Improving Comprehension of Informational Text

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Large proportions of American students have difficulty reading and writing informational text.
Low-income and minority students are particularly likely to struggle.
Some have attributed the “fourth grade slump” to difficulties with informational text.
Lower achievement in science may also be linked to difficulties with informational text.
Nearly 44 million adults cannot extract information from text in many circumstances.
More background: The importance of informational reading and writing

- We live in the “information age.”
- Approximately 96% of the sites on the World Wide Web are expository in form.
- The majority of reading and writing adults do is non-fiction, much of it informational.
- Academic achievement in a wide range of subjects depends in part on ability to read and write informational text.
More background: Some benefits of informational text

- Some students actually prefer reading and writing informational text.
- Informational text may provide a “way in” to literacy for some students.
Some topics of interest to Peter and Isaac:

**Peter**  
Space  
Animals  
Machines  
Oceans  
(e.g., *Sea Otters Come Home, Look Out For Pirates*)

**Isaac**  
Volcanoes  
Samurai  
Planets  
How-to-Science Experiments  
(e.g., “Mystery Minerals”)

Benefits of informational text, cont.

- Informational text can allow students to take advantage of background knowledge.
- Informational text can build background knowledge across the curriculum.
- Informational text can be used to capitalize on student interests.
Some professionally successful men and women with dyslexia

- S. Charles Bean, Neurologist
- Hannah Adams, Teacher
- William Brewer, Psychologist
- Jane Smith, Anthropologist
- Tania Baker, Biochemist
- Laura Brody, Cookbook author etc.
- Stacy Harris, Attorney at law
- Heriberto Cresto, Social worker

So What Do We Do?

- Increase availability of informational text.
- Increase exposure to informational text.
- Increase instructional time with informational text.
- Increase explicit teaching of comprehension strategies, along with lots of opportunities for guided and independent practice.
- Increase attention to the unique features of informational text.
- Ensure that informational text is used for authentic purposes as much as possible.
Increase availability of informational text

All Others 20.06%

Informational 10.83%

Informational-Poetic 0.25%

Narrative 66.80%

Informational 4.89%

Informational-Poetic 0.03%

Narrative 1.34%

High-SES Districts

Low-SES Districts
Increase exposure to informational text

Classrooms in Rank Order

Percentage of Displayed Text Coded as Informational

- Low-SES Districts
- High-SES Districts
Increase *instructional time* with informational text

<table>
<thead>
<tr>
<th>Minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>2000</td>
</tr>
<tr>
<td>4000</td>
</tr>
<tr>
<td>6000</td>
</tr>
<tr>
<td>8000</td>
</tr>
<tr>
<td>10000</td>
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<tr>
<td>12000</td>
</tr>
<tr>
<td>14000</td>
</tr>
<tr>
<td>16000</td>
</tr>
</tbody>
</table>

- **In School**
- **In Class**
- **With Written Language**
- **As a Whole Class**
- **With Informational Text**

Low-SES Districts

High-SES Districts
Increase explicit teaching of comprehension strategies

Get Ready. . . This one’s going to be really hard!!!
The State of Comprehension Instruction in Research

The comprehension revolution 1970 - 1990
- New intellectual tools (psycholinguistics, cognitive science, etc.)
- An increasing recognition that there was something more to reading than decoding
- A growing body of research demonstrating what good readers do when they read, comprehension strategies worth teaching, effective approaches to comprehension strategy instruction
The State of Comprehension Instruction in Practice

- Durkin’s embarrassing little study (1978)
  - Some 4,000 minutes of classroom observation
  - 11 minutes devoted to comprehension instruction
  - Lots of testing and lots of questioning during discussion
- Pressley et al. work of today
The usual suspects. . .
The overall climate. . .
  - Whole language found the tradition of explicit instruction in comprehension strategies a little too “skillsy” in feel.
  - “New phonics” was focused on word recognition and held a ‘simple view’ of reading \{ RC = [LC * Dec] \}. 
So what does research say about comprehension strategy instruction?

**We need:**
- A goal -- what good readers do when they read
- An environment -- a supportive context for comprehension development
- A model -- an overall view of how comprehension strategies are taught and learned
- A curriculum -- which comprehension strategies will be taught, when, and how
A Goal: What good readers do when they read

- Good readers are active readers.
- From the outset they have clear goals in mind for their reading. They constantly evaluate whether the text, and their reading of it, is meeting their goals.
- Good readers typically look over the text before they read, noting such things as the structure of the text and text sections that might be most relevant to their reading goals.
- As they read, good readers frequently make predictions about what is to come.
- They read selectively, continually making decisions about their reading--what to read carefully, what to read quickly, what not to read, what to re-read, and so on.
- Good readers **construct, revise, and question** the meanings they make as they read.
- They draw upon, compare, and **integrate** their prior **knowledge** with material in the text.
- They think about the **authors** of the text, their style, beliefs, intentions, historical milieu, and so on.
- They **monitor** their understanding of the text, making adjustments in their reading as necessary.
- Good readers try to determine the meaning of **unfamiliar words and concepts** in the text, and they deal with inconsistencies or gaps as needed.
- They **evaluate** the text’s **quality and value**, and react to the text in a range of ways, both intellectually and emotionally.
Good readers read different kinds of text differently.  
- When reading narrative, good readers attend closely to the setting and characters;  
- when reading expository text these readers frequently construct and revise summaries of what they have read.

For good readers, text processing occurs not only during ‘reading’ as we have traditionally defined it, but also during short breaks taken during reading, even after the ‘reading’ itself has commenced, even after the ‘reading’ has ceased.

Comprehension is a consuming, continuous, and complex activity, but one that, for good readers, is both satisfying and productive.
An Environment: A supportive context for comprehension development

- **Opportunity**: large amounts of time for actual text reading
- **Authenticity**: reading real texts for real reasons
- **Range**: reading THE range of text genres
- **Talk**: talking about text, with a teacher and one another
- **Words**: Conceptually driven vocabulary development
- **Enabling Skills**: solid base of decoding, monitoring and fluency
- **Writing**: writing texts for others to comprehend
A Model: Cognitive apprenticeship

With any luck, we move this way (++->) over time.

But we are always prepared to slide up and down the diagonal.

Gradual Release of Responsibility
Some key features of the model

- Demonstration by teachers: making thinking public / thinking aloud, including the what, why, when, and how of comprehension strategy use
- Guided practice / Genuine apprenticeships: a gradual release of responsibility, learning from others
- Independent use: the ultimate goal of reading comprehension strategy instruction
- Authentic texts and contexts are essential
A Curriculum: Which comprehension strategies will be taught, when & how

- **Individual Strategies**
  - Making predictions
  - Think-alouds
  - Uncovering text structure
  - Summarizing
  - Question-generation
  - Drawing inferences
  - Visual representations

- **Routines or Packages**
  - Reciprocal Teaching
  - SAIL/Transactional Strategies Instruction
  - Questioning the Author

## SAIL & Transactional Strategies Instruction

### Table 2: Basic Components of TSI

<table>
<thead>
<tr>
<th>Cognitive Strategies</th>
<th>Interpretive Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinking aloud</td>
<td>Character development</td>
</tr>
<tr>
<td>Constructing images</td>
<td>Imagining how a character might feel</td>
</tr>
<tr>
<td><strong>Summarizing</strong></td>
<td>Identifying with a character</td>
</tr>
<tr>
<td><strong>Predicting (prior knowledge activation)</strong></td>
<td>Creating themes</td>
</tr>
<tr>
<td>Questioning</td>
<td>Reading for multiple meanings</td>
</tr>
<tr>
<td><strong>Clarifying</strong></td>
<td>Creating literal/figurative distinctions</td>
</tr>
<tr>
<td>Story grammar analysis</td>
<td>Looking for a consistent point of view</td>
</tr>
<tr>
<td>Text structure analysis</td>
<td>Relating text to personal experience</td>
</tr>
<tr>
<td></td>
<td>Relating one text to another</td>
</tr>
<tr>
<td></td>
<td>Responding to certain text features, such as point of view, tone, or mood</td>
</tr>
</tbody>
</table>

*Note: strategies in *italics* are also a part of reciprocal teaching

## Questioning the Author

Table 3: Questions to guide the discussion in Questioning the Author

<table>
<thead>
<tr>
<th>Goal</th>
<th>Candidate Questions</th>
</tr>
</thead>
</table>
| Initiate the discussion                                              | • What is the author trying to say?  
  • What is the author’s message?  
  • What is the author talking about?                                  |
| Help students focus on the author’s message                          | • That is what the author says, but what does it mean?                                |
| Help students link information                                       | • How does that connect with what the author already told us?  
  • What information has the author added here that connects to or fits in with ....? |
| Identify difficulties with the way the author has presented           | • Does that make sense?  
  information or ideas.                                                  | • Is that said in a clear way?  
  • Did the author explain that clearly? Why or why not?  
  • What’s missing? What do we need to figure out or find out?             |
| Encourage students to refer to the text either because they’ve       | • Did the author tell us that?  
  misinterpreted a text statement or to help them recognize              | • Did the author give us the answer to that?                                      |
  that they’ve made an inference                                        |

Increase attention to the *unique features* of informational text

- Has a purpose to convey information about the natural or social world
- Enables nonlinear reading
- Has an index, table of contents, headings
- Diagrams, charts, graphs, captions
- Realistic illustrations, photographs
- Timeless verbs, generic nouns
- Specialized vocabulary, italicization, boldfacing
- Particular text structures
Ensure that informational text is used for *authentic purposes*

- For pleasure and/or to pass the time
- To find out something you want or need to know
- To convey information from someone who knows it to someone who does not, yet wants or needs to do so
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