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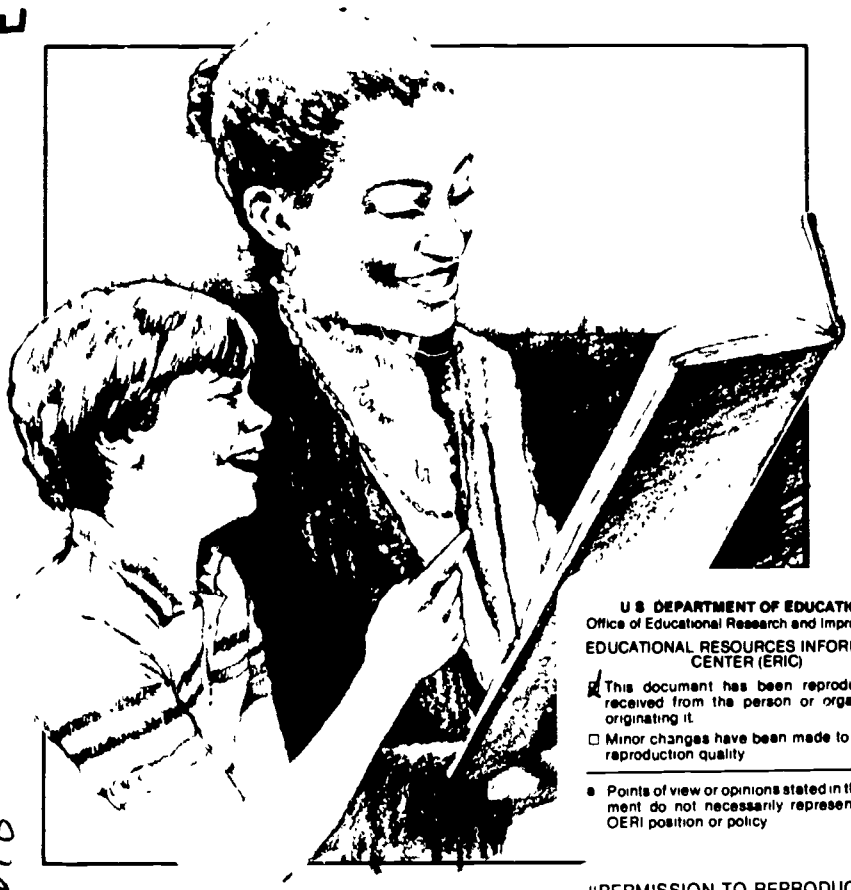
ABSTRACT

The 1986 and 1988 Reading Objectives Assessment of the National Assessment of Educational Progress (NAEP) reflects a consensus of opinion about the processes of reading for grades 4, 8, and 12. The objectives are based on an interpretation of reading as an interactive process between the reader, the reader's purposes and previous experiences, the material being read, and the context in which the reading occurs. The objectives outlined here are: (1) comprehending, including comprehending material read for a particular purpose; (2) extending comprehension, including analyzing interpreting and evaluating what has been read; (3) managing the reading experience, including using the structure and organization of the text, using readers' aids (e.g., heading, subheadings, graphs, charts, etc.), showing flexibility of reading style for different purposes, and selecting reading materials appropriate to the purpose; and (4) valuing reading, for enjoyment, to improve understanding and fulfill personal goals, to acquire knowledge and skills, and to appreciate the cultural role of written language. The booklet also includes a section of suggested instructional strategies for teaching reading; a description of NAEP's reading proficiency scale, developed in 1984; and a list of the individuals on the Learning Area Committees who developed the reading objectives for the 1986 and 1988 assessments. (JGL)

READING OBJECTIVES

1986 and 1988 ASSESSMENTS



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Reading objectives

1986 and 1988 Assessments

June 1987

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Contents

Introduction & overview

The National Assessment of Educational Progress (NAEP) began in 1969 as a large-scale data-collection effort to assess the state and progress of education in the United States. Since then, NAEP has gathered information about the performance of 9-, 13-, and 17-year-old students in many subject-matter areas, but most frequently in reading. The central attention accorded to reading reflects the fact that, although it has no substantive content of its own, reading proficiency as a process plays an important role in every subject-matter area.

The perennial questions of what to assess within a subject, and how to do so, are addressed by NAEP through a process of consensus. The charge given to NAEP is that assessment objectives should reflect the thinking of a wide variety of individuals—state and district curriculum specialists, teachers, school administrators, researchers, parents, and concerned citizens, officials and businesspeople. For each assessment, a Learning Area Committee is appointed to develop the initial set of measurement objectives. These objectives are then reviewed by outside consultants reflecting the various constituencies and revised as necessary. The members of the committee remain involved as the objectives move through the last two steps. While objectives defined from such a consensual process cannot specifically advance either a single theoretical framework or the views of any one individual, they do represent the thinking

of a broad cross-section of individuals who are deeply concern 1 with reading in our schools.

Mirroring changes over the past decades in viewpoints about the learning, teaching, and use of reading skills, the NAEP reading objectives have changed over past assessments. The combination of reading and literature in 1980 marked a major shift in orientation as well as a recognition that the two areas involve many of the same goals. For example, objectives were reorganized that dealt with the reader's comprehension of primarily expository passages and response to primarily literary passages. The 1983-84 objectives reflect the view that the processes of comprehension and the extension of comprehension through interpretation and analysis have a place in reading all kinds of texts. This recognition has been carried forward in the 1986 and 1988 objectives.

As a whole, the set of objectives is based upon an interactive view of reading. In this view, reading is a dynamic process in which a number of elements interact, including the reader, the material being read, the purposes for reading, the reader's previous experiences, and the context within which the reading occurs. Insofar as is possible, the objectives take these various elements into account. For example, tasks and purposes are delineated and applied across a broad range of reading materials. These materials include science fiction stories and fantasy; expository passages, such as selections from biography, science and social studies texts, as well as articles from newspapers and magazines; encyclopedia entries; persuasive passages, such as news articles; advertisements; peer writing; directions; and so forth.

The 1983-84 National Assessment surveyed over 100,000 students on their proficiencies in reading and writing as well as on their backgrounds, attitudes, and

activities. The sample included students at three age/grade levels: those who were either nine years old or in the fourth grade; those who were either 13 years old or in the eighth grade; and those who were either 17 years old or in the eleventh grade.

During the assessment, 22 writing exercises, hundreds of reading exercises, and hundreds of background and attitude questions were administered (NAEP Technical Report, 1986). The reading items were examined to determine whether they could be arrayed on a single scale. It was found that much of the reading information could be summarized using a single dimension. A total of 228 of the reading exercises along this dimension were selected and summarized on a scale using item response theory (IRT) methodology. Additionally, after equating for differences in methods of administration, NAEP was also able to summarize reading data from the 1971, 1975, and 1980 assessments using IRT.

Results from the 1984 reading assessment, together with those from the 1971, 1975, and 1980 assessments, were presented in *The Reading Report Card* (1985) using the newly created proficiency scale. Because the 1984 reading assessment was so extensive in content coverage and because the proficiency scale developed from it forms the basis for reporting data at least through the 1980s, a brief description of the scale is presented in this objectives booklet (see page 21).

Objective one

Comprehends What Is Read

The first objective, "Comprehends What Is Read," is central to the reading process, since every other objective is an outgrowth of this one.

Comprehension, an interactive process by which the reader constructs meaning from a text, encompasses:

- the type of material being read;
- the reader's purpose; and
- the background knowledge that the reader brings to the reading experience.

The specific purposes readers bring to the reading experience guide them in setting expectations and deriving meaning consistent with their own goals. Thus, in discussing reading achievement, it is not enough to look merely at the phrasing of the questions or tasks related to a particular passage. It is also necessary to ascertain the particular purposes for which the passage is to be read and to consider the kinds of knowledge that readers may already have that will help them more fully understand what they are reading.

If concepts in the passage are unfamiliar to the reader, these may need to be elaborated before they can be understood and remembered. If the concepts are familiar, readers may find it relatively easy to understand the

passage—that is, to apply the concepts to new or more complex situations.

A. Comprehends Various Types of Written Materials

In their personal as well as their school lives, students encounter a wide variety of written materials. Each of these poses its own problems of comprehension and interpretation. Making sense of the perhaps cryptic notes on a shopping list is different from understanding a complex essay or interpreting a literary work. In addition, students need to recognize the various types and structures of expository passages. Reading a science textbook differs from reading a historical essay. Letters, reports, inventories, and a wide range of record-keeping systems are integral to many businesses in today's "information society." To learn to manage problems of comprehension and interpretation, students need to read, discuss, and write about these different types of materials.

B. Comprehends Materials Read for a Particular Purpose

Reading purpose should influence the way something is read. A reader who is trying to answer a specific question by *identifying, locating,* or *confirming* information—such as in skimming a catalogue to pick up relatively isolated bits of information or looking up information in a reference book—differs from one who is following detailed instructions line by line to assemble a new toy. These kinds of reading activities, in turn, differ markedly from the careful reading and integration of numerous concepts required in preparation for writing a research report. Similarly, reading a play purely for enjoyment is quite different from reading a play in preparation for directing or acting in it. Experience in reading for a variety of purposes can help students develop varied strategies and learn to use them appropriately.

Objective two

Extends Comprehension

Objective two involves the deliberate kinds of *analysis*, *interpretation*, and *evaluation* that a student might use when participating in a class discussion or that a reader must develop for a talk or a paper.

Readers explore several main avenues when expanding their comprehension. They can examine their personal experience to increase their understanding of particular ideas, characters, or situations. They can use their awareness of the emotional impact of a passage as a source of information about its purpose and quality. They can make a general comparison of what they are reading with other materials they have read, or they can examine particular ideas in light of specific information from other sources. They can examine the structure and conventions of a passage. They can judge the validity of the ideas and information presented. Such activities are not necessarily separate from one another; some or all may take place as readers extend their comprehension of a particular passage.

A. Analyzes What Has Been Read

When they analyze what they have read, readers may clarify their initial interpretations. Analysis can take many different forms. It may involve tracking the logic of an argument, identifying the emotional appeals underlying a

political statement, explaining the motivations of a character in a story, or tracing the causes of a sequence of historical events. Such activities can lead to the discovery of inconsistencies in an initial interpretation (and hence to a reinterpretation of the passage) or can lead to the discovery of additional evidence for explaining or defending an initial point of view.

Frequently, the analytical reader must integrate both information and ideas. In the process, the reader may infer causes for particular actions, note underlying assumptions, or predict outcomes from the given information. Thus, a reader might: suggest economic consequences of the introduction of robotics after reading about the consequences of introducing the assembly line, infer reasons for a character's decision to leave home, or detect underlying assumptions in a newspaper editorial about the benefits of a new highway to the community.

B. Interprets What Has Been Read

Fluent readers use a variety of skills to deepen their understanding of what they have read, including relating the concepts to their own experiences, to other works they have read, and to their own initial reactions to a passage. After putting a passage aside, readers may reflect on their own experiences with similar problems or events and may, in the process, form opinions concerning the validity or worth of what has been written. They may also compare what they are reading with something they have read before. Sometimes this means relating a work to others dealing with the same theme. Such explorations are important steps in extending comprehension of new ideas or experiences.

Reading involves not only intellectual understanding, but also personal response. Many works are intended to entertain, persuade, or illustrate through emotional appeals. Therefore, another goal of reading instruction is

to help students become aware of their emotional reactions to what they read. By articulating these reactions through discussion or writing, students can become more involved with characters, events, and ideas. They can also better understand the subtle ways in which writers influence their audiences; e.g., presenting a serious message within the context of a humorous piece and using an emotional appeal to promote a cause that cannot stand rationally on its own merits.

C. Evaluates What Has Been Read

One part of a reader's reaction to any passage is an assessment of its integrity, usefulness, appropriateness, or quality. At the simplest level, such judgments control the decision to continue reading or not. On a more formal level, readers may judge the success of a work against their specific purposes for reading, more general criteria of successful writing, or worthwhile information.

In most situations, evaluation is intertwined with a reader's comprehension of a passage and continues throughout interpretation and analysis. Defending or explaining an evaluation helps the reader to articulate the criteria upon which the evaluation is based and to relate characteristics of the work to those criteria.

A reader who is reacting to or evaluating what has been read may: assess the quality of the text in order to separate fact from opinion; assert and support personal opinions on the basis of the material read; determine the adequacy of evidence used to support a position; or note the techniques used to achieve an effect by identifying the style or tone of a work.

Instruction should not lead students to a single set of criteria by which to judge what they read. Rather, it should lead students to develop their own criteria and apply them appropriately to a variety of reading experiences.

Objective three

Manages the Reading Experience

Good readers develop a variety of strategies to help them comprehend what they read. Applied throughout the reading experience, these strategies vary according to the characteristics of particular passages, the reader's knowledge and experience with similar materials, and the reader's purpose for reading.

A. Uses the Structure and Organization of the Text

Comprehension of a passage is based on information drawn from many different elements at many different levels. Traditionally, teachers have tended to view these elements hierarchically, beginning with words, then moving to relationships among words and sentences, and then to devices that give structure to the passage as a whole. Actually, these elements cannot stand alone. They are all interrelated; they also are related to the reader's previous experience. Indeed, in reading an entire passage or a complete work, good readers are aware of and sensitive to relationships and structures that govern larger units of a text. For example, sensitive readers develop an awareness of an evolving plot and of the relationships among the characters. In general, a good reader is guided by a sense of the structure of the particular genre (story,

newspaper article, letter, research report) as well as by a growing understanding of the author's purpose and direction.

Clauses, sentences, and paragraphs in longer works are typically linked together to express relationships among the ideas or events presented. Sometimes the relationships are stated, as in the following sentence: "The table wobbled because one leg was shorter than the other three." At other times, the relationship is simply implied: "Sarah hit Jim. Jim went home crying." Good readers look for these relationships to help them understand the passage they are reading.

Word meanings are, of course, dependent on context. The word "fly" has one meaning when defining a kind of buzzing insect and quite another in the context of a baseball game. Vocabulary skills involve both the understanding of various dictionary meanings and the ability to choose from among those meanings according to the context in which the word is used.

B. Uses Readers' Aids

Many books provide a variety of aids that can simplify their use. These include special typography (e.g., boldface, italics); layout (e.g., headings, subheadings); illustrations (e.g., charts, graphs, photographs); and various kinds of listings and guides (e.g., tables of contents, indexes, footnotes, bibliographies, glossaries). Although an experienced reader may automatically make use of such aids, a novice may need to have them explained.

C. Shows Flexibility in Approach to Reading

Different purposes for reading require different approaches. For example, a reader may study a textbook carefully to remember details, read a mystery story quickly to get the gist of the plot, skim a newspaper

article for an overall impression, or scan an encyclopedia entry to locate specific information. Notetaking, outlining, summarizing, or other techniques can increase understanding and retention of what has been read. Good readers choose from among a variety of approaches, depending on their specific purpose in reading.

D. Selects Reading Materials Appropriate to the Purpose

From the vast array of reading materials available, readers must learn to select those appropriate for their purposes. Sometimes their selections are guided by the suggestions of parents, teachers, or friends. At other times, readers have to turn to the reference materials available in their school and community libraries. Some reference tools, such as dictionaries or encyclopedias, provide the reader with all the needed information. Others, such as bibliographies, card catalogs, indexes, and abstracts, may point them toward the required sources. In any case, readers must learn how to find the relevant materials and how to evaluate the usefulness of particular information.

Objective four

Values Reading

Students should acquire a growing appreciation of the ways reading can affect their lives. At a minimal level of appreciation, readers are only marginally aware that reading can be pleasurable or informative. They choose reading over other activities only when the other activities are limited or unrewarding.

At a higher level of appreciation, readers actively seek opportunities to read. In their spare time at home or at school, they are often deep in a book they have chosen. They buy books or borrow them from the library and discuss what they read with friends and family. Some may even volunteer to tutor other students in reading.

A. Values Reading as a Source of Enjoyment

If students enjoy reading, they are likely to continue to read after their formal schooling is over. Thus, students should be encouraged to read for pleasure and to enjoy a wide variety of literary and expository materials.

B. Values Reading to Expand Understanding and Fulfill Personal Goals

Reading can enrich people's understanding of themselves and the world. Ideas or situations encountered in reading can help readers understand themselves, the people they

meet, and the situations in which they find themselves. Some reading may be directly psychological, inspirational, or philosophical. Some may allow the reader to appreciate historical, contemporary, or fictional personalities. In some cases, reading can help develop a personal sense of justice and an understanding of the ranges of choice open to every individual.

C. Values Reading as a Means of Acquiring Knowledge and Learning New Skills

Reading serves a variety of utilitarian functions. People read to choose groceries at the store, select a movie from the entertainment section of the paper, or complete income-tax forms. They also read to plan vacation trips, understand the implications of daily events, and learn new skills.

The current popularity of "how to" books dramatizes the importance of written materials for acquiring knowledge and solving problems. Throughout the school years, textbooks provide students with information about new topics and, once they complete their formal schooling, they continue to use reading as a primary source of new information.

D. Values the Cultural Role of Written Language

Students should learn to appreciate the critical role written materials play in society. Words can profoundly affect individuals; and individuals, independently and collectively, change societies. As students mature, they gain an increasing sense of how written materials and society interact and of the importance of protecting and sustaining this interaction.

Instructional strategies

Many people believe that the best way to teach students how to read is to have them read and then practice ways of using the information they gather. As students spend more time thinking about and discussing what they read, they strengthen their reading skills, and the reading practices they acquire in school eventually will extend to personal and social reading.

The instructional strategies that follow are included to help teachers who choose to use or adapt the reading objectives presented in this booklet. Each suggestion involves at least one of the objectives.

A. Reading Experiences

★ANSWERING/POSING QUESTIONS—Students who are involved in deriving information and ideas must have a variety of experiences in answering questions about what they have read. They should be encouraged to read a variety of materials carefully. To develop skills in finding information, students must practice reading increasingly complex material of the kind that includes conditional statements or is presented in sophisticated and novel formats. Students can also be encouraged to develop their own questions about what they have read.

★INTEGRATING INFORMATION—Students can practice organizing information from various sources by putting it into charts, graphs, and other formats.

★CLARIFYING/SPECULATING—Teachers should encourage students to seek clarification of what they do not understand. To stimulate interest, teachers can encourage students to speculate about materials both before and after reading.

B. Linking Reading To Writing

Students require instruction and practice beyond merely deriving meaning from text; they need to talk and write about what they read. Combining reading and writing can improve student skills in both areas, particularly when working with Objective II—Integrating and Applying Information and Ideas.

Many traditional activities, such as note-taking, summarizing, and report-writing, support this objective. However, enhancing student performance in these critical areas requires taking an additional step: Students' reading and writing should be directed to respond to particular tasks. Such tasks might include writing a letter to an editor in response to a newspaper article or rewriting a scene from a novel as a movie script. Students then need to receive timely feedback on their ideas and on their written products so that they can clarify, revise, or, if necessary, reorganize their thinking in response to what they have read.

Reading and writing activities are not limited to language arts instruction. Teachers of other content areas—from home economics to history to physics—need to focus on activities that logically integrate reading and writing—from planning shopping lists to writing to a local congressional representative to completing a lab report.

C. Relating to Information/Relating One Work to Another

In any content area, teachers can use discussion to ensure that students can relate to and apply the informa-

tion they have read. Such discussion could focus on the relevancy of the material and the utility of various kinds of information. Teachers can assess a student's performance by asking the student to summarize briefly such discussions. Students can then compare their perceptions and conclusions with each other.

A broad range of reading experiences will serve students well as they encounter new materials. However, the teacher needs to help them integrate a variety of reading experiences by providing activities that require them to relate different works.

D. Helping Students Find Information

Students must be made aware of a wide range of resource materials available for finding the answers to their questions; the resources they use should not be limited to dictionaries, atlases, and encyclopedias, but should include newspapers, almanacs, computer data bases, and the like. Skills in this area are becoming increasingly important as more and more information needs to be managed.

E. Helping Students Understand Text Structures

Readers who understand the structures of particular texts are better able to derive meaning from them. Students, therefore, need to read a variety of texts and to learn the different text structures and the reading strategies for those structures. Students should learn these skills not only in their English classes, but also in their social sciences, science, and mathematics classes.

NAEP's reading proficiency scale

Background

In each of NAEP's assessments of reading, students have been asked to respond to multiple-choice questions, to answer brief, open-ended questions, and to write about their reactions to what they read. Short and long passages, graphically presented materials, poems, documents common in everyday activities, and reference materials have all been used in these assessments. While each reading assessment has reflected the thinking and priorities of its respective Learning Area Committee, the common goal of each assessment has been to understand and present information about the status and progress of reading proficiencies among selected school-age populations.

To accomplish this goal, NAEP has chosen to measure as broad a range of materials and exercises as possible. In extending the range of content coverage beyond what is traditionally found in standardized reading tests, for example, it was necessary to use some form of item sampling design. The entire pool of exercises is too large to be administered to any single student.

Initially, NAEP reported educational progress by presenting the estimated percentage of students who responded correctly to each exercise. The percentages correctly responding were also presented for selected subpopulations. These included: gender, racial/ethnic groupings, regions of the country, and parental education levels. This approach proved to yield unwieldy amounts of information because of the large number of exercises involved. Some method for summarizing the information was necessary. The solution to the problem of abundant information was to publish the average percents correct for all exercises in a given area or for sub-areas; for example, in reading, the average percents correct were presented separately for literal comprehension, inferential comprehension, and reference skills.

The average percent-correct or p-value, however, made it awkward to report to the American public what students could and could not do (Beaton, 1986). First, the metric is totally dependent on the selection of exercises for inclusion in the assessment. The selection of easy or difficult exercises could make student performance look good or bad. Secondly, because the metric is a function of the exercises included, these cannot be changed over time without also altering the metric. Thirdly, comparisons across ages and across grades require that the same exercises be administered to all. Fourthly, because of the fact that different students respond to different exercises (item sampling), the ability to estimate distributions of performance and, therefore, changes in them over time is lost with the average percent-correct metric. Finally, to understand what students can and cannot do, one would have to examine individual exercise information.

Description

Beginning with the 1984 reading assessment, NAEP has used item response theory to enhance the comparability of results across ages, groups, and time. Scaling based on item-response theory addresses each of the shortcomings noted above for the average percent-correct metric. Specifically, estimated proficiency is not dependent on specific exercises, trend analyses based on more than identical exercises are possible (as are comparisons among major subgroups of interest), and changes in the shapes of the distributions for various subgroups can be studied and reported for policy makers.

Based on studies of dimensionality (Zwick, 1986), a total of 228 from the more than 300 exercises administered in 1984 across the three age/grade levels were placed on a common reading-proficiency scale. This scale ranged from 0-500, with an average of 250 and a standard deviation of 50. Exercises not scaled included those involving charts, graphs, tables, and indexes, since these were thought to represent a somewhat different dimension of reading. Thus, the NAEP reading scale reflects proficiency in comprehending or constructing meaning from a broad range of prose materials. In general, increased proficiency on the reading scale reflects the fact that as students gain knowledge and experience in dealing with print, the complexity of the materials they read (and of the tasks they are expected to perform) increases.

While the scale itself provides a means for enhancing the comparability of results, an innovative process of anchoring the scale was undertaken to enhance its interpretability. This anchoring process was aimed primarily at guiding the interpretation

of performance at specific scale points, and thus toward establishing the construct validity of the scale. To accomplish this, NAEP identified five scale points at 50-point intervals, selected tasks that discriminated well at these

Levels of Proficiency

Rudimentary (150)

Readers who have acquired rudimentary reading skills and strategies can follow brief written directions. They can also select words, phrases, or sentences to describe a simple picture and can interpret simple written clues to identify a common object. *Performance at this level suggests the ability to carry out simple, discrete reading tasks.*

Basic (200)

Readers who have learned basic comprehension skills and strategies can locate and identify facts from simple informational paragraphs, stories, and news articles. In addition, they can combine ideas and make inferences based on short, uncomplicated passages. *Performance at this level suggests the ability to understand specific or sequentially related information.*

Intermediate (250)

Readers with the ability to use intermediate skills and strategies can search for, locate, and organize the information they find in relatively lengthy passages and can recognize paraphrases of what they have read. They can also make inferences and reach generalizations about main ideas and author's purpose from passages dealing with literature, science, and social studies. *Performance*

respective levels, and analyzed performance both in terms of the text and the accompanying exercise. Labels and descriptions of these five levels were reported in *The Reading Report Card* (1985) and are reproduced here.

The development process

The National Assessment appreciates the efforts of all the individuals who contribute to the development of a reading assessment. Many people, including university professors, classroom teachers, legislators, parents, and other interested individuals, participated in developing and in reviewing drafts of the objectives.

This particular objectives booklet combines the work of two Learning Area Committees—those from the 1983-84 and the 1985-86 reading assessments—and extends at least through the 1987-88 reading assessment.

Special thanks are due to the members of these committees who developed the framework and specifications for the assessment, were responsive to the reviews, and spent long hours reviewing and revising objectives and exercises. Appreciation is also due to Kalle Gerritz, reading coordinator for NAEP's 1985-86 assessment.

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