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METADISCOURSE IN SOCIAL STUDIES TEXTS

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Metadiscourse

Abstract

Metadiscourse (an author's presence in a text) and its benefits for improving textbooks and children's learning and attitudes are explored in this paper. An historical review reveals that using the interpersonal voice (I/you) and the author's commentary are legitimate rhetorical devices. Interviews with prominent contemporary rhetoricians disclose various ideas for improving textbooks with metadiscourse. A descriptive study of metadiscourse use in social studies textbooks and nontextbooks finds that books which are not textbooks use more metadiscourse and appear more lively than textbooks. A case study evaluation of a chapter in a typical sixth grade social studies textbook discovers several problems related to metadiscourse. In an experimental study, this is modified by adding metadiscourse and interpersonal voice and the effects of this manipulation on retention and attitude is investigated. No significant main effects are found, but there are significant differences for subtexts and subgroups. The voice variable and high versus low comfort subgroups were critical factors.

Metadiscourse in Social Studies Texts

As part of a broader discussion about the quality of American education, leaders across the country want to improve textbooks, agreeing with Secretary of Education T. H. Bell that "without an upgrading of textbook quality, education reform will falter." Recent studies have emphasized the extent to which teachers rely on the textbooks they use—as much as three-fourths of all instruction is by textbooks and in areas such as social studies, teachers rely heavily on them. The focus for this study is on education and pedagogical communications and interactions.

Statement of the Problem

Educators and parents have many goals for children in school, some of which include learning how to learn, learning the content, and developing positive attitudes both toward learning and the subject learned. But many children have trouble in all these areas. Apparently, the transition from basal readers to social studies and science textbooks is particularly difficult, as documented by several sources. Evidence comes from classroom observation, teacher-student interviews, and parent surveys (Crismore, 1981), from large scale assessment tests of progress in social studies, reading comprehension, and writing (NAEP, 1978) and from empirical studies (Dixon, 1978).

One of the reasons that children find reading social studies textbooks so difficult may be that textbooks do not foster the
skills needed for learning. Because the amount and complexity of social studies reading steadily increases throughout the grades, it is important that children acquire the skills they need to understand and remember the information presented in their textbooks as early in their schooling as possible. To do this, they need textbooks that foster these skills.

Specialists in social studies, as well as parents and educators, consider it important for children to develop positive attitudes toward social studies and the reading and writing in that area (Daly, in press; Mikulecky, 1977; Tierney & Crismore, 1983). Yet many students find social studies books dull and uninteresting and therefore read little or no social studies beyond the required assignments (Fitzgerald, 1979). In order to develop positive attitudes, including a desire to read and write about social studies, students need textbooks that they find interesting and engaging. Although social studies textbooks are emphasized in this study, they are only examples. What is said about social studies textbooks applies to most other textbooks as well.

Rhetorical Textbooks as a Solution

Speech communication theorists (Bradley, 1981; Ehninger, Monroe, & Grusbeek, 1978) have defined certain characteristics of effective speech that may also be used in written texts to help students to learn. Effective characteristics used in spoken rhetoric that may also be used in written textbooks include having a point of view, unity, coherence, structure, development of the ideas and how they are emphasized; also how appropriate the material is to the learner, as well as the author's credibility, personality, and relationship to the learner.

Speech communication theorists say that the learner is helped by having a thorough introduction to the material which explains the goal. They also advise explicitly stating what the discourse topic is, its controlling thesis, as well as the rationale or justification for the controlling ideas, a body, and a conclusion. Because young children's learning may be limited by their memory, these characteristics are considered particularly critical for them.

The question to be considered, then, is whether presently available social studies textbooks have rhetorical characteristics, and, if they do not, whether that may be one reason they fail to have the positive effects on students that we would like. A textbook which does show these characteristics will be referred to as a rhetorical textbook. This is one that not only gives the desired content information, but is concerned with how it is presented. From speech communication research, it can be extrapolated that a rhetorical social studies text would result in more effective communication of ideas and the development of more positive attitudes.
Metadiscourse as a Rhetorical Device

Metadiscourse is a set of rhetorical characteristics used to communicate attitudes as well as to indicate the structural properties of the content. This concept will be more completely defined later. Metadiscourse has not been much explored by educators and psychologists, but has been written about by rhetoricians, literary theorists and sociolinguists. The following two examples taken from social studies texts illustrate how it can be used. The metadiscourse is underlined.

1. As an artist, a sailor, and an amateur anthropologist, I had come to regard it (the voyaging canoe) as the finest artifact that the Polynesians had produced . . . . To me it seems no genetic accident that Polynesians, as a race, are large and powerful people . . . . I felt that if a voyaging canoe were built and sailed today, it would function as a cultural catalyst and inspire the revival of almost-forgotten aspects of Hawaiian life (Kane, 1978, p. 475).

2. . . . The first chapter discusses the kinds of ideas people have of other groups of people. We believe that many Americans have an out-of-date and inaccurate picture of Indians. One way to change and broaden that picture is to understand more deeply both the past and present of America's Indians, and that is our goal in this book . . . . (Westbury & Westbury, 1975, p. 5).

The first example, a social studies text taken from a popular magazine written for adults, illustrates metadiscourse being used to communicate attitudes. The second example, taken from an unconventional social studies textbook, illustrates metadiscourse being used to indicate both the structural properties of the content and the author's attitude toward the content. The following final example is an excerpt without metadiscourse that is taken from a conventional social studies textbook written for sixth grade children.

3. In the guilds people learned to make fair rules about their work. And they learned to see that these rules were obeyed. Keeping women out of guilds did not help the growth of democracy. Yet making fair rules would some day include women. People were learning to make laws for a democracy (Dawson, Tiegs, & Adams, 1979, p. 117).

Because of the use of metadiscourse, which makes the author's stance, goals, and attitudes clear to the reader in a personalized voice, the social studies texts in the first two examples seem to establish a closer author-reader relationship than the conventional text. They also seem to convey a greater sense of immediacy and accessibility, perhaps increasing their interest and learning value for the reader.

To sum up, one problem with conventional social studies textbooks used in the classrooms is that students frequently find
them uninteresting, boring, and difficult to learn from. A possible reason for this is the way the textbooks are written. The purpose of this study is to explore this possibility in three stages: first, by identifying certain characteristics of texts that rhetoricians believe make texts more communicative; second, by looking at a sample of social studies texts to see how these characteristics are exemplified; and third, by manipulating some of these characteristics to see if this produces any effects on students' learning and emotional responses to the texts.

**Historical Review Methodology**

**The Role of the Author**

This section first describes the historical cycles of authors' roles from the perspectives of rhetorical theory and literary and film theory and points out how these traditions seem now to be converging. It then points out that the roles authors take in their writing determine the voice they use and what they inject into the text besides the content.

One of the issues is whether various roles that authors play influence how students learn from their textbooks. If an author takes the role of an objective reporter or a friendly companion to the reader, for instance, it may make a difference in the reader's reactions.

Improving the quality of textbooks is a worthy goal, and information gathered on the effects of author roles on readers' responses can be used to develop guidelines for this. The issue of author roles is especially relevant for investigating the rhetorical text characteristic called metadiscourse and its cognitive and affective effects on learners. Metadiscourse is the vehicle by which an author comments on the text and guides the reader. How theorists and researchers view the notions of author roles and metadiscourse depends on the traditions and view of language in their disciplines. Three rhetorical situations can reflect different perspectives: (a) author as primary; (b) reader as primary; or (c) world as primary.

The importance of the author and author roles for learning is controversial and varies from one historical period to another or even during any one period. This is due, no doubt, to different cultures and beliefs or inquiry systems. In order to understand the issue of the roles of the authors, it may be helpful to examine it from the perspective of rhetorical theory as well as literary and film theory.

Most classical and contemporary rhetoricians view the role of the author as an important aspect of the text itself. The psychologically and meaning-oriented rhetoricians, however, consider the role of the author as minor compared to content meaning of the text and the mind of the listener or reader. For them, the concern is with the way texts convey and readers comprehend information. The traditional (and now contemporary) concern of rhetoricians is how authors, through texts, persuade as they inform. For this, the role of the author is crucial.
A massive shift in literary opinion began earlier in this century—from the proposition that literature should be personal to the proposition that literature is, or ought to be, impersonal. Leading literary authors and critics proposed that the progress of an artist can be charted by the extinction of personality, that novels should be written as though they were completely natural events, not human events, and that texts should be studied as autonomous objects without reference to author personality or intention (Wellek & Warren, 1949; Wimsatt, 1954).

Readers and authors began to rebel against the facelessness and impersonality of the literature of our time. Now some authors are flaunting personality, using the confessional and authorial intrusion style of the eighteenth century. Some literary scholars are now introducing a rhetorical approach to certain classes of eighteenth century literary works (and being attacked for doing this), and some readers are now, no doubt, applauding (Elliot, 1982). It is clear that the role of the author is controversial within the field of literature and that notions about the importance of the author are perhaps cyclic, rather than evolutionary.

In summary, authors seem to have played different roles during three different periods: (a) a dominant role as an active influencer on the audience in the classical period; (b) a secondary role as a guest in the text during the late 1600s to early 1900s; and (c) an interactive role as communicator in the modern period. Although authors also played a variety of roles from the perspectives of literary theory during these periods, there is a contrast to the roles identified by rhetorical theory. During three historical periods, the author has played these roles: (a) a dominant role as creator, reflecting lamp, and teller during the early 1700s and 1800s; (b) a secondary role as a creator, mirror, and fiction during the 1800s and early 1900s; and (c) a very minor role as a value-free reporter and producer of texts during the modern period. There now seems to be a trend for the author to interact more with the reader in literary theory.

Rhetorical Devices for Author Roles in Fiction and Nonfiction

The roles that an author chooses for a text are represented by certain rhetorical devices. This section describes two that can be used for different roles in fiction and nonfiction texts: the first is the use of the author's stance or point of view (the position from which the author views a subject and the grammatical person used by the author which indicates the distance from and the attitude toward the reader). The second is the use of author commentary in the text. While these are usually correlated, they are to some degree independent of one another. These two rhetorical devices are important for the concept of metadiscourse, which is discussed below.
Point of view. It is useful to consider fictional texts as ranging along a continuum of unauthored to authored. At one end is the unauthored folktale, a story with cumulative authorship, a narrative in which each narrator usually contributes some variation in retelling the basic story. Although the storyteller is important, the lack of a real or implied single author for a folktale does not seem to make much difference, for the tale is authorized by folk traditions and conventions. At the other end of the continuum are those authored stories where the author/narrator is part of the story and intrudes into it, interrupting to comment to the reader about ideas, characters, events or the presentation.

Parallel to this continuum could be one for instructional texts. At one end would be unauthored textbooks developed and produced by publishers, editors, and educators. These are the texts, authorized by authorities in the field, which contain canonical knowledge and beliefs. At the other end would be single authored textbooks, usually college textbooks, in which the author acts as storyteller or narrator and takes a point of view. Point of view can be defined as either the ideological position from which an author views a subject or the grammatical person (first, second, or third person) used. The grammatical person indicates the distance from and the attitude toward the reader, and therefore is an index of author-reader relationship, while the ideological position indicates author beliefs about the subject and is an index of author-subject relationships.

Textbook authors, like authors of fiction, can interrupt the discourse to comment on the ideas or the presentation.

One theory (Moffett & McElhenny, 1966) insists that there are many possible grammatical person point-of-view techniques that index author-reader-text relationships, and that these techniques form a continuum of distance between the author and reader. The differences are of degree—categories further along the spectrum represent increasing distance between the author and the reader and between the author and his subject. What results is a trinity of first, second, and third persons—\textit{I}, \textit{you} and \textit{they}—or narrator, reader and text. Some shift in the relations determines movement along the spectrum. As the focus changes from \textit{I} to \textit{they}, the gap widens between author and subject and between author and reader.

Author commentary. Commentary is another rhetorical device available to an author. Author commentary or intrusion is defined as explanations or statements that go beyond portraying a situation in fiction (or stating facts in nonfiction) to make interpretive comments about it. In author commentary, the author seems to address the reader directly, abandoning the illusion of the tale in order to deliver an announcement or an opinion (Cassill, 1981). Author commentary usually makes use of first person, but also uses second person (Dear Reader . . .), and
third person (this book . . .). This device is an author's means of guiding his readers in understanding the tale.

Critics find author commentary problematic because it is often pursued for its own sake and results in a lack of formal coherence and therefore interferes with other qualities or effects. They suggest that the authorial commentaries of older novelists deflect readers' attention from the subject matter (the events themselves) to the way the author handles it and possibly diminishes the authority of the story. Uninteresting commentators or commentary inappropriate to the context may interfere with the reading and thereby affect reader interest and attitudes.

It is important to keep in mind, though, as Booth (1961) points out, that what seems artificial and problematic today seemed quite natural to certain literary schools of thought in another period. Many early novelists like Fielding, Elliot, Trollope and Austen considered author commentary as a natural way to use language in novels. However, it was not unusual for early modern novelists (e.g., Virginia Woolf) and critics to see language and novel writing as art and, therefore, author commentary as unnatural. Additionally, it is important not to treat author commentary as a single rhetorical device, for there are types of commentaries for different functions—those used for (a) ornament only, (b) a rhetorical purpose but not as part of the dramatic structure, and (c) a rhetorical purpose which is a part of the dramatic structure.

Literary experts who have studied author commentary believe it can be advantageous for readers. A narrator's intrusions into a text are not, as Booth clearly explains, independent outbursts, but a continuing series of events or stages in a developing relationship between reader and author. The reader realizes as he continues through the text that the author talks like this as he tells his story and as a result becomes more comfortable with the style and understands more. When great authors call attention to their work as literature and to themselves as artists, the effect achieved can be profound. The telling itself is a dramatic showing of a relationship between the author and the reader and with the author and the author's second-self, the narrator. One might speculate that the reader's feelings of admiration and affection for the author become more intense and lively with explicit, personal fiction than with implicit, impersonal fiction. The reader feels he is traveling through the book with an author who cares enough to guide him and who is trying to do justice to the subject matter. Whether it is fiction or nonfiction a reader gets involved with an author who cares deeply about the subject matter and about the reader.

The roles which authors can choose when writing vary widely and determine characteristics of the text. For example, selecting a role at one end of the continuum might result in an
The Nature of Metadiscourse and Its Effects

The preceding section pointed out that the roles chosen by authors determine how their text will be written and whether or not they will use metadiscourse and the personal or impersonal voice. Since these two variables are important for the studies that are reported and discussed below, it is necessary to understand the concept of metadiscourse. The purposes of this section are to define and explain metadiscourse in order to set up a classification to use and to review some empirical studies of metadiscourse including a closely related concept, signaling.

Metadiscourse can range along a continuum from implicit, nonverbal, and general to explicit, verbal, and specific. It can be defined as the rhetorical act of discussing the spoken or written situation (between speaker and hearers, authors and readers, goals and intentions, and the occasion) or about the discourse itself (the organization or evaluation of it).

Metadiscourse can focus upon a single message and the process of composing a text; furthermore, it can focus upon a number of relational states implied in a message, both ideational or interpersonal. The person generating the metadiscourse may be a participant in the action about which he comments.

Broadly defined, metadiscourse has at least four dimensions: interpersonal/impersonal voice, ideational/referential, evaluative/attitudinal, and textual/structural. As Vande Kopple points out (in press), common to all types of metadiscourse identified by scholars is the fact that they do not expand the propositional information of a text. The fact that they do not make claims about states of affairs in the real world that can be either true or false, justifies considering these types to function on a different level or plane from that of the primary discourse. He suggests that the various kinds of metadiscourse can fulfill either textual or interpersonal functions of language. One assumption of those who study language use and social interaction is that language functions to transmit referential information, as well as to create and sustain expressive meanings. This study assumes that not only primary discourse but also metadiscourse is used for both referential and expressive ends.

A typology of metadiscourse. For the purposes of this study, a typology of the metadiscourse system was established.
based on Halliday's functions of language (1973) and on Williams' (1981a; 1981b), Schiffrin's (1980), and Meyer's (1975) classifications with some of their categories omitted. Like Schiffrin's classification system, the typology includes two general categories, the informational and attitudinal, with several subtypes for each.

Metadiscourse functions on a referential, informational plane when it serves to direct readers in how to understand the author's goals and primary message by referring to content and structure. This referring can be on a global (whole text) or local (section or sentence) level. Four subtypes of informational metadiscourse can be noted: (a) global goal statements (both preliminary and review), called goals; (b) global preliminary statements about content and structure, called previews; (c) global review statements about content and structure, called reviews; and (d) local shifts of topic, called topicalizers.

Metadiscourse functions on an expressive, or attitudinal, plane when it serves to direct readers in how to "take" the author, that is, how to understand the author's perspective or stance toward the content or structure of the primary discourse. Four subtypes of attitudinal metadiscourse have been identified: (a) importance of idea, called salience; (b) degree of certainty of assertion, called emphatics; (c) degree of uncertainty, called hedges; and (d) attitude toward a fact or idea, called evaluatives (Schiffrin, 1980).

Experimental studies of metadiscourse and signaling. Although a few analysts have studied metadiscourse as it is used in spoken and written discourse (Lautamatti, 1978; Ragan & Hopper, 1981; Schiffrin, 1980), only one researcher, Vande Kopple (1980), has experimentally manipulated metadiscourse. In addition to Vande Kopple's study, several studies by Meyer and her associates have investigated the extent to which signaling (metadiscourse which would be classified as text connectives and illocutionary markers by Lautamatti and Vande Kopple in their systems) has an effect on the readers' understanding and recall of the content.

The experimental studies which were reviewed did not show many general effects of metadiscourse or signaling on readers' long-term recall of the content, perhaps because they explored only a few of the possible kinds of metadiscourse. The studies investigated metadiscourse and signaling on high school students and adults, but not on readers in elementary school.

These studies point up the need to learn more about metadiscourse in order to be more precise in defining it, classifying its types, and using it appropriately for the situation and the reader. It is clear that much remains to be learned about the complex concept of metadiscourse and the materials and measures needed to explore it further. The
remaining sections will attempt to shed more light on the concept of metadiscourse and its effects on learners.

Author/Reader Relationships

It is possible that cultures which value interpersonal relationships also value social interaction in communication and use rhetorical devices that convey interpersonal meanings differently than cultures which do not.

Current interpersonal, social interaction models provide a framework for understanding school reading as a rhetorical, communicative act and for speculating about the effects of the roles of author and readers and their relationship. The models assume that all authors and readers use personas and societal roles. They assume that authors and readers are fictions, not real authors and real readers, and that social status relationships can be inferred by readers from the roles that authors play or are perceived to play. Clearly, the models recognize the importance of the rhetorical devices that convey the role relationships of author and readers but seem not to recognize that different cultures, disciplines or age groups may use different rhetorical devices to convey the role relationships.

These possibilities have not yet been studied by researchers, but some other interesting questions have been asked and answers to them sought in several recent studies that attempted to gain a better understanding of the nature of author/reader relationships.

The results indicate that to a great extent, the actions and reactions of an author and reader depend on the role each assumes in relation to the other. The roles assumed and perceived are important for generating, understanding and enjoying a wide range of texts. A reader's comprehension, inferencing and remembering efforts for fiction and content texts seem to be tied to the author and to author/reader beliefs and attitudes about the role of the author as well as text content.

Interview Methodology

Metadiscourse benefits: Rhetoricians. This section presents the views of several scholars from the field of rhetoric about the benefits of metadiscourse for students.

Metadiscourse eventually is oral, according to Walter Ong, who believes that the ideal social studies textbook would not just present 'bare' facts, because there are no bare facts. Instead, it attempts to link facts with a personable author and to unify the world in which the student learns. A social studies textbook with metadiscourse would put the text into the interpersonal world, for as soon as the reader sees the I of the author on the page, the you of the reader appears; similarly, when I, the reader, appears in the reader's consciousness, so does the you of the author.
From the perspective of Robert Young, metadiscourse should help students be better thinkers. The use of attitudinal metadiscourse (e.g., *it seems to me*, *in my judgment*, and *I believe*) by an author implies that there are alternative problems or kinds of knowledge. An author can be oriented toward a realistic epistemology, believing that truth and meaning are "out there," or toward a phenomenological epistemology, believing that truth and meaning are contingent.

Metadiscourse for Young is an epistemological issue. For him, the benefits are that it helps readers identify alternative problems, look for truth and meaning, and become critical thinkers.

According to Ross Winterowd, rhetoricians believe that understanding is contingent and that authors need different styles for different people. Because rhetoricians believe that discourse should be adjusted to achieve the ends of the speaker/author, they view metadiscourse favorably and believe that it can be used to help readers understand.

Booth (1961), too, has discussed possible benefits that commentary (metadiscourse) might have for readers. It explains, summarizes thought processes and mental stages, gives orientation information, issues against wandering, guides the readers' expectation, intellectual and emotional responses, heightens intensity, relates the part to the whole, creates harmony between author and reader, and identifies the character with the author.

The reader becomes involved with the text and with an author who cares deeply about the subject and the reader.

From the viewpoint of educational psychologists, it seems plausible that both informational and attitudinal types of metadiscourse are important to reading for several reasons. The organization, shifts of topic, and author perspective on the content and propositions help to create anticipation in the reader. The informational subtypes of metadiscourse can be considered structural pegs. Once anticipation has been created, then metadiscourse may draw the reader's attention to important points. The amount of the author's certainty or uncertainty may help readers to attend to the text as they make judgments about the author's claims (whether they are strong or weak, or valid or not).

Readers need ways to encode the primary discourse into long-term memory. Metadiscourse may facilitate this by providing a context in which the primary text can be embedded—a context for the text, in other words. The explicit informational metadiscourse reviews and provides reminders of old content and discourses and possibly forms a basis for new information, new structures, and accommodation.

It is not enough then, to emphasize the ideational aspects of the text, the ideas or content and textual aids for understanding the ideas. These are important concerns and require further study, but there is a need to investigate the
non-ideational, interpersonal aspects of texts as additional aids in learning from textbooks. There may, in fact, be several kinds of learning from texts and different strategies needed for each kind of learning.

The first part of this paper discussed the domain of metadiscourse and broke it down into the following subtopics: the presentation of the problem of uninteresting conventional social studies textbooks and the resolution of that problem using metadiscourse and interpersonal voice; the roles that authors can take, as seen from the perspectives of rhetoricians and film and literary theorists, and the rhetorical techniques used in the roles; the concept of metadiscourse and a review of research on the effects of metadiscourse and signaling; the nature of author-reader relationships; and possible effects of the author's voice and metadiscourse on readers' learning and emotional responses to social studies texts.

The last part of this paper presents the results of three empirical studies. The first investigates the extent to which metadiscourse and authorial voice is found in conventional and unconventional social studies texts. The second study analyzes, critiques, and makes suggestions for modifying a chapter from a conventional social studies textbook. The third is an experimental study which investigates the effects of three aspects of metadiscourse on readers' retention of information and their emotional reactions to the manipulated text.

The final section discusses what was learned in the process of studying metadiscourse and voice and suggests educational implications and future directions for research in this area.

Discourse Analysis Methodology

Study 1: A Study of Metadiscourse Use in Social Studies Texts

This study describes types of informational and attitudinal metadiscourse in connected discourse, based on a systematic analysis of nine social science texts written for students ranging in level from third grade to college undergraduate and nine texts written by historians, political scientists, anthropologists and other social scientists for intelligent adults, from non-academic periodicals and monographs to academic journals and books. It attempts to answer four questions: (a) Are there differences in the amount and types of metadiscourse used by social studies writers in materials for school and non-school purposes? (b) Are there differences in the amount and types of metadiscourse used in social science textbooks across grade levels? (c) Are there differences among publishers of social science textbooks on the same grade level? Or for the same publisher on different grade levels? (d) Are there differences in the amount and types of metadiscourse used by non-textbook social science writers who write for different audiences?
Metadiscourse was classified as either informational (which dealt with the content or the text itself) or attitudinal (which dealt with author's attitudes toward the content or readers).

The texts analyzed range in length from 1,000 words in the third grade text to 12,000 words in the high school and college textbooks and non-textbook samples. A part of a unit, chapter, or article was analyzed. In order to compare textbooks and non-textbooks which were not the same length (the length of units or chapters increases through the grade for textbooks and initial chapters might differ from later chapters), it was necessary to use a 1,000 word unit as a base. Each sample was examined for four subtypes of informational metadiscourse—goals, previews, reviews, and topicalizers—and the four types of attitudinal metadiscourse—saliency (the importance of the idea), emphatics and hedges (the degree of the author's certainty or uncertainty), and evaluatives (the author's attitude toward the information).

While quantitative information is necessary for indicating the existence of and relative emphasis given to different metadiscourse types in the samples, only qualitative analysis can, however, convey the flavor of the text. The categories chosen for quantitative analysis need qualitative illustration by direct quotation in order to see the style and patterns used. In order to assess the degree of author presence in the text, the point of view or "person" used for the metadiscourse was also examined.

Findings for Informational Metadiscourse

The analysis indicated that both textbooks and nontextbooks used at least some of all four subtypes of metadiscourse. However, there were qualitative differences in the types of informational metadiscourse used in materials for school and nonschool purposes. Typical textbooks used third person formulaic expressions and concentrated on subject matter for previews and reviews. Atypical textbooks and nontextbooks used first person or both first and second person, did not use formulaic expressions and concentrated on subject matter and structure in goals, previews and reviews.

Differences also existed in the amount and types of metadiscourse use across grade levels. The texts written for the early elementary grades 3 and 4 and college level students did not use informational metadiscourse at all. Typical textbooks for grades 5–12 used previews and reviews but no goals or topicalizers.

Publishers of social science textbooks on the same grade level used informational metadiscourse differently. The atypical textbooks tended to use all four subtypes and to use them extensively, while the typical textbooks used only previews and reviews.

There were also differences in style and content between typical and atypical publishers. The typical publishers focused on the reader and topics only in a standardized format. The
atypical publishers, however, felt free to focus on the author, or on structure as well as subject matter, and used more variety. There were quite large differences in texts written for general or for specialized audiences (readers interested in social science or social scientists) which contained much more informational metadiscourse of all four types. Very little informational metadiscourse was used for general audiences but, based on this small sample, it seems characteristic of academic nontextbook writing.

**Findings for Attitudinal Metadiscourse**

There were larger differences among books in the use of attitudinal than in informational metadiscourse. Nontextbooks used attitudinal types over five times as often as did the textbooks. It is interesting that the frequency of using different types of attitudinal metadiscourse varied in the same way for both nontextbook and textbook writers. With the exception of four hedges and one emphatic, no attitudinal metadiscourse was used in textbooks for grades 3-6. The little attitudinal metadiscourse there was seemed to be used mostly in the textbooks for grades 7-8.

It also appeared that there were qualitative differences in the way attitudinal metadiscourse types are used. Textbooks seem to use them to refer to concrete people or happenings in the primary discourse, while nontextbooks use them to refer to abstract concepts as well as concrete. A second difference was the tendency of nontextbook writers to be present in text in the first person to express attitudes, while textbook writers prefer more distance and use second or third person. A third difference was the large amount of emphatics and hedges nontextbook writers use to argue their points. Finally, textbook writers used simple evaluatives only and very few of them, but nontextbook writers use both simple and complex evaluatives.

The data here suggest that audience does make a difference. In general, there seemed to be a trend toward increased use of attitudinal metadiscourse in textbooks from grades 7-8 to college. Also, evaluatives, a subtype of attitudinal metadiscourse, were used differently on the college level than on other levels. More attitudinal metadiscourse of each type was used for the specialized audience than for the general audience, but the frequency of use was similar, except for saliency. The nontextbook materials for specialized audiences contained more than three times as many salience statements as did the materials for the general audience.

The findings have implications for publishers and consumers of social studies textbooks. The use or non-use of metadiscourse may indicate underlying beliefs and values concerning the roles of the teacher, author, student and textbook.

The study was limited by the lack of precision that exists in the definition of metadiscourse and the fuzziness of the boundaries between the different subtypes. Another problem is
that metadiscourse, like primary discourse, can serve several functions simultaneously in a social situation. Still, clear differences in frequency and type of use were observed and documented, which indicate the characteristics of normal textbook writing in this area, and a groundwork was laid for further studies of this type.

Study 2: A Case Study Evaluation of a Grade Six Social Studies Chapter

The nature of the textbook, its structure, coherence, logical content, is an important factor in social studies learning-to-learn situations. One chapter, entitled 'The Later Middle Ages: Civilization Reborn,' found in Ginn's Our World sixth grade social studies textbook, was analyzed to determine how rhetorically appropriate it was. Eight text characteristics were analyzed and evaluated.

Vocabulary. Chapter Six defined 13 vocabulary words and concepts that qualify as specific vocabulary needed for The Later Middle Ages but many words needed for understanding the chapter were not defined. Seventy words or phrases that could be potential problems were identified and classified: compounds, figurative language, verbs and participles, elegant variation, adjectives, nouns, noun phrases, polysemous words, and derivatives and suffixes.

Grammatical complexity. Many examples of grammatically complex sentences were found in Chapter Six. Sentences had, for example, complex noun phrases and verbal phrases as subjects, or negatives combined with initial logical connectors in the same sentence.

Thematization/coherence. Chapter Six, 'The Later Middle Ages: Civilization Reborn,' did not have an explicit theme. Unity and coherence no doubt suffered as a result of this lack. Instead of a single topic, there were multiple topics which resulted in abrupt shifts and discontinuities for the readers. In addition, there seemed to be no connection between the unit and chapter topics and predications about topics. Students reading titles and the following text would see discrete, unconnected sections making up the chapter.

Structure/organization. The underlying structure of Chapter Six did not have a conventional, canonical structure as do stories and argumentative essays. Instead, it was a mixture of narrative and generalizations but with no clear point for the narrative to illustrate. It seemed more like the structure of a popular magazine article in its unclear, erratic structure.

Explicit meaning cues/metadiscourse. Explicit meaning cues did not appear often in Chapter Six. The chapter did have titles, but they were frequently misleading. The bold-faced sentences which served as section subheadings and as the first sentence of the paragraph were no doubt an attempt to explicitly cue meaning, but they were confusing. The sentences were more general than the following sentences and did not seem closely
related to them. The paragraphing seemed to be done for reasons other than logic. The short three or four sentence paragraphs were reminiscent of journalistic paragraphing used for aesthetic reasons and for "easier" reading by unskilled readers.

Many of the relationships between sentences, as well as between main ideas, were difficult to determine in Chapter Six because few logical connectors were used. Furthermore, the chapter had no explicit global level summary or preview at the beginning or at the end and no summary statements that look back or ahead on the local level.

Summaries that abstract the main idea could be supplemented with summaries that present explicitly labeled topics, a thesis statement, topic sentence, purpose statements, significance statements, and the author's writing plan for the chapter in regard to partitioning and sequencing. If this were done, a reader could see the author's plan for content as well as for composing. Concluding summaries of content and composing could help readers confirm their hypotheses about what the author was saying in the chapter.

In addition, there were many unelaborated generalizations in Chapter Six that could be difficult for sixth graders to understand and remember.

**Style.** An objective, authoritarian, truth-giver style is the style used for Chapter Six, although there were a few shifts to an interpersonal style. The authors of Chapter Six did not take a stance on anything presented. There was no author perspective and very little author personality.

**Content density.** The content presented in Chapter Six seemed very dense. Children would no doubt have problems in understanding and remembering not only the many concepts in the short paragraphs about language development but also the surrounding paragraphs about the beginnings of Romance languages, the English language, and the transition from Latin to vernacular and from oral to written communication.

**Further Suggestions for Improving Chapter Six**

In order to achieve the goal of having an independent or partially independent reader who depends heavily on a textbook to learn the material, Chapter Six may need to be completely rewritten. It may need a single author with a controlling idea and stance who writes with a sixth grade reader in mind. This author could be helped by keeping in mind: learner characteristics and strategies, the task, and text characteristics. The author, then, as he revised Chapter Six would attend to each of the text characteristics previously discussed. Next, the completed chapter would be field-tested with sixth graders who would be interviewed and tested on the chapter.

While a complete rewriting of the chapter was not attempted, modifications were done that contain some of the elements that are needed for improving the test. The modifications were
Metadiscourse

concerned with only some of the text characteristics: those of explicit meaning cues (specifically, metadiscourse), style, thematization, and elaboration.

Experimental Methodology

Study 3: An Experimental Study of Metadiscourse

An exploratory study was carried out in an attempt to learn more about the effect of the roles of the author, point of view, relationship of author to reader, and style in content area textbooks on children's learning. While the general goal was to investigate the effects of metadiscourse on students, a specific goal was to investigate the effects when metadiscourse was presented with a combination of first and second person voice (interpersonal) as opposed to third person voice (impersonal)—(1) on children's retention of information from longer social studies passages and (2) on their attitudes toward the social studies passages and subject matter.

Metadiscourse was classified into two general categories, informational and attitudinal, with subtypes for each. One of the assumptions of studies of language use and social interaction is that language functions to transmit referential information, as well as to create and sustain expressive meanings. The assumption in this study was that not only primary discourse but also metadiscourse is used for both referential and expressive ends. Metadiscourse functions on a referential, informational plane when it serves to direct readers in how to understand the primary message by referring to its content and structure, and to the author's purposes or goals. This referring can be on a global or local level. Metadiscourse functions on an expressive, attitudinal and symbolic plane when it serves to direct readers in how to take the author, that is, how to understand the author's perspective or stance toward the content or structure of the primary discourse.

The study investigated whether either of these two forms of metadiscourse or the use of interpersonal style affects: (a) retention of information from social studies passages, (b) students' attitudes toward the passages and the subject matter, and (c) reading time. In addition, it investigated whether the effects of the variables were interactive and, if so, under what conditions.

Method subjects. The subjects were 120 sixth-grade children who came from white, middle-class families and lived near a large midwestern university. They were enrolled in five social studies classes taught by the same teacher and were homogeneously grouped according to ability as measured by scores in standardized tests. The children did not have access to films, workbooks, study guides, or teacher/student discussion on the topic of the passages studied, and they read the experimental materials independently.

Materials. The materials selected for the children to read consisted of three passages of approximately 1,000 words each,
taken from Chapter Six of the Ginn grade six social studies
textbook currently used in the subjects' classroom. The chapter
concerned the later half of the Middle Ages in Europe. The
original passages used for the study were written in third person
voice (except for map references, which were omitted) and none
contained informational or attitudinal metadiscourse.

The intent was not to rewrite the content of the original
text, but to add metadiscourse in the form of words, phrases, or
clauses, and to modify the voice. Informational metadiscourse
was added to the text on two levels, global and local. On the
global level, metadiscourse was added by attaching an elaborate
preview and conclusion to each passage and by inserting sentences
within the passage which dealt with global aspects of the passage
content. On the local level, metadiscourse was added by
attaching briefer previews and conclusions to the sub-parts of
the passage and by attaching metadiscourse to the existing
sentences.

Variables manipulated. Informational metadiscourse was
added on the basis of evidence found in the semantic and
structural content of the chapter, the unit title, and the
teacher's manual. Attitudinal metadiscourse was added
arbitrarily where it seemed reasonable to do so. Voice was
changed to interpersonal on both global and local metadiscourse
where it was appropriate for the design.

Measures. Several dependent measures were used to explore
the effects of manipulating the text on students' performance and
attitudes. A passage test had a number of subtests, which
measured how well information, either central or peripheral to
the message of the passage, was retained, and also measured the
retention of information that was not directly related to the
metadiscourse, as well as information that was directly stated in
the metadiscourse.

The overall test scores for each of the three passages had a
high degree of reliability. The coefficients (Cronbach’s Alpha)
were: passage 1, .82; passage 2, .81; and passage 3, .80.

The second test measured attitude. This consisted of a
series of 14 items for which students rated (a) their preference
for the manipulated text compared to their regular text, (b)
their attitude toward the author, designated as “Pat,” and (c)
their level of interest in the Middle Ages. Thirteen items used
a five point nominal scale (1-5), and one item used a three point
nominal scale (1-3). The data indicated that eleven of the items
were highly intercorrelated and that three items were
independent. Further analyses showed that the intercorrelations
for the eleven items were stable and that the children were
consistent in their ratings across four administrations of the
test.

Two instruments, one cognitive and one affective, were
devised as pretests and pilot tested with a group of sixth-grade
children from another state. The first was a background knowledge test, and the second an affective social studies comfort index (SSCI), which was also administered as a posttest. The pilot test data indicated the test scores showed wide variability for the children chosen and seemed to have good face validity.

**Design.** The design was a 2x2x2x3 (voice x attitude x information x passage) factorial with repeated measures on the passage and attitude tests. Each subject read all three passages in the same condition and in the same order.

Subjects were placed in eight equal groups by first stratifying them on the basis of standardized reading comprehension scores obtained from school records (Stanford Achievement Test, 1973). Within each stratified level, students were randomly assigned.

Subjects were given the two types of pretests on the first day. After pretesting was completed, they were told that the experimenter had a friend, Pat, who was writing a new social studies textbook for sixth graders and needed their advice in order to write a textbook that was easy and interesting to read and learn from. They were told that they would have the opportunity to read part of that book over the next four days.

**Results**

**Total passage test score.** A three-way analysis of variance was performed on the total passage test score data, using scores from the three passages. The three factors were the presence or absence of informational metadiscourse, attitudinal metadiscourse, and interpersonal voice. No main effects or interactions were significant for the passage test overall.

**Passage subtest scores.** Next, a series of analyses of variance was performed on the passage subtest scores. This approach was justified, since the passage test was not a normal comprehension or retention test, and the subtests were of rather different types, some dealing with passage structure, some with author attitudes, and some with stated content.

In order to investigate the effects of two individual difference dimensions, the subjects were divided at the median score on the vocabulary test (median = 76.83), taken as an intelligence measure, and on the SSCI (median = 20.86), taken as an affective measure. For each of these groups, a 2x2x2 ANOVA was performed on each of the subtest scores, in order to find out whether for that group, the three variables of the study had an effect on that subscore.

There were relatively few significant main effects, and most of these were related to students scoring higher on a subtest when the information being tested was directly stated or repeated in the added metadiscourse. Most noteworthy was the lack of effects which might be expected considering how extensively the three passages were manipulated. Even the effects just noted were significant for only some of the subgroups. Informational
discourse, which gave information about the structure of the passage and author strategies, did not raise scores on the structure (DAS) subtest, which tested for awareness and retention of this type of information. There was little evidence that the informational or attitudinal metadiscourse raised or lowered the scores for retention of information that was not manipulated (stated, repeated, or emphasized) by the added metadiscourse. Finally, the effects of interpersonal voice were minimal.

The results of significant two-way interaction effects seem to indicate that using interpersonal as opposed to an impersonal voice differentially affects students. The interpersonal voice helps the low-comfort students when informational metadiscourse is present and hurts the high-comfort students under the same conditions. Further, the interpersonal voice reduces the likelihood that low-comfort students will remember such things as author attitudes. While the pattern of the significant three-way interaction is complex, the data indicate particularly good retention when interpersonal voice and informational metadiscourse are either present together or both missing, and particularly poor performance when either of these is present alone. (In addition, the presence of attitudinal metadiscourse results in moderate scores.)

**Attitude Measure Analyses**

**Main effects overall.** A three-way analysis of variance was performed on the attitude rating data, using total scores across three ratings. The three factors were the presence versus absence of informational metadiscourse, attitudinal metadiscourse and interpersonal voice. Again, no main effects or interactions were significant. Next, analyses of variance were carried out separately for each cluster defined subscore, using total rating scores across the four cluster-defined subtests as data. Separate analyses were conducted for all students and for four subgroups: students who tested high versus low on the vocabulary test, and students who scored high versus low on the comfort index before participating in the study.

The three significant main effects indicated that the presence of informational metadiscourse decreased the students' rated preference for social studies texts which used a large number of first and second person pronouns and opinion words, while the presence of attitudinal metadiscourse somewhat increased the high-comfort group's interest in the Middle Ages. There were no main effects for interpersonal voice.

**Interaction effects.** Most students who had both attitudinal and informational metadiscourse, and those who did not have either, most preferred having just facts in their social studies texts. Students who had just one type of metadiscourse were tolerant of more opinions. Both high- and low-comfort groups, as well as the high- and low-vocabulary groups, show this pattern. The most attitude-laden texts were those with both attitudinal metadiscourse and interpersonal voice, and the students who had
these texts were the ones who indicated the greatest preference for social studies texts with just facts. The students indicating the most tolerance for opinions in the text are those who had some exposure to the interpersonal aspect of language, with either attitudinal metadiscourse or interpersonal voice, but not too much. In general, it appears that the experimental manipulations had even less effect on the students' attitudes toward the materials than they did on the students' retention of information.

Reading time analyses. The primary result was that lengthening the text in the manner required by including informational metadiscourse produced longer reading times. The other variables had little effect. It should be noted, however, that while the addition of informational metadiscourse increased the length of the passage from approximately 3,000 words to approximately 6,000 words, an increase of 100%, this yielded a reading time increase of only 40%. Apparently, the metadiscourse was read faster.

Discussion. While the informational metadiscourse did seem to have some beneficial effect, it was not great and not necessarily limited to the information on which the metadiscourse focused. Furthermore, the students seemed to react neither negatively nor positively to this added length and the supposedly helpful informational author commentary, in general, as indicated by their attitude scores.

It was expected that attitudinal metadiscourse and interpersonal voice would increase the closeness of the author/reader relation, making the text more interesting and personal to the students. If this occurred, it is not reflected in their responses on the attitude test since there was no general effect on ratings of how well the students liked the text, their assessment of the author, or how well they liked the subject matter.

On the other hand, there is some indication that there were more local effects. Subgroups differing on the affective measure showed differences in their response to the use of personal versus impersonal voice. It may be that the personal style of an author can be helpful to students who are more anxious about their own ability when dealing with certain types of complexities in the text. There is also some indication that students can react negatively to too much metadiscourse, since students getting both attitudinal and informational metadiscourse were the ones who were least in favor of longer texts.

In general, most of the effects which were observed were small or were limited to certain subgroups of students. This suggests that it may be difficult to make general recommendations about the use of metadiscourse in textbook writing.

Explanations for the Lack of Effects
1. It may be that it simply doesn't have much effect.
2. It may be that since the students were not used to reading texts of this sort, they simply did not have the background to allow them to appreciate or benefit from it.

3. It may be that subjects could not adequately respond to the types of questions that were used to test retention and effects of the information.

4. It may be that the passage was too difficult for students to understand and remember on their own; thus the added metadiscourse simply added to the load on the students.

5. It may be that the crucial factor is not simply the presence of metadiscourse, but what specific type, how it is used and how much it is used.

6. It is also possible that an artificial text resulted from trying to add metadiscourse to an existing, not well-written passage.

7. It is also possible that the instruments used to measure the effects of the metadiscourse and voice variables were inappropriate for the questions that were asked, insensitive to what was being measured, or not sufficiently reliable or valid.

8. Finally, the research method used may not be an appropriate method for investigating the effects of metadiscourse and voice.

Conclusions

Despite the apparent paucity of findings, some aspects of the data are worth highlighting. For example, grouping students on the basis of the affective measure, the SSCI, resulted in subgroups who responded differently to the metadiscourse manipulations. There is a need to further refine and validate the current measure, but it is apparent that future reading and writing studies should include a comfort index as a basis for assessing individual differences.

A second interesting finding was that the primary result of voice appeared to be that it modulated the effects of the metadiscourse variables. Thus, while it may have little direct effect on retention, it may influence other variables. Future research should explore this possibility as well.

Issues Regarding Metadiscourse

Several scholars have pointed out the lack of a firm theoretical basis needed for studying metadiscourse. At present, the notion of metadiscourse involves different definitions, terminologies, and conflicting classification systems. An important theoretical issue is whether “content-less” metadiscourse can be fit into the current models of discourse in the field of rhetoric. There seems to be a need for somehow integrating the content-less characteristics of discourse (which would include pragmatics and metadiscourse) with the content characteristics.
At present, the discipline of rhetoric, in general, looks favorably upon metadiscourse as it did during the classical period. Those rhetoricians working within a psychological, "John Lockeian" framework during the late seventeenth and the eighteenth centuries probably would not have been as favorable. Speech communication, a sub-branch of rhetoric, regards metadiscourse as facilitating communication, but business communication, also a sub-branch of rhetoric, tends to consider it a type of wordiness. Novelists and critics, once positive during the eighteenth century and the Victorian period, and then more negative, now seem to consider metadiscourse a legitimate rhetorical technique in fiction. Linguists of various kinds seem interested in metadiscourse as a phenomenon, and several educational psychologists regard it as having the potential to have positive effects on learning.

Another issue involves the curriculum goals for social studies and indeed for any other school subject. It is impossible to decide whether metadiscourse is beneficial or not, even if research studies in the future find metadiscourse significantly affects students' performance and attitudes, without first having a clear understanding of curriculum goals. Value questions cannot be answered except in relation to goals.

Metadiscourse raises the issue of epistemology. The field of education may need to ask itself what view of knowledge it should be communicating to students—whether it should present knowledge as fixed, established, and to be memorized—or as correctible, participatory, and changing as new discoveries are made. Furthermore, there are the issues of interpretation and subjectivity, and how these relate to social studies. If history is interpretation, as historians agree that it is, while social studies textbooks present history as facts using an objective, scientific approach, then is this a spurious objectivity?

Side effects would result if metadiscourse were used in social studies textbooks. If a social studies textbook were written by an author with an overt point of view, is that kind of textbook appropriate for young children? At present, children are expected to learn the received wisdom given to them in social studies textbooks, even though historians admit that authors are mythmaking. Is it appropriate to reveal this characteristic of historical knowledge to children? The lack of metadiscourse in social studies textbooks is an index of the pedagogical assumptions in the field of history and social studies.

Still other issues that are raised by considering metadiscourse in textbooks concern the roles of the teacher and of the learner. If a great deal of metadiscourse is included in the student's texts as part of the connected discourse in the lesson, does this take away from the contribution the teacher can make? Should textbooks or teachers provide the metadiscourse to the children if it is appropriate? And there is also the issue of whether adding metadiscourse to textbooks decreases the active
role of the reader in reading, understanding, and remembering the text. If nothing is left for the reader to do in terms of organizing the information, does this reduce active learning from the text?

The results of the experimental study indicate that metadiscourse was helpful for certain subgroups of students, depending on whether the interpersonal voice was used or not. This raises the issue of whether the single, standardized textbook approach that is commonly used in schools today for reasons of economy and efficiency can be justified. The multi-text approach, with different groups of students using texts written in different ways (that is, with different amounts or kinds of metadiscourse assistance) might be justified if future studies find the kinds of individual differences observed in the experimental study reported here.

The study failed to find students were more interested in a text or subject matter with a personalized author, but this finding, too, raises the question of whether it is possible to learn much about interest, attitudes or acceptability of texts until a theory for these affective dimensions is developed.

The children in the study, in general, did not seem to prefer social studies textbooks with an author's opinion over a social studies textbook that was factual. The critical issue, though, may not be whether students prefer a textbook with an author who has a point of view and who uses attitudinal metadiscourse, but whether they need it. With hedges and emphatics removed, for instance, students have no grounds to judge the truth or confidence of assertions and may be too impressed by the text.

The questions that were raised as a result of the study of metadiscourse make clear the fact that the issues go beyond the research questions asked. Metadiscourse is but the tip of the iceberg in the general question of what a theory of education should be. Many subtleties are involved if an author decides to use metadiscourse, for the decision relates to a whole array of other issues regarding the philosophy of knowledge and psychology of learning.
References
Metadiscourse


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**TABLE 1**

**EXAMPLES OF TEXTS WITH METADISCOURSE***

<table>
<thead>
<tr>
<th>No.</th>
<th>Excerpt</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I shall now proceed to apply these observations to the work before us: for indeed I have set them down principally to obviate some constructions which the good-nature of mankind, who are always forward to see their friends' virtues recorded, may put to particular parts. I question not but several of my readers will know the lawyer in the stage-coach the moment they hear his voice. It is likewise odd but the wit and the prude meet with some of their acquaintance, as well as all the rest of my characters. To prevent, therefore, any such malicious applications, I declare here, once for all, I describe not men, but manners; not an individual, but a species. <em>Perhaps it will be answered. Are not the characters then taken from life?</em> Heinrich Fielding — <em>Joseph Andrews</em></td>
</tr>
<tr>
<td>2.</td>
<td>In this work, however, I wished to regard the subject from an altogether different point of view. Immigration altered America. But it also altered the immigrants. And it is the effect upon the newcomers of their arduous transplantation that I have tried to study. ... I have tried historically to trace the impact of separation of the disruption in the lives and work of people who left one world to adjust to a new. <em>Oscar Handlin — The Uprooted</em></td>
</tr>
<tr>
<td>3.</td>
<td>... To me it seems no genetic accident that Polynesians, as a race are large and powerful people...I felt that if a voyaging canoe were built and sailed today, it would function as a cultural catalyst and inspire the revival of almost-forgotten aspects of Hawaiian life. <em>Herb Kane — National Geographic</em></td>
</tr>
<tr>
<td>4.</td>
<td>I'm going to tell you the causes of the Renaissance. Let me begin with the fall of Constantinople. The Turk-Moslems tried once more to conquer Constantinople. This time they had won. Merchants, painters, teachers, and traders all fled to Italy, Spain, and Rome. This was the beginning of the Renaissance. The Renaissance was the time when people had more interest in art. Famous painters were born during this time, such as, Raphael, Michaelangelo, Leonardo Da Vinci and D'Este. Leonardo Da Vinci painted the famous unknown woman called the Mona Lisa. Michael Angelo was a sculptor as well as a painter. He carved a beautiful statue known as the Angel. That is the statue I admire most of all. If you've ever seen the lovely thing, you will understand why. These lovely works of art are priceless. Let's now get back to during the Renaissance. Nobles were in more demand for art. They hired painters to paint for them. This is why more people wanted education, and schools grew. I think you would find the Renaissance very interesting. <em>Ginny Henderson, 6th grader — a model text written for other 6th graders</em></td>
</tr>
</tbody>
</table>

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*Metadiscourse is underlined*
### TABLE 2
**INFORMATIONAL AND ATTITUDINAL AND TOTAL METADISCOURSE USED FOR ALL SOCIAL STUDIES TEXTS**

<table>
<thead>
<tr>
<th>Text Type</th>
<th>Total a Words</th>
<th>Informational</th>
<th>Attitudinal</th>
<th>Total Metadiscourse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textbooks</td>
<td>129,000</td>
<td>1.17</td>
<td>.81</td>
<td>1.98</td>
</tr>
<tr>
<td>Nontextbooks</td>
<td>77,000</td>
<td>1.85</td>
<td>4.32</td>
<td>6.17</td>
</tr>
<tr>
<td>Typical Textbooks</td>
<td>82,000</td>
<td>.55</td>
<td>.78</td>
<td>1.33</td>
</tr>
<tr>
<td>Typical Nontextbooks</td>
<td>66,000</td>
<td>.47</td>
<td>3.70</td>
<td>4.17</td>
</tr>
<tr>
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<td>47,000</td>
<td>2.26</td>
<td>.83</td>
<td>3.11</td>
</tr>
<tr>
<td>Atypical nontextbooks</td>
<td>11,000</td>
<td>10.18</td>
<td>8.09</td>
<td>18.27</td>
</tr>
<tr>
<td>All typical texts</td>
<td>148,000</td>
<td>.51</td>
<td>1.08</td>
<td>2.59</td>
</tr>
<tr>
<td>All atypical texts</td>
<td>58,000</td>
<td>3.76</td>
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<tr>
<td>Typical textbooks</td>
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<td>.55</td>
<td>.78</td>
<td>1.33</td>
</tr>
<tr>
<td>Atypical textbooks</td>
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<td>2.26</td>
<td>.83</td>
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<td>11,000</td>
<td>10.18</td>
<td>8.09</td>
<td>18.27</td>
</tr>
</tbody>
</table>

*Approximate

### TABLE 3
**EXAMPLES OF MANIPULATION***

An Excerpt from Passage 1 with Interpersonal Voice

**VAI**

In Part One I review you the early Middle Ages. The way I do this is by describing what life was like during that time. The main idea I am trying to get across to you here is that the early Middle Ages was a time without learning and freedom for most people.

I think it unfortunate that [during the early Middle Ages, most Europeans knew little about other parts of the world.] I also find it unfortunate that [their lives were ruled by the promises that were part of the feudal system.]

**Vai**

I think it unfortunate that [during the early Middle Ages, most Europeans knew little about other parts of the world.] I also find it unfortunate that [their lives were ruled by the promises that were part of the feudal system.]

**Vai**

In Part One I review you the early Middle Ages. The way I do this is by describing what life was like during that time. The main idea I am trying to get across to you here is that the early Middle Ages was a time without learning and freedom for most people. [During the early Middle Ages, most Europeans knew little about other parts of the world. Their lives were ruled by the promises that were part of the feudal system.]

**Vai**

I found that [during the early Middle Ages, most Europeans knew little about other parts of the world. Their lives were ruled by the promises that were part of the feudal system.]

* Capital letters indicate presence of Interpersonal Voice (V), Attitudinal (A), or Informational Metadiscourse (I). Lower case letters indicate absence of interpersonal voice (v), attitudinal voice (a), or informational metadiscourse (i).
Figure 1

Comparisons of 2-way Interactions (Voice X Information) for the High Comfort Group on Passage Tests
Figure 2
Comparisons of 2-way Interactions (Voice X Information) for the Low Comfort Group on Total Passage, CIU, PIU, AND PIM Tests
Figure 3

Comparisons of 2-way Interactions (Voice X Attitude) for High and Low Comfort Groups on PIU and AAI Tests