. Identification of Sentences

E. City, State, & Zip

F. Date Writing

Number of Items

0 1 2 3 4 5 6 7 8 9 10
V. SPELLING

skills number of items

0 1 2 3 4 5 6 7 8 9 10

A. Plural

B. Correct Spelling

VI. FOLLOWING DIRECTIONS

skills

A. Oral

B. Written

VII. STUDY SKILLS

skills

A. Using an Index
I. NUMERATION

skills

number of items

0 1 2 3 4 5 6 7 8 9 10

A. Expanded Notation

1. __hun. + __ones

2. 13½ = __+__+

B. Fractions

C. Reading Numbers

D. Rounding Numbers

E. Place Value

F. Number Order
II. MEASUREMENT

skills

number of items

A. Money

B. Time

C. Inches

D. Centimeters

E. Calendar

F. Graph
II. OPERATIONS

1. Addition
2. Fractions
3. Facts
4. Facts

A. Addition
B. Subtraction
C. Facts

1. 4 Digit Numbers
a. no regrouping
b. regrouping

2. 3 Digit Numbers

3. 2 Digit Numbers
number of items
0 1 2 3 4 5 6 7 8 9 10 20 30 40 41 42 43 44 45 46 47 48 49 50

C. Multiplication
1. 3 Digit X 2 Digit
2. 2 Digit X 1 Digit
3. Facts

D. Division
1. 3 Digit ÷ 1 Digit
2. Facts
IV. PROBLEM SOLVING

<table>
<thead>
<tr>
<th>skills</th>
<th>number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
</tr>
</tbody>
</table>

A. Addition

B. Subtraction

C. Two Step