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Reading Comprehension Instruction for Students Who Are Learning to Read: Challenges in Curricularizing Comprehension* In the Primary Grades

* With appreciation P. David Pearson for this term.

Nell K. Duke
Michigan State University & the Literacy Achievement Research Center

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Plan for the Presentation

• Curricularizing comprehension involves "transforming research-based practices into daily life in classrooms" (P. David Pearson).
• There are many challenges to curricularizing comprehension -- challenges facing researchers, teachers, publishers, and educational leaders, to name a few.
• This presentation will focus on 10 challenges to curricularizing comprehension, and some knowledge and strategies for addressing them.
How is Curricularizing Comprehension Different from What Often Happens Now?

In practice:
- Very little comprehension instruction occurs in many classrooms, especially in the primary grades.
- Comprehension instruction that does occur is often incomplete, ineffective, relegated to a particular unit, grade, teacher, or group of students.

In research:
- Few studies examine long-term comprehension instruction or interventions (e.g., even over a year).
- Almost no research examines comprehension instruction articulated across grades, especially for the same students.

So it’s hard to know “what’s next?” For example, we probably don’t want to do reciprocal teaching every year with every text K - 12. . . .
10 Challenges

1. View comprehension as important in the primary grades
2. View skills underlying comprehension as also important
3. Attend to reading as well as listening comprehension
4. Involve a wider range of genres
5. Build world knowledge
10 Challenges

6. Integrate comprehension instruction into the curriculum
7. Provide engaging contexts for comprehension
8. Address vocabulary
9. Develop some -- but not too much -- scope and sequence for instruction
10. Provide articulated instruction school-wide
View Comprehension as Important in the Primary Grades

- Although there is considerably less research, the research we have supports comprehension instruction in the primary grades (Pearson & Duke, 2002; K. Stahl, 2004).
  - Comprehension improves when teachers provide explicit instruction in the use of comprehension strategies.
  - Comprehension improves when teachers design and implement activities that support the understanding of the texts students read in their classes.
View Comprehension as Important in the Primary Grades

- Comprehension instruction need not impede decoding and word recognition development, and probably works synergistically with it.
  - Recent national syntheses of research on early literacy:
    - *Preventing Reading Difficulties* (1998)
  - Exemplary teachers and schools studies:
    - E.g., Morrow, Tracey, Woo, & Pressley (1999) study
    - Taylor, Pearson, Clark, & Walpole (2000) study
  - Students Achieving Independent Learning (SAIL) study (Brown et al., 1996)
View Skills Underlying Comprehension As Also Important

These include:

- Intentional/functional knowledge
- Concepts of print
- Phonemic Awareness *
- Word recognition and decoding *
- Reading fluency *
- Vocabulary *
- Active and reflective learning stance
- Engagement in reading and learning

* A component in the *National Reading Panel Report*
Attend to Reading as Well as Listening Comprehension

- A strong oral language environment is not enough.
  - Written register versus oral register
- Comprehension instruction only during and for read aloud is not enough.
  - Reading comprehension is not simply decoding plus listening comprehension (Duke et al., 2004).
    - Rereading, skimming, searching, hypertexting
    - Comprehension of illustrations
    - Other skills predict reading comprehension above and beyond listening comprehension and decoding ability
    - Some students struggle with comprehension despite strong listening comprehension and decoding ability
- In any case children need to learn to juggle multiple processing demands simultaneously.
Involve a Wider Range of Genres

- Primary grade curricula have been dominated by fictional narrative for reading and personal narrative for writing, with informational text, among other genres, neglected (see Duke, Bennett-Armistead, & Roberts, 2003, for a review).

- There is no good reason for this in research
  - There is no research suggesting superiority of a learn to read then read to learn sequence.
  - Young children can handle informational text.
  - Some young children prefer informational text.
  - Greater inclusion of informational text appears to have some benefits.
  - It is quite possible to teach informational text comprehension in developmentally appropriate ways (Duke & Bennett-Armistead, 2003; ELFT: Duke, in progress).
The role of prior knowledge in reading comprehension is well-established and powerful (e.g., Pressley & Afflerbach, 1995; Wilson & Anderson).

There is at least anecdotal evidence that knowledge-building subjects, namely science and social studies, are receiving increasingly little attention in the primary grades.

Many texts read in the primary grades do not have a strong knowledge-building function.

Aliteracy is also a major threat to building world knowledge (see next slide).
Reading

Vocabulary  World Knowledge  Textual Knowledge
Integrate Comprehension Instruction into the Curriculum

- Comprehension instruction during reading instruction
- Comprehension instruction during the writing block
- Comprehension instruction during small group and/or class discussions
- Comprehension instruction during content area instruction
Comprehension Instruction during Reading Instruction

• To curricularize comprehension in reading instruction effectively:
  ❖ Comprehension would be a major focus of reading instruction on a regular basis in every grade.
  ❖ Comprehension instruction would occur during routine components of reading instruction: read aloud, guided reading, independent reading, mini-lessons, and the like.
  ❖ Approaches would be favored that have been shown to be effective in the reading/language arts block and over long periods of time.

• One such approach:
  ❖ SAIL and Transactional Strategies Instruction (TSI) approaches (see the next two slides)
SAIL & Transactional Strategies

Instruction Approaches

- Occurs during read aloud, whole group and small group instruction; is reinforced during independent reading.
- Uses cognitive and interpretive strategies. Cognitive strategies include:
  - Thinking aloud
  - Constructing images
  - Summarizing
  - Predicting & prior knowledge activation
  - Questioning
  - Clarifying
  - Text structure analysis

• Interpretive strategies include:
  - Character development
  - Imagining how a character might feel
  - Creating themes
  - Reading for multiple meanings
  - Creating literal/figurative distinctions
  - Looking for a consistent point of view
  - Relating text to personal experience
  - Relating one text to another (intertextuality)
  - Responding to certain text features, such as point of view, tone, or mood
Comprehension Instruction during Class and/or Small Group Discussions

- To curricularize comprehension in class and/or small group discussions:
  - Class discussions around text would be held regularly.
  - These discussions would use approaches shown to be effective in building comprehension.
  - Discussions would be carefully designed to build comprehension knowledge and skills.
- Two examples of effective approaches:
  - Experience-Text-Relationship (E-T-R) Au; Tharp, 1982 (see the next two slides)
  - Instructional Conversations (ICs) Goldenberg, 1992/1993 (see the following two slides)
Discussion focuses on:
• children’s background knowledge or experiences related to some aspect of the text to be read
  then the
• content of the text itself
  then the
• relationship between the experiences and the text
Experience-Text-Relationship

- The experiences part could be based on past experiences the children have had.
- Or it could be based on experiences you provide through firsthand or hands-on investigations.
- Or it could be both.

Among other things, this technique may help children not take material in text simply as universal or true.
Instructional Conversations

• Focus on a theme.
• Activate the use of background knowledge and relevant schemata.
• Use direct teaching.
• Promote more complex language and expression.
• Elicit bases for statements or positions.
• Use fewer “known-answer” questions.
Instructional Conversations

- Are responsive to student contributions.
- Encourage connected discourse.
- Create a challenging but nonthreatening atmosphere.
- Promote general participation, including self-selected turns.
Comprehension Instruction during Content Area Instruction

• To curricularize comprehension during content area instruction:
  - Literacy would have to be regularly integrated into content area instruction (but without content area instruction suffering).
  - Content area literacy instruction would involve approaches shown to be effective in building comprehension.
  - Instruction would be carefully designed to build comprehension knowledge and skills.

• Two examples of effective approaches:
  - Concept-Oriented Reading Instruction (CORI) (see slides later in this presentation and tomorrow)
  - Collaborative Strategic Reading (CSR) (see the following three slides)
An Approach Designed for Content Area Text: Collaborative Strategic Reading

Has elements of reciprocal teaching and cooperative learning.

- Students work in small, cooperative groups
- Students apply four comprehension strategies:
  - Preview (think about what they already know, predict what the passage might be about)
  - “Click and clunk” (monitor comprehension, use fix-up strategies as needed)
  - Get the gist (glean and restate the most important idea)
  - Wrap up (summarize, ask questions)

See Klingner and Vaughn, 1999; See also Duke & Bennett-Armistead, 2003.
Students have specific roles: leader, clunk expert, gist expert, announcer, encourager

Cue cards may be used to support students in small, cooperative groups

E.g., a clunk card that says: “Reread the sentences before and after the clunk looking for cues.”

E.g., a student leader cue card that says: “Did everyone understand what we read? If you did not, write your clunks in your learning log.”
Students complete learning logs before and after reading

Before reading: preview
- What I already know about the topic.
- What I predict I will learn.

During reading
- Clunks

After reading wrap-up
- Questions about the important ideas in the passage.
- What I learned from the text.
To curricularize comprehension during the writing block:
- Reading and writing would be highly integrated -- writing like readers, reading like writers
- Writing instruction would include approaches shown to be effective in building comprehension.

Writing is a component of some of the previously-discussed approaches. I am not aware of a research-tested approach K - 3 that focuses heavily on writing to build comprehension.

We are working on developing such an approach: the Emergent Learning from Text (E-LFT) approach.
The Emergent Learning from Text (E-LFT) Approach

- A project- and product-based approach, with units on such things as Michigan and Microscopic Animals
- Forty-five minute writing blocks with:
  - Read Aloud/Teacher Modeling (15+ minutes)
  - Guided and Independent Experiences (20+ minutes)
  - Reflection Time (10+ minutes)
In the context of reading and writing to achieve project/product-based goals, students receive instruction and practice in:

- 1) features of informational text,
- 2) comprehension strategies,
- 3) vocabulary,
- 4) vocabulary strategies,
- 5) text-picture integration, and
- 6) writing strategies (especially for informational texts).

Units are designed to address a scope and sequence, with flexibility.
Provide Engaging Contexts for Comprehension

Comprehension instruction seems to be more effective in some contexts than others.

Two more effective contexts are: Authentic Literacy Events and Concept-Oriented Reading Instruction

Authentic literacy events are those that replicate or reflect reading and writing purposes and texts, specific to the genre, that occur in the world outside of a schooling context.

Authentic reading of informational text involves reading for the purpose of obtaining information about the natural or social world that you want or need to know.

Authentic writing of informational text involves communicating information about the natural or social world to people who want or need to know it.

(Purcell-Gates, Duke, & Martineau, under review)
Some set-ups for authentic reading of informational text in science

- Discrepant events to generate questions
  - E.g., prisms on the overhead
- Demonstrations of phenomena to generate questions
  - E.g., volcano, caterpillars
- Serendipitous events brought from world outside
  - E.g., broken arm
- Announcing topic and asking for questions
  - E.g., K-W-L charts (topic: sound)

(Duke, Purcell-Gates, Hall, & Tower, in press)
Some set-ups for authentic reading and writing in science

- Literacy in response to a community need
  - E.g., pond brochure
- Literacy as part of problem-solving
  - E.g., dying tadpoles

(Audience integral to authentic writing -- audiences include distant readers (e.g., Costa Rican pen pals), within-school audiences, and within-classroom audiences)

(Duke, Purcell-Gates, Hall, & Tower, in press)
Concept-Oriented Reading Instruction (CORI)

(You’ll hear more about this tomorrow. . .)

- Centers on a conceptual theme
- Engages students in real-world interactions and uses interesting, often student-selected texts
- Focuses on goals, Includes strategy instruction in the service of conceptual goals
- Involves collaboration and student autonomy
- Evaluation focuses on conceptual goals, learning goals, and engagement

See Motivating Reading Comprehension: Concept-Oriented Reading Instruction (Guthrie, Wigfield, & Perecevich, Eds., 2004)
Groups of 3 - 6 students meet for in-depth discussion of a text or texts
Teacher modeling early in the year, increasingly peer-led
Focus on a concept; read a variety of texts related to that concept
Have a open-ended, self-determined goals clear to all group members
Can be organized in a jigsaw (Aronson, 1978) format

Address Vocabulary

• Vocabulary and reading comprehension are integrally, and causally, related (e.g., Baumann, Kame'enui, & Ash, 2003; Blachowicz & Fisher, 2000; NRP, 2000; Stahl, 1998; Stahl & Fairbanks, 1986).

• Quality vocabulary instruction:
  - Involves lots of time spent reading and read aloud
  - Involves lots of rich talk and talk about text
  - Teaches important and conceptually-related words
  - Relates new words to known words
  - Exposes children to words multiple times in multiple meaningful contexts
  - Raises word consciousness
Semantic Word Map:

What They Do

Grow plants for people or animals to eat or use

Animals

Raise animals for people to eat or use

cows, pigs, chickens, sheep, ostriches!, fish...

Crops

corn, wheat, soy beans, rice, fruit, vegetables...

Equipment

silo

barn

plow

Tractor

Milking machines

(Rupley, Logan, & Nichols, 1999)
Concept Wheel:

**Hibernation**
- Sleep
- Rest
- Winter
- Dens
- Low heart rate
- Bats
- Bears
- Turtles
- Garter snakes
- Toads

(Rupley, Logan, & Nichols, 1999)
Concept of Definition:

- Categories: What is it?
- Properties: What is it like?
- Comparisons: Same/Different
- Illustrations: What are some Examples?

(Schwartz & Raphael, 1985)
Develop Some -- But Not Too Much -- Scope and Sequence for Instruction

- In general comprehension is more of a growth construct than a mastery construct.
- However, some knowledge and skills relevant to comprehension are more mastery in nature (e.g., knowledge of some text features).
- And previous instruction does matter (consider, e.g., students who have been taught to activate background knowledge for several years versus students who have never been taught to do this).
- As does, we suspect, development (consider, e.g., the challenge of teaching summarizing to young children).
- And we can’t teach everything in the first year anyway.
Therefore, I think that there needs to be some scope and sequence for teaching and learning comprehension knowledge and skills, but there also needs to be ongoing revisiting of comprehension knowledge and skills:

- as texts become more challenging;
- as new content is encountered;
- as new genres are encountered;
- as readers develop.
Curricularizing comprehension entails addressing comprehension not only throughout the year but across the grades and individual students’ education.

This (if done well) requires coordination with respect to:

- scope and sequence
- terminology
- concepts
- routines, and so on.
Curricularizing Comprehension Across a Whole School


- Common language, concepts, and icons were developed for use across grades.
  - The next four slides come courtesy of Sharon Walpole and provide examples of common language, concepts, and icons developed at the school.
Predict: What do I think will happen next?

• What information do I have from the text about characters and situations?
• What information do I have in my head about characters and situations?
• How can I apply what I know to make a guess about what will happen next?

from Sharon Walpole
Skilled readers extract information from the text and combine it with information from prior knowledge to anticipate a future text event.

from Sharon Walpole
Imagine: Can I imagine what is happening?

• What information does the text give about the physical setting, the appearance of the characters, and the actions?
• What do I need to add from my head to create a complete mental image that makes sense?

from Sharon Walpole
Skilled readers extract information from the text (semantic and visual) and use it to start a visual image of text setting or content and then fill out that image with information from prior knowledge (semantic and visual)

from Sharon Walpole
Curricularizing Comprehension Across a Whole School

- Benchmarks were created for each grade. For example, for the clarification strategy:

  **Kindergarten Benchmark**
  - **Clarify:** Does this make sense?
    - Students answer literal questions during read alouds

  **First Grade Benchmark**
  - **Clarify:** Does this make sense?
    - Students ask questions during read alouds when something does not make sense
    - Students ask questions during their own reading when something does not make sense

from Sharon Walpole
Second Grade Benchmark
- Clarify: Does this make sense?
  - Students can identify specific parts in a text that are disrupting their comprehension during reading

Third Grade Benchmark
- Clarify: Does this make sense?
  - Students can describe strategies that good readers use to construct meaning

Fourth Grade Benchmark
- Clarify: Does this make sense?
  - Students can use strategies that good readers use when comprehension breaks down

from Sharon Walpole
Final Thoughts

• Curricularizing comprehension is one of the great and most important challenges facing educators and researchers.
• Sharing resources, ideas, and approaches will greatly enhance the efficiency and effectiveness of our ability to face this challenge.