Comprehending Complex Texts in Middle and High Schools

Meeting the needs of struggling adolescent readers and writers is not simply an altruistic goal. The emotional, social, and public health costs of academic failure have been well documented, and the consequences of the national literary crisis are too serious and far-reaching for us to ignore.

One of the greatest challenges facing middle and high schools is ensuring students have the comprehension strategies needed to cope in the increasingly complex world of print. The Literacy Common Core State Standards acknowledges this and has placed an increasing emphasis on getting students ready for the complexity of texts they will face in their careers and at college.

Thirty years ago, Durkin’s (1978) research caught the attention of the educational community when she found that in most upper elementary classrooms in the United States, comprehension was not being taught. What was happening under the name of comprehension instruction was a “read and quiz” type approach, with questions focusing on literal interpretation. Teachers were not teaching students to use strategies while reading in order to deepen comprehension. For the last 10 years, adolescent literacy has been a “hot topic” both educationally and politically. Once again, the focus is on the need to improve comprehension strategies, but this time, it is on middle and high school students.

The end result of the lack of emphasis on comprehension instruction has been that many students entering middle and high schools are efficient decoders with poor comprehension skills. (NEAP Report, 2000).

As students move through school, they are faced with texts that are increasingly longer and more complex in terms of vocabulary, sentence structure and text organization. Middle and high school texts will present greater conceptual challenges including more detailed graphic representations, while at the same time, demanding a much greater ability on the part of the reader to synthesize the information read. Tasks, like texts, become more complex as students consider ideas and information in different ways. There is a “gear shift” from locating and evaluating topical information to locating, evaluating, and synthesizing information from several different sources while citing textual evidence to support analysis. The sophistication with which students are able to carry out such tasks increases from one year to the next. As students read and write to communicate increasingly complex information and ideas, the use of ideas and information that they comprehend also increase in complexity.
Reading across discipline areas

Comprehension strategies are traditionally introduced and taught by ELA teachers, and students are expected to apply these strategies to reading in other content areas. Research in general, and particularly work in New York City Schools, show that this is not the case.

In other learning areas of the curriculum, the literacy demand is largely implicit. Students are required to read and write texts for multiple purposes, but the specific literacy demands of both the texts and tasks are not always made clear to them. The Literacy Common Core Standards guide teachers in making these literacy demands explicit. When teachers are clear about each curriculum area’s reading and writing demands while taking students’ experiences (in relation to culture, language, and identity) into consideration, they can deliberately integrate the teaching of literacy with the teaching of discipline content in appropriate ways.

The texts that students use to meet the reading demands across discipline areas at middle and high school will often include:

- Elements that require interpretation such as complex plots, sophisticated themes, and abstract ideas
- Complex layers of meaning, and/or information that is irrelevant to the identified purpose for reading (i.e., competing information), requiring students to infer meanings or make judgments
- Non-continuous text structures and mixed text types
- Sentences that vary in length, including long, complex sentences that contain a lot of information
- Adverbial clauses or connectives that require students to make links across the whole text
- Academic and domain-specific vocabulary
- Words and phrases with multiple meanings that require students to know and use effective word-solving strategies to retain their focus on meaning
- Metaphor, analogy, and connotative language that is open to interpretation
- Illustrations, photographs, text boxes, diagrams, maps, charts, and graphs, containing important ideas that relate to the text’s content and need to be read in an integrated way

Such texts will include both non-fiction and fiction in electronic and print media. The volume of print and the range of text types that secondary students will be asked to read across the disciplines requires them to be skillful and critical readers. Accurate decoding and a literal understanding, while important, will not be adequate for today’s literacy demands. To help our students successfully meet the challenges they will face, we want them to confidently engage with, and think critically about, the texts they interact with. Students need to have a range of comprehension strategies that they can apply confidently and flexibly to a diverse range of texts.
Key Comprehension Strategies

Students who fully comprehend what they read are able to infer from text by predicting and asking questions. Comprehension cannot be taught without active engagement with text. There are six key strategies that must be taught: predicting and using prior knowledge, questioning, Think-aloud, using text structures and features, visualizing, and summarizing. While there is a belief that the comprehension strategies differ in each discipline, it is not the strategies that change, but how they are applied.

Predicting and using prior knowledge

Fluent readers use prior relevant knowledge to predict and form hypotheses about what may occur next when reading. They bring knowledge from life experiences and understanding of the text to form predictions before and during reading. Strategic readers:

- Compare their predictions with textual evidence, and they evaluate and modify their predictions as necessary
- Reflect on their predictions and on what they have read, and may review their knowledge base to construct new understandings

Questioning

For students to actively and strategically engage with texts, they need to ask questions to:

- Focus their reading
- Delve deeper into the text
- Clarify meaning
- Critically reflect on what they have read

It is by asking meaningful questions that students learn to monitor their comprehension. Good readers recognize when they are losing meaning, whether it be at the word, sentence, or text level, and are able to ask questions about what strategies they need to use to help them comprehend (Block and Pressley, 2003).

Students need explicit instruction to develop questioning strategies so they can actively construct meaning and monitor their comprehension. They also need to be shown the types of questions that will help with comprehension in each discipline area.

Think-aloud

Think-aloud is a well-researched and important strategy for reading comprehension. Simply put, it is when readers recognize and talk out loud through the process that is occurring in their head (metacognition), as they read. Students who think metacognitively can monitor their own thinking processes, adjust their thinking to achieve clearer comprehension, and use that adjustment for any future refinement in making meaning as they read.

There is some evidence that suggests that students who attend to the structure of texts learn more about the content even while attending to the structure. They are able to identify the features of each text type and therefore predict how to read more effectively.  

Duke & Pearson, 2002
The Think-aloud strategy is interesting because it needs to be treated as a comprehension strategy in its own right, but also involves the use of other comprehension strategies. Therefore, the teaching of Think-aloud can be integrated with the teaching of other strategies.

Think-aloud has been shown to improve students’ comprehension both when students engage in the practice during reading, and also when teachers routinely use the strategy while reading to students (Duke and Pearson, 2002).

Using text structures and features

Text structure is the organization or framework of the text. Text features are the elements of writing that accompany each text type, including language (tense, vocabulary, participants, signal words for time and order), and the type of supports, such as the artwork (illustrations, photographs, diagrams, graphs) and aids to organization or language (contents, index, headings, glossary, references).

Students are engaged by studying text structures and features of the texts takes them ‘back stage’ into the architecture, or bones, of texts. They are able to see how texts are crafted by deconstructing them with the teachers’ support. The Gradients in Text Complexity Rubrics will help with the analysis of texts.

Texts become easier to understand when students know the structural shape of a text. There is some evidence that suggests that students who attend to the structure of texts learn more about the content, even while attending to the structure. They are able to identify the features of each text type, therefore predicting how to read more effectively (Duke & Pearson, 2002).

Visualizing

Using visualization techniques, students engage directly with text to envisage, imagine, and ‘see’ in the mind’s eye images from the text. The research on imagery and reading comprehension is based on the theory that mental imagery is a knowledge representation system that readers can use in organizing, integrating, and retrieving information from written text (Block & Pressley, 2002). It activates the use of all the senses: seeing, feeling, smelling, touching and tasting. Students say that visualizing text makes difficult parts easier to understand, and makes reading more interesting. This, in turn, motivates them to read more.

Visual representation involves using graphic organizers and other visual displays to represent the text, to communicate the information, and to show relationships beyond the use of words. Teaching students to use systematic visual graphs to organize ideas will benefit readers to remember what they read and improve their reading comprehension.

Summarizing

When summarizing, readers reduce a text to its bare essentials by understanding and putting what they have read into their own words. We summarize constantly as we read, sorting out significant ideas, events, and other bits and pieces of information. Summarizing provides a shortened version of another’s text that includes all of the main points of the original, but reduces the detail of the original text by pulling it back to its essence.
When demonstrating how to summarize, students need to be shown how to:

- Identify the main points of the text
- Delete unimportant ideas
- Maintain the author’s point of view
- Sequence the information logically

Summarizing is not an easy thing to do. It is one of the hardest strategies for students to grasp and, therefore, one of the hardest strategies to teach.

**Implications for practice**

The creation of Literacy Standards for content areas to support students reading is the responsibility of teachers across disciplines. While teachers in ELA will introduce the comprehension strategies, these need to be reinforced in each discipline area. Comprehension strategies need to be explicitly taught and students need opportunities to practice and apply these in authentic contexts. This is done through a gradual release of responsibility where new strategies are introduced in the most supportive context through reading to students as well as in a shared close reading. Here, the students can focus on the strategy with the teacher taking responsibility for the reading.

**Gradual Release of Responsibility**

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<th>Students</th>
<th>Teachers</th>
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<td>Observe, listen and respond</td>
<td>Introduce and provide models of strategies and texts</td>
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<tr>
<td>Participate and respond</td>
<td>Demonstrate how the strategy works in a shared setting</td>
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<td>Attempt with support</td>
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<td>Practice and problem solve</td>
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Students will need to be shown how to read the texts specific to each content area. For teachers to be able to support students in reading the texts specific to their discipline area, teachers will need to understand what makes their texts complex.

Comprehension requires our students to actively engage with texts as they make meaning. This requires commitment and risk taking on the part of the reader. Students will not put this amount of effort into texts that are dull and uninteresting.
Supporting students’ comprehension of complex texts

• Model the strategies proficient readers use when reading challenging texts. Teachers often underestimate the extent to which modeling effective reading behaviors and coaching thinking skills are necessary to extend students’ abilities to comprehend and process information.

• Help students develop a language for talking about comprehension. Students and teachers need a shared language to discuss the types of thinking associated with classroom tasks, and literacy and thinking strategies.

• Provide purposeful and engaging opportunities where students tackle more complex texts. Engaged readers work to unlock the text; they find strategies to help them read because they want to understand what they are reading. Help students understand that arriving at insights is worth the struggle.

• Help students use their prior knowledge to make predictions. Show students how to preview texts. To construct meaning from a text, strategic readers consciously integrate their existing knowledge and strategies with the sources of information in the text. A reader’s existing or prior knowledge includes their background and literacy-related knowledge. Students can use these sources of information only if they can make links between:

  ... their existing understandings and the concepts in the text

  ... their existing knowledge of the structure of language and the structures used in the text

• Provide opportunities for students to work collaboratively on reading complex texts. Small group guided or close readings give students opportunities to negotiate meaning, defend their opinions, and support them with textual evidence. Comprehension routines such as reciprocal teaching provide frameworks in which students apply and discuss the comprehension strategies as they read and understand challenging texts.

• Establish a purpose for reading to help students understand that texts are constructed for a range of intentions and situations. Without a clear purpose for reading, students’ interactions with a text may be unfocused and haphazard. Students need a clear idea of why they are reading: what information they need to find; where in the text they are likely to find this information; and what they will do with the information when they find it.

• Have students keep learning logs where they track their use of comprehension strategies.

• Create graphic organizers to support students’ summarizing information that reflect the complexity of the text and the content.
Assessing Comprehension

The comprehension strategies that students are using need to be assessed and monitored throughout the year. It is important to know what level and types of text they understand when reading, and what strategies they use to make meaning of what is read. It is not just the ELA teacher who needs to monitor students’ comprehension, content area teachers need to know if their students are able to “independently read with comprehension” the texts used in their courses. A student who easily comprehends the texts used in ELA may struggle with texts in science or history.

The teacher needs to gather and record evidence from a range of sources to establish whether the student is effectively using comprehension strategies to deepen their comprehension of texts. When teachers assign reading they need to know whether students:

• Modify and/or broaden their thinking because of the text
• Adjust how they are thinking about the content based on the type of text

This document focuses on the assessment process where information is gathered from a range of sources to provide information for the ongoing learning of students.

Gathering information through conferring

Teachers build valuable knowledge of their students’ comprehension through conferences, interviews and conversations. They do this by:

• Gathering information about the students’ comprehension of texts and discussing this with the student
• Clarifying the strategies that students are using to ensure that the student is becoming aware of how to control these in a flexible way
• Identifying and discussing problems or obstacles to comprehension that the teacher may not have been aware of
• Providing specific and personal feedback
• Agreeing on goals for further learning

Conferences, interviews and conversations can be held with individual students or with small groups. They are more effective when the focus is on an agreed goal.

Conferring with students as they are engaged in reading challenging texts provides the most useful information on students’ comprehension and the strategies they use. During conferences, teachers prompt or question students while they are reading to understand if students are transferring their knowledge and skills and are applying them to new contexts to improve or deepen their comprehension as they read, respond to, and think critically about texts.
### Key points to remember

1. Students need the opportunity to describe their thinking process—how and why a comprehension strategy helps increase comprehension.

2. Students can focus on thinking about the text rather than retelling/responding to the text.

3. The ultimate measure of success in comprehension is when a student can describe how and why they understand better with the use of a comprehension strategy.

A rubric has been developed to provide teachers with a framework for looking at comprehension and a way of recording changes in student development.

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Comprehension Conferring Rubric

The rubric includes indicators for the six key comprehension strategies:

- Using prior knowledge and predicting
- Asking questions
- Using text structures and features
- Using metacognitive processes
- Visualizing and using visual representations
- Summarizing

The rubric is designed to be used in a number of ways. Firstly, teachers can record students’ use of strategies on an ongoing basis. Teachers can highlight the strategies students are using during individual conferences or during small group close or guided reading. The most useful information will be gained when students are engaged in reading challenging texts.

Strategy use may be recorded over a number of texts. Not all strategies will be evident in one conference. Often during small group reciprocal teaching, guided reading or a close reading of a challenging text, the students’ conversations provide valuable information on the understanding and strategy use.

By highlighting the strategy indicators, the teacher and student can use these to set goals for further learning.

The rubric shows a seventh grade student’s growth in using comprehension strategies over 2010-2011. Using different color highlights for different marking periods shows how the student’s strategy use has changed.
### The change in the number of students at each level for comprehension strategies across a year for a seventh grade class

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Overview of Comprehension Strategies

Predicting
Thoughtful readers use relevant prior knowledge to predict when reading. Use of this strategy helps students:
• Bring knowledge from life experiences to their reading
• Form predictions based on this prior knowledge
• Engage more deeply with the text

Questioning
Fluent readers actively and strategically engage when reading by asking questions. Questioning allows students to:
• Focus their reading
• Clarify meaning
• Critically reflect on what they have read

Text Structure
Students who consciously attend to text structures and features are able to:
• Comprehend and recall texts more effectively
• Analyze and synthesize written texts
• Think critically about their reading

Visualizing
The use of visualizing techniques and visual representations helps students:
• Use mental imagery as a comprehension strategy
• Focus on concepts, and relations between concepts, as they read
• Learn how to view information critically and thoughtfully

Summarizing
Summarization is an essential comprehension strategy that enables students to:
• Focus on major points in the text
• Establish in their own minds what they think the text is saying
• Deepen their knowledge of what they have read

Metacognition
By recognizing and talking out loud about their metacognitive processes students learn to:
• Monitor their own thinking processes
• Adjust their thinking to achieve clearer comprehension
• Clarify meaning as they continue to read
References


