UNDERSTANDING
DISCIPLINARY LITERACY

GRADES 5-12

Recognize highly-specialized thinking

Teach reading in tandem with content

Model expert thinking

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Recognize highly-specialized thinking

Recognize the different reading needs among the 4 major disciplines.

INCREASING THE SPECIALIZATION OF LITERACY

Disciplinary Literacy

Intermediate Literacy

Basic Literacy
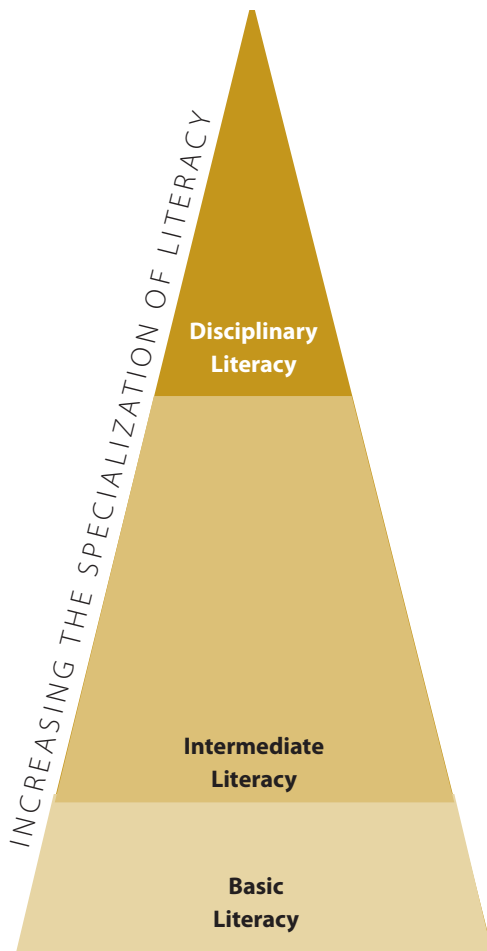
Literature Reading

- Reading meant to convey an experience to the reader.
- Rich language includes multiple meaning words, figurative language, etc.
- Heavy emphasis on interpreting/inferring author ideas and intentions.
- Understanding of the many modes & text structures within the genre of literature.
- Understanding of the individual story elements that compose the whole work.

History/Social Studies Reading

- Reading narrative accounts/theories of historical events.
- Balancing fact v. opinion/interpretation/ perspective.
- Heavy emphasis on reading multiple accounts.
- Understanding of author bias/interpretation is necessary.
- Understanding of cause-effect relationships (those who acted and those who were affected).

Math & Technical Reading

- Reading to reach an end result.
- Heavy emphasis on accuracy/error detection.
- Precision is essential.
- Understanding of processes is essential.

Science Reading

- Read to understand the theories and principles behind science.
- Requires active reading to understand how facts, assumptions, principles, and proofs are interrelated.
- Understanding of experiments or process.
- Heavy emphasis on specialized vocabulary.
- Heavy emphasis on visual literacy (e.g., graphs, charts, formulas, photos, diagrams, etc.).
- Some science reading includes the presence of math.

Teach reading in tandem with content

Identify textual differences.

| HISTORY	SCIENCE	MATH
By 1929, American factories were turning out nearly half of the world's industrial goods. The rising productivity led to enormous profits. However, this new wealth was not evenly distributed.	The cells that line the nasal cavities have cilia, tiny hairlike extensions that can move together like whips. The whiplike motion of these cilia sweeps the mucus into the throat, where you swallow it.	At time t=0, a tank contains 4 lb. of salt dissolved in 100 gal. of water. Suppose that brine containing 2 lb. of salt per gallon of water is allowed to enter the tank at a rate of 5 gal./min. and that the mixed solution is drained from the tank at the same rate. Find the amount of salt in the tank after 10 min.

Model expert thinking

Model how to think while reading your course text using Think Alouds.
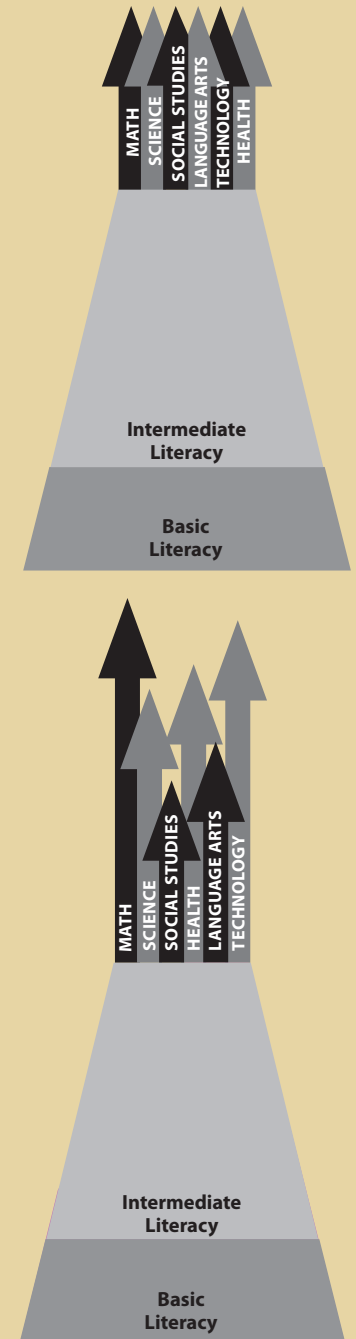
Model expert thinking, *continued*

Literature Reading

- Model how to follow a plot throughout a story, noticing how it grows.

- Model how to think beyond what the text says literally to understand what it means inferentially (e.g., allusions, analogies, theme, etc.).

- Model how you figure out what a word/phrase means.

- Model how you visualize the plot evolving.

- Model your thinking process to determine an author's purpose, message, and perspective.

ELA/Literary Texts
- Short stories, novels, folktales, legends, myths, parodies, fiction, graphic novels
- Dramas, plays, movies/scripts
- Poetry

- Model how you scrutinize the author's choice for organizing and structuring the text.

- Model how to compare story elements across multiple texts (e.g., characters, settings, events, themes, etc.).

Math & Technical Reading

- Model how to juggle reading explanatory text with adjacent examples/samples/diagrams.

- Model the *Reading Voice* (oral fluency) when "reading" a math problem or technical document of symbols/codes.

- Model how you interact with the text, circling/underlining the relevant information.

- Model how to create visual/graphic representations of technical text/math problems.

Technical Texts
- Course textbook(s)
- Directions, instruction manuals, recipes
- Forms, contracts, documents, spreadsheets
- Blueprints, sheet music, fingering charts, design principles
- Stats within graphs, charts, tables
- Math problems/story problems

- Model how you utilize the text structure to execute the task (e.g., follow the outlined sequence of steps).

- Model the self-checking process to demonstrate an understanding of what you're doing, when, & why.

History/Social Studies Reading

- Model how you track the "characters" and actions that caused a series of events.

- Model how you note key details, steps, or facts that lead to a general summary of the text.

- Model how you also consider the context of when the document was written in history (contextualizing).

- Model how you consider the author's interpretation/perspective.

- Model how you scrutinize the author's word choice.

- Model how you take note of the author and consider his research, his bias, his perspective, his motives, etc. (sourcing).

History/Social Studies Texts
- History textbook(s)
- Primary source documents
- First-hand accounts (e.g., journal/diary entries, personal letters)
- Biographies, autobiographies
- Maps, timelines, photographs
- News articles
- Artistic representations of the culture/event (e.g., artwork, film, editorial cartoons)

- Model how you cross-reference the information provided by comparing it to information from multiple texts/ from multiple sources (connecting, corroborating).

Science Reading

- Model how you note key details, steps, or facts that lead to a general summary of the text.

- Model how to read related charts, figures, graphs, photographs, diagrams, etc.

- Model how to read procedural text.

- Model how often you wonder, question, or predict something when reading.

- Model how to question the credibility of the work (e.g., examine the procedures used to obtain the results).

Science Texts
- Science textbook(s)
- Science trade books
- Raw data, field notes, journals
- Science journal articles & websites
- Procedural steps for an experiment
- Recounts, explanations, reports
- Flowcharts, graphs, figures, models

- Model how to corroborate information.

- Model how you integrate the information read/learned with what you knew previously and how you develop a new, deeper understanding.

Discussion: Turn & Talk

Discuss the degree to which you have been modeling the reading, writing, and thinking skills necessary to be successful in your particular class.

Discuss what constitutes text for your course.

Was your definition of what "counts" as text broad enough?

Identify the different texts you already include within your curriculum.

What additional text types might you look to include?

Beyond what's listed on page 5, what additional "expert thoughts" could you model for students within your content area?

BUILD SUCCESSFUL READERS & WRITERS

Learn more simple and effective strategies for teaching reading and writing when you visit *www.SmekensEducation.com*.

To find additional resources related to this session, search the Smekens Education website using these keywords:

- Thinking Voice
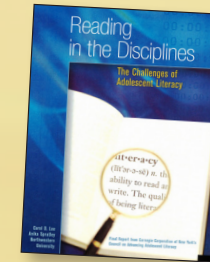- Think aloud
- Multi-text expectation

USE THE RIGHT TOOLS

Our online bookstore, *www.TheLiteracyStore.com*, features hundreds of titles from all the major publishers. And, it's the only place where you can purchase Smekens Education original resources.

ADDITIONAL RESOURCES

Search the Internet for this free download.

"Reading in the Disciplines: The Challeneges of Adolescent Literacy," Carnegie Corporation