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ABSTRACT

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An evaluation of elementary social studies textbooks indicates that eight factors are making textbooks harder to read. These factors are: (1) the reading level of the book and/or the range of reading levels within it; (2) long sentences and/or too many concepts within a sentence or paragraph; (3) the use of vague terms, technical vocabulary, and words that have several definitions; (4) too much content and/or textbook is too long; (5) new concepts in familiar material; (6) new content material which is unfamiliar to the teacher or student, especially content from anthropology, economics, political science, and sociology; (7) the need for materials or activities that are not covered in the textbook; and (8) the use of primary source material. Although there are various factors that make some of the newer textbooks harder to read, reading level is not as much of a problem as it used to be. A comparison of textbooks published before and after 1972 indicates that the average reading level and range of reading levels within the textbooks is decreasing. Results of readability tests for various commercially published texts are included. (Author/DE)

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BEWARE: ELEMENTARY SOCIAL STUDIES TEXTBOOKS

ARE GETTING HARDER TO READ

by

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The title suggests that the reading level of elementary social studies textbooks is getting higher which would mean that the students would have a harder time reading them. In fact, that was to be the main purpose of my study when I started the textbook evaluations reported below. I thought that in most cases the trend of the last ten years would continue.

Two major studies by Johnson published in 1970 and 1973 showed that there were two trends in the reading levels that were creating problems for elementary students. One was that the average reading level of a textbook was increasing. The other, and maybe more important, was that the range of reading levels within a textbook was increasing.

However, while evaluating textbooks and the literature for this study I found eight factors, including the reading level, that are making textbooks harder to read.

These are:

- 1. The reading level of the book and/or the range of reading levels within it.
- 2. Long sentences and/or too many concepts within a sentence or paragraph.
- 3. The use of vague terms, technical vocabulary, and words that have several definitions.
- 4. Too much content and/or too long a textbook.
- 5. New concepts in familiar material.
- New content material which is unfamiliar to the teacher or student, especially content from anthropology, economics, political science, and sociology.
- 7. The need for materials or activities that are not covered in the textbook.
- 8. The use of primary source material.

Let's take a quick look at factors 2 - 8, and then take an in-depth look at the first one.

 Long sentences and/or too many concepts within a sentence or paragraph can make a textbook harder to read.

Some texts include sentences that have colons, semi-colons, and commas separating several ands, but, therefores, and due to's; which can cause a reader to get confused, lose the train of thought, and/or just give up: but, this is not what is interfed, even though this is what most likely happened to you while reading this sentence.

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Material is easier to comprehend if the sentences are kept relatively short. The number of concepts within a sentence or paragraph should also be limited because too many can be confusing.

This does not mean that an elementary book has to read like the old stereotype first grade text, "Oh look! See Dick. See Spot." Authors should instead say what is necessary and keep things simple.

3.

The use of vague terms, technical vocabulary, and words that have several definitions can make a text harder to read.

In a text reviewed recently there is a sentence similar to this one.

Daniel Boone took a <u>large</u> group of people on a <u>long</u>, <u>hard</u> journey over the <u>high</u> mountains through a narrow gap that led into a broad, deep valley.

What is meant by:

- l. large?
 - 2. long and hard?
 - 3. high?
 - 4. narrow?
 - 5. broad and deep?

I don't know and I think the poor students won't know either.

4.

' Too much content and/or too long a text can make a text harder to read.

Social studies textbooks are usually considered to be the most highly condensed and overly factual textbooks on the market. There is a reason to include a great deal of information. However, there is a limit to how much a student can absorb as well as how much a teacher can teach.

Some companies have texts that look like college textbooks. Others have two, three, or four texts for one grade level.

It is true that the teacher should be selective in what is covered but some teachers and students get turned off by seeing too much material.

Remember how you felt the first time you picked up a book and there were no pictures? Where did all that print come from?

5.

New concepts in familiar material can make a text harder to read.

This is a point that many people do not consider. It refers to material in a text which is different from, or contrary to, what was taught before.

A trend is to include material that takes a more honest look at ourselves and our heroes, and/or includes material previously considered not suitable for elementary students.



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Some teachers do not like to consider people like Washington, Jefferson, and Lincoln as real human beings. This tends to make texts harder to teach which makes it harder to read if the teachers do not use the text as instructed in the teacher's guide.

Some concepts, such as the concept of death, were previously considered unappropriate for elementary students. If teachers do not feel comfortable with these concepts they will not teach them properly or skip them completely. If the teacher does not want to deal with a subject the students will not get the proper background or incentive to read the material.

6.

If teachers do not have background knowledge in a subject, such as economics, and anthropology, it can cause the text to be harder to read.

The introduction of disciplines other than history and geography into elementary social studies have introduced material that is unfamiliar to many elementary teachers.

Sum.

As in the previous point, students can find things hard to read if teachers do not provide the necessary background or motivation. Teachers will find it hard to provide the proper motivation or background if they do not have knowledge in the discipline. Even though most teachers want to do a good job, their lack of background can hinder the students learning. They may not be able to provide motivation, help find necessary resources, or be able to answer questions.

7. The need for extra materials, not in the textbook, can make a book harder to read.

Some textbooks are written which include the use of outside materials to make the learning activities complete. There are two conditions which can cause this factor to be importnat.

- 1. With the economic situation as it is, some school districts can not afford to purchase the extra materials which means the classroom materials are not complete.
- 2. The one person that society continually chooses to teach everything is the elementary school teacher. It sometimes becomes impossible for the teacher to include all the necessary outside materials and activities in all subject areas. Therefore, if the materials that are necessary to make the meaning complete are not available, the text will not be easy to comprehend, because the teacher will not have time to include it.

8. The use of primary source materials can make a textbook harder to read.

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Some primary source materials may be at a low readability level but difficult to read because:

The sentence structure may be unfamiliar or awkward.

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- 2. Some words may not be used in todays language. For example, most children have read or heard the following: "Four score and seven years ago our fathers brought forth on this continent a new nation conceived in liberty...." If students were to read that on their own they might read it as: "Four score (like in a game) our fathers (I wonder if that's like my dad or our priest) brought forth on this continent (that's America, I think) a new nation (I hope that is the U.S.) conceived (I wonder what that means)...."
- 3. Other primary sources are hard to read because they are published as they were written. For example, the following words appear in the Declaration of Independence

feparate (separate) caufes (causes) difsolved (dissolved) (to pass) (life)

Now let's return to the first point.

The reading level of a book and/or the range of reading levels within a book can make it hard to read.

This deals with the concept of readability.

There have been two major studies which have given in-depth reports of the readability levels of elementary social studies texts. The first by Johnson (1970) reported the reading levels of 41 texts published prior to 1967. They will be called the 1967 texts during the rest of this paper. (See Table I.)

The second, and most often quoted study, was published by Johnson and Vardian (1973). This was an extensive study involving 68 textbooks published by five major publishing houses prior to 1970. They will be called the 1970 texts during the rest of this paper. (See Table II.)

These two studies illustrated that not only the average reading level of these elementary textbooks was getting higher, but that the range of reading levels within a text was also increasing.

The present study involves the evaluation of various series of elementary social studies textbooks published since 1972. These texts will be called the 1975 texts during the rest of this paper. However, at times, these texts are broken into two groups.

As in the two previous evaluation studies, the Spache Readability Formula was used to evaluate the primary texts and the Dale-Chall Formula was used to evaluate the reading level of texts for grades 4, 5, and 6.

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A point has to be made here before going further. After the 1973 anticle in <u>The Reading Teacher</u>, I was employed by the Houghton Mifflin Company to help design and produce a new series of elementary social studies textbooks with a controlled vocabulary and the teaching of selected reading skills.

Shortly after that, I was asked to help revise the Silver Burdett series, but I had to refuse. However, I am aware that they revised the series. In fact, I have been informed that many of the elementary social studies series have been revised during the last three years.

I had planned to evaluate 12 series of textbooks for this study but as of now I have only evaluated five complete series and parts of two others. Those evaluated in their entirety are published by the Harcourt, Brace, Jovanovich; Houghton Mifflin; Noble and Noble; Silver Burdett; and Science Research Associates Companies. Allyn and Bacon and Ginn publish the partially evaluated series.

Twenty-five one-hundred word passages were randomly selected from each book. If a book was not large enough to allow for twentyfive samples, as in some primary textbooks, then almost every word was evaluated. (See Table III for results of this evaluation.)

Table IV shows the average reading levels of the texts evaluated in the three studies of 1967, 1970, and 1975. Please note that the texts evaluated in the 1975 study are listed two ways. The average reading level of all the texts is listed first and then the averages are listed by year of publication. An evaluation of the Table shows:

- The average reading levels in grades 3 6 increased between 1967 and 1970.
- 2. The average reading levels of all grades decreased between 1970 and 1975.
- 3. The average reading levels of the two series published in 1976 were lower than those in 1973 and 1974.

Table V shows the range of reading levels within texts at various grade levels for the three studies. The range of levels for the primary grades in the 1967 study are not available.

An evaluation of Table V shows:

- The range of reading levels in the primary grade texts in all three studies is not very wide. In fact they are very tight.
- 2. There is quite an increase in the range of texts in 1970 over those of 1967.

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3. The range of reading levels in the 1975 texts is much less than those of 1970.

4. There is a trend to have less of a range in the 1976 texts than those of 1973 and 1974.

Although there seems to be several things that tend to make some of the newer texts harder to read, this study points out that the reading level is not as much of a problem as it used to be.

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TABLE I

READABILITY LEVELS OF TEXTBOOKS PUBLISHED PRIOR TO	1967
Grades 1, 2, and 3	Spache
Allyn and Bacon Learning About Our Families, Gr. l Learning About Our Neighbors, Gr. 2 Learning About Our Country, Gr. 3	2.4 2.6 3.5
Benefic Press You Are Here, Gr. 1 You and the Neighborhood, Gr. 2 You and the Community, Gr. 3	1.9 2.6 3.4
D. C. Heath A New Hometown, Primer In School and Out, Gr. 1 Greenfield, U. S. A., Gr. 2 Communities At Work, Gr. 3	1.6 1.7 2.2 3.1
Rand McNally Which Way? Gr. 2 How Far? Gr. 2 Where? Gr. 2	2.8 3.3 3.3
Silver Burdett Pets Around the World, Gr. 1 Fun Around the World, Gr. 1 Homes Around the World, Gr. 1 Schools Around the World, Gr. 2 Ways of Our Land, Gr. 3 /	2.4 2.9 2.6 3.7 3.7

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TABLE I (Cont.)

Grades 4, 5, and 6	Dale-Chall	Range
<u>Allyn and Bacon</u> Discovering American History, Gr. 5 The New Worlds Foundation in The Old, Gr. 6	5 7	4 - 6 6 - 8
American Book Co. Our Journey Through Florida, Gr. 4 Under Freedom's Banner, Gr. 4 The Adventure of America, Gr. 5 Discovering Our World's History, Gr. 6	5 5 6 6	4 - 8 5 - 6 4 - 7 4 - 7
<u>Ginn and Co.</u> At Home Around the World, Gr. 4 The Unite d States, Canada, and Latin America, G Eurasia, Africa and Australia, Gr. 6	4 r.56 9	4 - 5 5 - 7 8 -10
Harper and Row The Story of Our Country	5	5 - 6
Laidlaw Great Names in American History, Gr. 4 Our Country, Gr. 5 World Background for American History	4 5 6	4 - 5 5 6 - 7
<u>Prentice Hall</u> The Earth and Our States, Gr. 4 The Americas, Gr. 5 Nations Around the Globe, Gr. 6	5 5 6	4 - 6 5 - 6 5 - 8
Silver Burdett Our Big World, Gr. 4 Learning to Look at Our World, Gr. 4 The American Continents, Gr. 5 The Changing New World, Gr. 5 Old World Lands, Gr.6 The Changing Ole World, Gr. 6	4 5 5 6 5 6	4 - 5 4 - 6 5 - 6 4 - 7 4 - 6 4 - 8
Steck Co. The Story of Florida	4	4 - 6



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TABI	Ε	II

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READABILITY LEVELS OF TEXTBOOKS PUBLISHED) IN 196	58 - 1970	
Allyn and Bacon		Spache	Range
Grade 1 Our Country		2.1	2.0-2.3
Vasco Balboa			2.1-2.3
Marco Polo		2.2	2.2-2.4
John Glenn		2.7	2.6-3.0
Hanry Hudson		2.3	2.0-2.6
Captain Cook		2.4	2.3-2.7
Robert E. Peary		2.1	1.9-2.6
Jacques Cousteau		2.4	
The Norsemen		2.2	2.1-2.3
DeSoto		2.2	
Magellan		2.1	-
Richard Byrd			1.9-2.6
Stanley & Livingston		2.5	2.3-2.7
		213	
Grade 2		2.5	2.4-2.9
Our Community			2.4-2.9
The Aborigines of Central Australia		2.8	2.5-3.2
The Eskimos of Northern Alaska		2.3	2.0-3.0
An Historical Community: Williamsburg, Va.	×.	2.3	2.3-3.2
An Apple-Growing Community: Yakima, Wash.		2.8	2.3-3.2
A Military Community: Fort Bragg, N. C.		2.9	2.5-3.2
A Forest Products Community: Crosset, Ark.		3.0	2.1-3.8
A Steel-Making Community: Pittsburg, Pa. A Rural Community: Webster City, Iowa		3.1	2.8-3.8
Grade 3			
The Making of Our America		2.8	2.3-3.6
The Metropolitan Community		3.0	2.5-3.4
			•
Grade 4		Dale-Chal	<u>I</u> <u>Range</u>
Agriculture: Man and the Land		4	4 - 8
Industry: Man and the Machine		5, - 6	4 - 8
Grade 5			
Ancient Civilization		5 - 6	4 - 6
Four World Views		5 - 6 ·	
Greek and Roman Civilization		5 - 6	4 - 8
Medieval Civilization		5 - 6	4 - 8
Grade 6			
The Age of Western Expansion		5 - 6	4 - 8
New World and Eurasian Cultures		5 - 6	4 - 8
The Challenge of Change		7 - 8	4 -12
The Interaction of Cultures		5 - 6	4 - 8

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TABLE II (Cont.)

	Create	Domas
Fiedler	Spache	Range
Grade 1		
Families Around the World	2.3	2.0-2.8
Grade 2	· .	
The Needs of Man	2.7	2.3-3.4
Grade 3		
The Earth and Man	3.3	2.5-4.1
	Dile Chall	D
Grade 4	Dale-Chall	Range
Great Ideas of Man	5 - 6	4 - 8
Crado F		
Grade 5 The South	5 - 6	4 - 8
The Northeast	7 - 8 5 - 6	5 -10
Midwest and Great Plains The West	5 - 6 5 - 6	5 - 8 4 - 8
ine west	0 - 0	4 – 0
Grade 6		
American <u>N</u> eighbors (one volume) Canada	7 - 8 7 - 8	4 - 12 5 - 12
Mexico	7 - 8	
Caribbean Lands	7 - 8	5 -12
South America	5 - 6	4 - 8
	Spache	Range
Field		
Grade 1 Working, Playing, Learning	1.6	1.5-1.7
working, riaying, heatning	1.0	1.5 1.7
Grade 2		1 7 0 4
People, Places, Products	2.0	1.7-2.4
Grade 3		
Towns and Cities	3.5	3.0-4.1
	Dale-Chall	Range
Grade 4		
Regions Around the World	5 - 6	4 - 8
Grade 5	*	
The American Adventure	7 - 8	4 - 8
The United States and Canada	5 - 6	4 - 9
Grade 6		
The Human Adventure	9 -10 5 - 6	7 -10 4 - 9
The Story of Latin America	5 - 6	4 - 9



TABLE II (Cont.)

	Spache	Range
Harcourt, Brace, Jovanovich		·
Grade 1 Blue	1.8	1.6-2.2
Grade 2 Red	2.2	1.9-2.6
Grade 3 Green	3.9	3.2-4.7
	Dale-Chall	Range
Grade 4 Orange	5 - 6	4 - 6
Grade 5 Purple	5 - 6	4 - 8
Grade 6 Brown	5 - 6	4 - 8
· · · · · · · · · · · · · · · · · · ·	Spache	Range
Laidlaw Grade l People at Home Families and Social Needs	2.4 2.3	2.1-2.7 2.0-2.7
Grade 2 Communities and Social Needs	2.5	2.1-3.0
Grade 3 Regions and Social Needs	3. 5	2.7-4.1
	Dale-Chall	Range
Grade 4 Using the Social Studies	5 - 6	4 - 6
Grade 5 The Social Studies and Our Country	5 <mark>- 6</mark>	4 - 6
Grade 6 The Social Studies and Our World	5 (- 6	4 - 8

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	Spache	Range
Allyn & Bacon (1974) (Incomplete Series)		
Grade 1	2.2	1.9-2.7
Our Country Balboa	2.2	1.9-2.5
John Glenn	2.1	2.6-3.0
Marco Polo	2.0	2.1-2.4
Columbus	2.0	1.9-2.2
Estevan	1.8	1.7-1.9
LSCEVAII	1.0	1.7 1.9
Grade 2		
Our Community	2.6	2.3-3.1
Australia and the Aborigines	2.7	2.2-3.0
Alaska and the Eskimos	2.5	2.1-3.1
A Historical Community: Williamsburg,		2.5-3.0
A Rural Community: Webster City, Iowa	2.7	2.2-3.2
	···· · ·	
Grade 3	3.2	2.7-4.2
The Making of Our America	3.3	2.3-4.2
The Metropolitan Community	.,, J • J	2.5-4.2
	Dale-Chall	Range
Grade 4		
Agricultúre: The Land and The People	5	4 - 6
Industry: People and the Machine	6	4 - 10
Grade 5		
The Human Adventure:		
The Age of Western Expansion	6	5 - 9
New World and Eurasian Cultures	7	4 - 11
The Challenge of Change	÷	5 - 10
The Interaction of Cultures	7	5 - 8
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TABLE III

READABILITY LEVELS OF TEXTBOOKS PUBLISHED IN 1973 - 1976

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		· · · · ·
Saionao Roppariato Accoriatos (C. R. R.) (1072)	Spache	Range
Science Research Associates (S. R. A.) (1973) Our Working World		
Grade 1		
Families	2.4	1.2-3.3
	2 • 7	1.2 5.5
Grade 2	•	
Neighborhoods	2.7	2.1-3.5
		• •
Grade 3	3	
Cities	3.4	2.7-4.7
	Dale-Chall	<u>Ranje</u>
Grade 4		
Regions of the United States	5	4 - 9
Grade 5		
American Way of Life	7	4 - 11
Grade 6		
Regions of the World	8	5 - 13
Regions of the world	O .) – T)
•	Spache	Range
Ginn (1975) (Incomplete Series)	, <u>opaone</u>	
Grade 1		
Grade 2		
Grade 3		
Our Towns and Cities	3.2	2.5-4.2
		_
Grade 4	Dale-Chall	Range
	А	A (
Our People	4	4 - 6
Grade 5	њ. ⁴	
Our Country	5	4 - 8
		0 -
Grade 6		
Our World	5	4 - 7
		- •

TABLE III (Cont.)

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TABLE III (Cont.)

Harcourt, Brace, Jovanovich (1975)	Spache	Range
Concepts and Values		
Grade 1 Blue	1.8	1.6-2.5
Grade 2 Red	1.9	1.7-2.5
Grade 3 Green	3.5	2.4-4.7
Grade 4	Dale-Chall	Range
Orange	4 ·	4 - 7
Grade 5	×	
Purple	6	4 - 11
Grade 6 Brown	6	4 - 8
	Crasha	Dongo
Noble and Noble (1974)	Spache	Range
Grade 1 You and Your Family	2.0	1.6-2.3
Grade 2 Groups and Communities	2.6	2.0-3.2
· ·		
Grade 3 Cities and Suburbs	3.3	1.9-4.9
	Dale-Chall	Range
Grade 4 People and the Land	5	4 - 8
Grade 5 Many Americans - One Nation	5	4 - 9
Grade 6 People and Cultu re	6	4 - 10

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ERIC Prelitient Provided by ERIC TABLE III (Cont.)

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	Spache	Range
Houghton Mifflin (1976) Windows On Our World Grade l		
Things We Do	1.9	1.7-2.0
Grade 2 The World Around Us	2.3	1.9-3.2
Grade 3 Who Are We?	2.7	1.4-3.6
Grade 4	Dale-Chall	Range
Planet Earth	4	· 4 – 7
Grade 5 The United States	4	4 - 6
Grade 6 The Way People Live	5	4 - 8
Silver Burdett (1976)	Spache	Range
Grade l Living in Families	2.0	1.6-2.8
Grade 2 Living in Communities	2.1	1.7-2.9
Grade 3 People in Regions People and Resources	. 3.1 2.9	2.3-3.9 2.2-3.7
	Dale-Chall	Range
Grade 4 People and Ideas	4	4 - 7
Grade 5 "People in the Americas	4	4 - 6
Grade 6 People and Change	5	4 - 9



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TABLE I	V
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AVERAGE REAL	AVERAGE READING LEVEL BY GRADE AND YEAR					
· ·	Spache Readability Levels for Grades 1, 2, and 3.					
Year	1	2	3			
1967 1970 1975* 1973 (S.R.A.) 1974 (A & B; N & N) 1975 (Ginn; Harcourt) 1976 (Houghton; Silver)	2.3 2.2 2.1 2.4 2.2 1.8 2.0	3.0 2.7 2.5 2.7 2.7 1.9 2.2	3.3 3.3 3.2 3.4 3.3 3.3 2.9			
		Dale-Chall Readability Levels for Grades 4, 5, and 6.	:			
Year	4	5	6			
1967 1970 1975* 1973 (S.R.A.) 1974 (A & B; N & N) 1975 (Ginn; Harcourt) 1976 (Houghton; Silver)	4 5 4.6 5 5.3 4.0 4.0	5 6 5.8 7.0 6.4 5.0 4.0	7 8 6.0 8.0 6.0 5.5 5.5			

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This is the average for all the texts in this study. The averages for each year of publication are listed below the 1975 number.

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TABLE V	1
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RANGE	OF READING L	EVELS WITHIN	TEXTS	
	Number of	Texts		Range
Grade 1				
1970	19			.8
1975*	11			• 6
1973	- 1			1.1
1974	7			.5
/ 1975	1			.9
1976	2			.9
Grade 2				
1970	13			. 8
1975*	10			1.0
1973	1	×		1.4
1974	. 6			.9
1975	1			• 6
1976	2			1.3
Grade 3				
1970	6			1.3
1975*	9			2.0
1973	1			2.0
1974				2.1
1975	2			1.9
1976	3 2 3			1.9
Grade 4				
1967	8			2.8
1970	6	١		4.3
1975*	8	,		4.8
1973	1			6.0
1974	3			6.0
1975	· 2			3.5
1976	3 2 2			4.0
Grade 5	* 			
1967	8			2.6
1970	12		`	4.8
197,5 *	10			5.7
1973	1			
1973				8.0
1974	5			5.8
	5 2 2			6.5
.1976	2			3.0
Grade 6		¢	•	
1967	7			3.4
1970	13			6.2
1975*	10			6.0
1973	1			9.0
1974				7.0
1975	5 2 2			4.5
	2			5.0
1976				

*This is the average for all the texts in this study. The averages for each year of publication are listed below the 1975 number. 17