READING COMPREHENSION SKILLS FOR COLLEGE STUDENTS: A MULTIDISCIPLINARY APPROACH

WHAT IS READING?
On the most basic level, reading is a decoding process whereby phonemes and graphemes are assimilated into units of meaning, or words. Some experts refer to reading as a psycholinguistic guessing game.

ACADEMIC READING AT THE POSTSECONDARY LEVEL...
More recently referred to as academic literacy, it is the ability to process and interact with a body of artifacts and ideas preserved within the specific domains of educational institutions. It is a set of behaviors peculiar to the formally educated.

ACADEMIC LITERACY refers to the notion that literate people are those who read literature, philosophy, history, and contemporary essays, the very sorts of texts college students face during their first two years of undergraduate work. It reflects the idea that they can also write about these texts in some fashion. And it reflects the belief that they can comprehend such texts within the larger context of Western cultural traditions (Olthoek & Stain, 1997).

WHY IS IT IMPORTANT FOR CONTENT AREA TEACHERS TO "TEACH" READING?
For the last 50 years, various models of epistemological development suggest that beginning college students are not likely to be functioning at higher levels of developmental stages or negotiating their learning in transactional terms. Academic support must come in the classroom and assist the students in developing the cognitive sophistication and skills that current learning demands.

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<th>Traditional comprehensive textbooks</th>
<th>Instructor composed readers</th>
<th>Trade books</th>
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<td>More likely to be associated with expository writing, these do not involve reader construction of meaning, honor the knowledge the reader brings to the text, or lead nonspecialists to initial reading. Classical prose features high content density, a compressed information, and a higher pattern of presenting declarations through print, and organizational strategies. Given the nature of the discipline represented or patterns that dominate thinking in this field, professional articles are necessarily subject to nonexpository forms and pose problems for the reader due to the high level of background knowledge assumed in this form. Textbooks need to match the structure with the type of reading by providing advanced registers prior to the reading assignment, use follow-up questions to initiate discussion in class, and provide specialized vocabulary where needed. De novo original and transactional reading involves the reader directly in the genre.</td>
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<td>Intended for a broad range of readers, these include lectures, seminar, and survey books. They also include comprehensive, biographical, and historical accounts of specific periods or events, analyses of social or political topics, and literary works, such as novels or biographies. Students who read them off for the sake of reading off and book marks must be prepared to handle the major mindset changes necessary for going from one type of reading to another. Academic deductive and inductive learning get from texts already in place.</td>
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FOUR EXAMPLES OF ORGANIZATION OF TEXTS REFLECTING THE LOGIC OF THE DISCIPLINE

1. Chemistry Textbooks
- Built of macrostructures composed of main ideas or concepts
- Reading material reinforces ways of thinking that are associated with chemistry as a process as well as a body of knowledge
- Includes definition structures, comparison structures, solution pathways, sequence structures, enumeration structures, response structures, causal relationships, and the scientific method

2. Biology Textbooks
- Two basic kinds of organization: from simple to the complex, and large, or vice versa
- Both reflect basic organization of biological phenomena on the basis of size and complexity
- Intro texts that use the building blocks approach typically begin with cells, move through genetics and evolution to the physiology of plants and animals, and then covers ecology
- Alternatives to that approach may use a conceptual organization, such as one that starts with ecology, moves through evolution and diversity, and then covers cells, plants, and animals in that order

3. Psychology Textbooks
- Seven major psychological areas covered in introductory psychology texts: biological, experimental, cognitive, developmental, clinical, social, and personality
- These generally constitute the macrostructure of psychology texts, often in that order, so that at the beginning, the study of psychology is close to the study of biology, and the field is presented as a natural science
- Because many students do not consider psychology as remote a field as chemistry or biology, the text may actually negate reader experience by foregrounding such technical material as nervous system structure and animal experimentation

4. History Textbooks
- Usually organized chronologically, with a macrostructure scheme composed of major era of time being covered
- Narrative by nature, but involves as much interpretation as reporting
- Introductory history texts tend to emphasize the latter, however, so that the basic argumentative structure of history may not be evident to the reader, who sees pages densely packed with facts
- Students must learn to sort through many levels of information to separate concepts from supporting details, a common kind of analytical reading

WHAT MAKES A TEXTBOOK 'READER FRIENDLY'?

According to Walker, there are five basic characteristics used to evaluate texts on user-friendliness:
1. Organization, including macrostructures, transitional devices, consistency of writing styles, and text overviews and summaries;
2. Explication, which includes uses of definitions and examples written clearly to make concepts comprehensible;
1. Conceptual density, which refers to the number of concepts presented in a given amount of space and the accessibility of the vocabulary used in the presentation;

4. Metadiscourse, in which the author gives cues to the reader as to the level of importance of information;

5. Instructional devices, referring to the layout and apparatus of the textbook such as a well-organized table of contents, glossary, index, headings, and subheadings; questions to aid self-testing, etc.

(Only about 22% of the items of the inventory refer to content, and 78% to text organization, cues, and apparatus.)

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**GENERAL SUGGESTIONS FOR EVALUATING READING**

1. Distribute daily reading schedules outlining exactly what should be read prior to test preparation.

2. Require vocabulary master lists and quiz students regularly on vocabulary terms.

3. Require vocabulary master files (terms are kept on index cards in alphabetical order) and quiz regularly.

4. Reinforce meanings of roots and affixes when possible and quiz on them.

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5. Distribute advance organizers prior to chapter readings.

6. Teach students effective ways to take notes from their readings and periodically check their reading notes.

7. For courses with discrete vocabulary, devise a system of abbreviations to make note-taking more effective.

8. Test on independently read materials to check for reading comprehension.

9. Carefully explain the objectives of the course and link the objectives with efficient reading strategies.

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**SAMPLE READING SCHEDULE**

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<th>Sun</th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
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<td>Ch 1</td>
<td>Ch 2</td>
<td>Ch 3</td>
<td>Ch 4</td>
<td>Ch 5</td>
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<td>1-10</td>
<td>11-19</td>
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**SAMPLE SOCIAL SCIENCES VOCABULARY CARD**

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<th>Ch 1</th>
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<tr>
<td>Business</td>
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*business* p. 3

A profit-seeking activity that provides goods and services that satisfy consumer's needs; 4 key roles: profit, not-for-profit organizations, service businesses, goods-producing business.
SAMPLE HUMANITIES VOCABULARY CARD

incantation
(n)
p. 5
chant

A use of spells or verbal charms spoken or sung as a part of a ritual of magic.
Harry softly murmured the incantation as he practiced spells in Defense of the Dark Arts class.

SAMPLE MATHEMATICS VOCABULARY CARD

Central tendency

Arithmetic mean or mean (X)
p. 60

Most frequently used measure of central tendency; to compute, sum all data values of the distribution and divide by N.

\[ X = \frac{\sum X}{N} \]

SAMPLE BUSINESS ADVANCE ORGANIZER

- What do you already know about supply and demand in business?
- What are the purposes of business in American society?
- Imagine that you own a Fortune 500 company. What would be some challenges for staying competitive?
- Read your chapter one section at a time. In your notes, summarize the main ideas of each section in two or three sentences.

SUGGESTIONS FOR ENGAGING STUDENTS

- Supplemental instructional seminars focusing on strategies designed to enhance studying and learning
- General study strategies courses with an emphasis on reading comprehension skills and using collegiate text excerpts
- Critical thinking skills courses, designed to be aligned with specific courses
- Prereading requirements for courses