Discipline Specific Literacy: Improving Comprehension in Content Area Classes

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Goals

SIM PDers WBAT:

- recognize depth of understanding in content area
- gain another point of entrance with content area teachers
- deepen connections between improving comprehension and SIM

Components of Instruction that build Comprehension

1. **Background knowledge**
   - ✓ World
   - ✓ Vocabulary
   - ✓ Concepts
2. **Knowledge of text/discourse structures**
   - ✓ Narrative/Expository organizational patterns
   - ✓ Student awareness and Strategic use
3. **Cognitive Strategies**
   - ✓ Goal-specific (activate pk; text analysis, SQ, paraphrasing, summarizing, visual imagery)
   - ✓ Monitoring and repair
   - ✓ Packaging
4. **Increase motivation/engagement**

e.g., Gersten et al., 2001; Biancarosa & Snow, 2004; Ehren, 2005 Torgeson et al., 2007

Structures for Learning

- Listening
  - Teacher Behaviors
  - Success regardless of literacy level
  - Example: Instructional Routines
- Reading
  - Student behaviors
  - Require mediated instruction for independent mastery
  - Example: Learning Strategies

Science's Critical Challenge

- Help students to change what they believe intuitively, based on prior knowledge or perceived experience, by shifting understanding
  - e.g., seasons caused by the tilt of the earth, not the distance from sun
- Instruction is intended to create informed consumers and engaged citizens

History's Critical Challenge

- History is the narrative of a people with bias and context, not just a story.
- Historians read to do three things:
  - Corroborate (*find the overlap*)
  - Source (*find the bias in documents*)
  - Contextualize (*find the context of the writing*)
  - This results in knowledge that is nuanced, even when prior knowledge is limited!

Background Knowledge

- Address **intuitive misunderstandings** to prevent reader *ignoring*, *discounting*, and *compartmentalizing* accurate information that is different by
  - Clarification of background knowledge vs. Activation prior to reading
  - Provide explicit contradictions to help shift intuitive beliefs
- Address **inconsiderate texts**
  - High level vocabulary words and poorly explained concepts
  - Fail to tie students experience and knowledge to concepts, impeding inference making
  - Graphs and charts are often hard to read

Text/Discourse Structures

- Address **the scope and life of the field** by
  - Using multiple texts: films, trade books, journal articles, experiments, lab reports, historical documents…& textbooks
  - Teach the structure and language-use of these genres explicitly, including as "speech acts"
- Observe **multiple perspectives** and come to **objective evaluation**
  - Step outside of intuitive or personal beliefs
  - Critically examine personal beliefs in light of others before forming opinions or evaluations
- **Truth**
  - Truth ≠ Textbook
  - Truth is always an approximation

Cognitive Strategies

- Students who believe that science has a Truth that is unchanging:
  - use shallow strategies to study facts (right and wrong)
  - *Do not* engage deeply understand the concepts
- Common Science Strategies
  - Graphic Organizers
  - Questions related to key points
  - Text structures (organization of texts—articles, reports, textbooks, etc.)

Cognitive Strategies

Common History Strategies

- Story Grammar for narrative comprehension
- Prompts & structures to organize expository essays
- Self-questioning around Big 3 Skill areas
  - What biases or predispositions did the author or authors have?
- Write evaluations of different perspectives, not summaries of a Truth
- Engage in collaborative reasoning by taking and defending a position

Motivation & Engagement

- Motivation is tied to helping the student find
  - the material interesting,
  - perceived as useful,
- Motivation is most possible when students
  - have self-efficacy,
  - are self-regulated learners
- Ensure multiple texts are accessible and create desired contradiction
- Collaborative reasoning must be taught, roles clarified, and tasks clearly outlined.

Word Study

- Multisyllabic Words
- Difficult, often content specific syntax
- Variety of unique semantic constructions

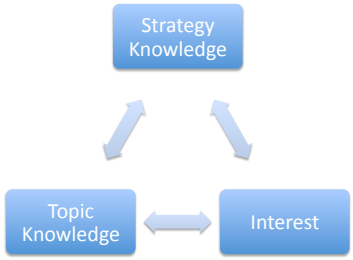
English/Language Arts

Critical Challenge
- Strategies help to develop "High Literacy," defined as the educational goal of teaching all students to think, read, and write critically.

Of Note
- Langer, 2001 conducted a five-year qualitative study of highly successful English classrooms with diverse groups of students. P. 45 has results (below)
  - Strategies, skills and knowledge are taught in multiple types of lessons
  - Tests are deconstructed to inform curriculum and instruction
  - Within curriculum and instruction, connections are made across content and structure to ensure coherence
  - Strategies for thinking and performing are emphasized
  - Generative learning is encouraged
  - Classrooms are organized to foster collaboration and shared cognition

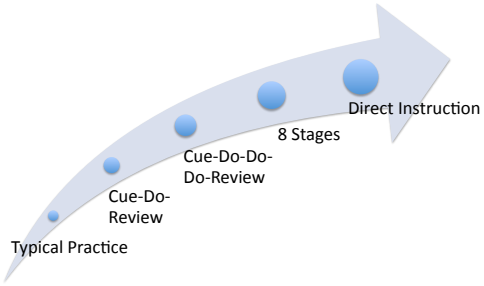
Common Strategies
- (Following Reciprocal Teaching: Questioning, Clarifying, Summarizing, Predicting)

Leverage with Students



Alexander, 1997

Continuum of Explicitness



Watch your language

- Modeling (vs. Demonstration)
- Strategy (vs. Skills)
- Practice (Guided, Independent, Cooperative)
- Corrective Feedback
- Intensity
- Literacy/Reading
- Explicit Instruction
- Critical Thinking
- Self-Regulation
- Mediation
- Objectives

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Thank you!