Reading as thinking: “Critically” constructing meaning of text

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THE CONSTANT SEARCH

Any teacher who has been part of the school system for twenty years or more has participated in or at least witnessed hundreds of proposed educational changes. Teaching reading and more recently “literacy” instruction have been frequent focuses of these ever-changing initiatives. Some teachers are heartened and many are discouraged by a continual search for improved approaches to reading. These “new” initiatives have included basal readers, language experience, focus on phonics, whole language, reading skills instruction, reading/writing workshop, balanced literacy, literature circles, reading first, smart reading, early literacy, adolescent literacy and numerous other programs that promise to produce successful readers. Even the term “literacy,” once understood as competence with oral, written and spoken language, has become a catch-all label for proficiencies in areas ranging from art to technology, and mathematics to science.

Accompanying this constant push for new ways to promote literacy are a barrage of criticisms that our students are leaving school without adequate reading and writing proficiency. Despite the longstanding attention, student literacy remains a priority concern across educational jurisdictions in North America. For example, in British Columbia over 90% of school districts have identified literacy as one of their top three school goals.

We draw four conclusions from this on-going quest for enhanced literacy instruction:
• the ability to read, write and communicate is important and will remain so even in the midst of a changing world
• teaching reading and learning to read are complex undertakings
• many of the literacy initiatives have much to recommend them and many programs have significantly increased students’ reading scores
• despite the gains, the system as a whole continues to search for more effective ways to overcome what may be a growing literacy deficit.

Clearly, addressing this deficiency poses complex and multidimensional challenges. However, we believe, as Case (1994) argues in his article, “Our crude handling of educational reforms,” that greater success with literacy instruction will not be found by continually looking for new fixes. Rather we need to learn to build upon and enhance existing programs and initiatives. Otherwise, to use a familiar expression, we are in danger of perpetually throwing the baby out with the bathwater. Our purpose in this discussion document is to highlight two key deficiencies in the common approaches to literacy
instruction and to suggest how we might “retool” them to achieve greater effect.

**Prevailing limitations**

Our reading of scholarly and professional literature on literacy suggests two underlying limitations of common approaches to teaching reading (or, at least, limitations of the ways they are used in classrooms by many teachers):

- emphasis on teacher-directed tasks and isolated activities that students undertake with the intention of improving their understanding of a text
- predominance of a “decoding” mindset where students come to view reading as taking information off the page.

**Activities versus tools**

Many student activities offered under the guise of literacy instruction—for example, sort and predict, placemats, thinking bubbles and flip books—help students comprehend the text they are studying, but they do little to develop self-regulated “tools” that students can use purposefully and independently.

We define a “tool” as a device that students intentionally use to achieve a chosen end or objective; an activity is a task students complete. Students can “own” a tool—which means they employ it at will and for strategic purposes. On the other hand, students may get very good at an activity and still never use it outside of the assigned context. Consider, for example, the pre-reading activity “sort and predict” that many teachers use to help activate student thinking about a story or piece of non-fiction. When invited to sort and predict, students are given a selection of words taken from the text. Their task is to organize those words to make sense of and anticipate the content of the text. This is a worthwhile activity but it is teacher-directed, and it is not a strategy that students can use independently. (Students would already have had to read the text in order to extract the words and therefore could not use the words as the basis of their prediction.)

The distinction between a tool and an activity is more complicated than the example of “sort and predict” might suggest. Many so-called literacy strategies (e.g., previewing, storyboards, concept and mind maps, evidence charts) have the potential to be a tool, but never become more than an activity that students undertake. Consider, for example, the use of graphic organizers such as Venn diagrams to compare two characters or events in a story. The teacher may model use of a Venn diagram and guide students in using it with several examples. Many teachers would say that they are teaching a strategy. However, this potentially useful strategy remains an activity unless students add it to their repertoire of self-regulated tools. By self-regulated, we mean tools that are **purposeful** (intended to achieve an internalized objective), **used independently** (not used only upon request) and **thoughtfully chosen** (selected from an array of possible options). Despite teacher intentions, in many classrooms students would not know or think to use a Venn diagram on their own to assist them in making sense of the differences between two elements of a text they are reading.

Distinguishing between strategies that remain as activities and those that become self-regulated literacy tools is not intended to diminish the role of activities within a reading program. Activities can help students increase their understanding of particular texts. However, getting students to complete activities or tasks may contribute little and may distract from helping students learn to how to think whenever they read and try to make sense of texts. This is because students haven’t learned to use a Venn diagram or other such graphic organizer when they (and not the teacher) decide that it is a convenient and appropriate strategy to help them better understand similarities and differences in the text. Students acquire literacy tools only as they learn to think for themselves about the reading purpose or need, consider their options and choose an effective strategy. As long as students simply do the activities we set for them when they read, literacy instruction remains a string of disconnected, externally imposed tasks.

**Decoding versus constructing**

Reading is more than pronouncing words. Of course, we must teach students different ways of cracking the textual code and enunciating the words they encounter. This is an important aspect of reading but it is not “reading” in the full sense. We have all encountered the student who can fluently pronounce the words in a passage but has little sense of the textual meaning. This student has not truly “read” the passage. According to
Harvey and Goudvis (2005), “reading is a two-pronged approach: it involves cracking the alphabetic code to determine the words and thinking about the meaning of the words” (p. 5).  

READING

Cracking the code     Making meaning

We want to focus in this paper on “thinking about the meaning”. Educators have long referred to the process of making meaning as reading comprehension. Sadly, comprehension has often been reduced to answering obvious questions or dissecting text in a somewhat rote fashion. The preoccupation is on finding out whether or not students have grasped the meaning of the words they have seen on the page. We refer to this as the decoding orientation to making meaning.

For many students, decoding the words is not an activity that invites thinking. Rather, as illustrated by the following example, it depends on whether the reader knows enough of the key words in the passage to understand what is written. To illustrate this point, imagine that the blank spaces in the following sentence represent words the reader does not understand:

*When I first felt a pain in my _____, I thought perhaps I had______, but as I picked up my pace I realized it was just a passing ________.*

If students look upon reading as straightforward decoding, they will be unable to answer comprehension questions such as “Where did the author first feel the pain?” and “What is actually wrong with the author?” The best they could do is offer guesses about the missing words.

In our view, meaning is not simply to be found in a text but is actively constructed by thinking critically about the possible interpretations and implications of a text (explicit and implicit) and judging which seems most sensible. It is not sufficient that we help students understand more of the words they read; we must teach students to be detectives engaged in an inquiry that builds meaning by thinking and making judgments before, during and after reading. We refer to this as the “constructing” orientation to making meaning.

If students approached the previous passage with a mindset of a detective, they would look for clues rather than simply offering guesses about possible words to complete the sentence. Among other things, these clues would be informed by considering the criteria for judging which words would qualify as candidates for the missing words. Obvious criteria include the following:

- is the correct part of speech
- makes sense within the sentence
- is consistent with other sentences
- matches the context or theme.

For example, the “part of speech” criterion suggests that the words must all be nouns. The “makes sense within the sentence” consideration suggests that the words need to be something that can be hurt or damaged. Students can then narrow their word selection based on these clues. The following responses are plausible constructions:

- When I first felt a pain in my *side*, I thought perhaps I had *pulled a muscle*, but as I picked up my pace I realized it was just a passing *stitch*.
- When I first felt a pain in my *heart*, I thought perhaps I had *found true love*, but as I picked up my pace I realized it was just a passing *infatuation*.

We might be able to further narrow the interpretation to something along the lines of the second suggestion if we learned that the title of the passage was “My first love.”

Significantly, even readers who never learn the precise meaning of the missing words can, nevertheless, construct a general sense of the passage. They might surmise the following:

*When I first felt a pain in my [some part of my body], I thought perhaps I had [a serious problem], but as I picked up my pace I realized it was just a passing [a less serious condition]*.

In other words, the reader has been able to construct a plausible interpretation of the text without being able to decode the missing words. This is possible because
the reader has approached the text in a critically thoughtful manner with the intention of solving the puzzle of the text. In short, the reader understands that making meaning of text—even at the level of literal comprehension—requires a constructivist mindset.

Unfortunately, thinking—particularly rigorous thinking—is a small aspect of teaching reading comprehension. We say this notwithstanding the attention to meta-cognition (thinking about thinking) in many classrooms. Student musings about the reasoning behind their textual interpretations have some value but these may be more rationalizations and speculations than rigorous self-examination of constructed meaning. Furthermore, meta-cognition places thinking as an after-thought of one’s interpretation, rather than, as we recommend, as the orientation to meaning construction.

What would teachers need if they were to redirect the emphasis in literacy instruction away from isolated activities towards systematic tool development and to change the orientation from decoding to constructing meaning? Our recommendation is to focus on developing core literacy competencies that identify the major “intellectual moves” or “lines of inquiry” that thoughtful, independent readers pursue as they make sense of the “puzzles” of any text.

Core literacy competencies

Research tells us successful readers approach and interact with text in particular ways in order to make meaning. In other words, good readers do certain things that struggling readers are unable or disinclined to do. We refer to these as literacy competencies—abilities that strong readers possess that enable them to thoughtfully construct meaning from text. To illustrate what these competencies entail, we ask that you consciously “inquire” into the meaning of the text as you read each sentence in the following passage.\(^2\)

Be aware of the questions and hypotheses that come to mind as you read.

It felt like we walked for miles, the distance made longer by the silence between us. Side by side but alone with our own thoughts. When we reached the lake, my father took out of his trombone case three things: a knife; a fishing line with a hook; one wooden match. “You will stay here by yourself until after breakfast tomorrow morning,” he said, resting his hand gently on my shoulder.

As you tried to construct meaning, you may have had some of the following thoughts:
- What were they thinking about as they walked to the lake? Why the silence?
- What is the father doing and why is he leaving the child?
- I think the child is a boy.
- Why is there a trombone case? I wonder about its significance?
- Is it reckless or dangerous of the father to leave his child alone?
- The father seems to care about the child so why is he doing this?
- This might be a coming of age ritual or could it be a form of punishment?
- Does this kind of challenge help children grow up with confidence?
- Have I ever had a parallel experience where my self-reliance was deliberately tested?
- I suspect the boy will be fine in the end, but something will happen during the night.
- Is this a children’s story or adult literature?

As a successful inquiring reader, you would have demonstrated competence in the following areas:
- Ability to activate relevant personal and public knowledge
- Anticipation of text development, purpose and structure
- Fluency in extracting explicit and implied details and overall meaning
- Inclination to challenge your own interpretations and to assess merits of the text
- Deliberation about the implications beyond the text

\(^2\) Inspired by a passage in *Spud Sweetgrass* by Brian Doyle (1993).
Review the charts above and on the right and consider how the ideas generated about the sample passage link to each of these competencies. As these sample questions and hypotheses illustrate, proficiency in these literacy competencies enables readers to construct rich meaning from text. The competencies are not sequential—they can be used in any order. Once internalized, they interact with seamless fluidity during any phase of reading. Thoughtful readers employ these competencies intentionally and intuitively to engage with text and construct meaning.

<table>
<thead>
<tr>
<th>Example</th>
<th>Literacy competence</th>
</tr>
</thead>
<tbody>
<tr>
<td>• This might be a coming of age ritual or could it be a form of punishment?</td>
<td>Activate</td>
</tr>
<tr>
<td>• Have I ever had a parallel experience where my self-reliance was deliberately tested?</td>
<td></td>
</tr>
<tr>
<td>• What is the father doing and why is he leaving the child?</td>
<td>Anticipate</td>
</tr>
<tr>
<td>• I think the boy will be fine in the end, but something will happen during the night.</td>
<td></td>
</tr>
<tr>
<td>• Is this a children’s story or adult literature?</td>
<td></td>
</tr>
<tr>
<td>• What were they thinking about as they walked to the lake? Why the silence?</td>
<td></td>
</tr>
<tr>
<td>• I think the child is a boy.</td>
<td></td>
</tr>
<tr>
<td>• The father seems to care about the child so why is he doing this?</td>
<td></td>
</tr>
<tr>
<td>• Why is there a trombone case? I wonder about its significance?</td>
<td></td>
</tr>
<tr>
<td>• Is it reckless or dangerous of the father to leave his child alone?</td>
<td>Challenge</td>
</tr>
<tr>
<td>• Does this kind of challenge help children grow up with confidence?</td>
<td>Deliberate</td>
</tr>
<tr>
<td>• Question emerging interpretation and understanding of the text</td>
<td></td>
</tr>
<tr>
<td>• Question the merits of the text given its purpose</td>
<td></td>
</tr>
<tr>
<td>• Does this kind of challenge help children grow up with confidence?</td>
<td></td>
</tr>
</tbody>
</table>

As mentioned previously, teachers likely engage
students in many activities that could help students develop these competencies. While these activities may be worthwhile, unless they are deliberately attached to a competence and explicitly taught as a strategy, their use can reduce one’s reading program to a disconnected array of purposeless exercises, as illustrated below.

Awareness of these five literacy competencies enables a teacher to think beyond simplistic reading comprehension. The goal of teaching reading becomes helping students understand what each competency involves and learning to adeptly and purposely implement them. But how do students develop these literacy competencies? The answer lies in understanding the kinds of tools that support each competence.

**Teaching the tools**

The approach developed by The Critical Thinking Consortium suggests that success in any critical thinking endeavour depends on the level of development of five kinds of “intellectual tools” (Case and Daniels, 2002). We believe that these tools identify what is needed to enable students to develop the core literacy competencies just discussed.

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Let’s examine what is involved in being competent in activating personal and public knowledge to see how these tools play out in the context of reading. Each of us has a wealth of personal experiences, including things we have actually done, as well as indirect knowledge of people, places and things we have heard about, seen, read about and listened to. Students need to understand the value of activating this information when making meaning from text. In addition, students can access sources of information beyond their own experiences such as books (including dictionaries, encyclopedias), the internet and other people. These sources of personal and public information illustrate the tool we call **background knowledge**.

A critically thoughtful reader needs to decide what sources of background information will contribute to constructing meaning from the text. For example, a reader may activate many types of information when reading the previously discussed text: remembering getting a fish hook stuck in their thumb, recalling camping experiences, feeling fearful about being alone at night and understanding cultural rights of passage rituals. The reader must filter through a myriad of possible knowledge sources to identify those that best contribute to textual understanding. A critically thoughtful reader would consider criteria such as the efficiency of access, relevance, usefulness and credibility of the information. We refer to this tool as
criteria for judgment. Each competency presupposes fluency with various criteria that guide the thoughtful reading decisions students must make.

Visual cues and graphic organizers are examples of tools that help critically thoughtful readers organize their thinking. For example, thinking of a time when you had to do something hard by yourself and recalling your feelings would help you as a reader relate to the child left alone for the night by his father. We call these thinking strategies. As we discussed earlier, teachers often use the terms “activity” and “strategy” interchangeably. In reading as thinking, we define an activity as a teacher-directed task. A reading strategy becomes part of a student’s “tool kit” only if it becomes self-regulated. Each competency is supported by thinking strategies when they have become part of a student’s repertoire of tools for independent use.

Vocabulary is a key part of reading, but there is a particular kind of vocabulary that is central to reading as thinking. These concepts, called critical thinking vocabulary, help us think about what we are reading and about the interpretations we are developing. They include notions such as clue and evidence, bias and point of view, stereotype and generalization.

Finally, the mindset that readers bring to text influences their interactions and thinking. Attitudes such as curiosity, attention to detail, persistence and open-mindedness orient how students engage with the text.

We call these habits of mind.

The chart on the following page illustrates particulars of the five tools that enable students to become proficient at each literacy competency.

Summary

Reading as thinking seeks to embed critical thinking as the orientation behind literacy instruction. Independent, critically thoughtful readers approach text with an inquisitive mindset as they interact with text, construct meaning and transform their thinking. To help students become thinkers, we must consciously nurture self-regulated use of tools in the pursuit of what we see to be five overarching literacy competencies:

• **Activate** relevant personal and public knowledge
• **Anticipate** text development, purpose and structure
• **Extract** explicit and implied details and overall meaning
• **Challenge** emerging interpretations and assess merits of the text
• **Deliberate** the implications beyond the text

Successful and effortless application of these competencies depends upon incremental acquisition of a substantial array of tools, including relevant background knowledge, criteria for judgment, strategies, thinking concepts and habits of mind.
<table>
<thead>
<tr>
<th>Supporting Tools</th>
<th>Background knowledge</th>
<th>Criteria for judgment</th>
<th>Thinking vocabulary</th>
<th>Thinking strategies</th>
<th>Habits of mind</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activate</strong></td>
<td>• personal knowledge and experiences • information from other sources</td>
<td>• direct and indirect personal experience • knowledge of a variety of reference sources and merits/limitations of each</td>
<td>• efficient • relevant • useful • credible</td>
<td>• previewing • brainstorming • think of a time • visualizing</td>
<td>• inquiry minded</td>
</tr>
<tr>
<td><strong>Anticipate</strong></td>
<td>• text structures • elements of the text</td>
<td>• can be supported by clues in the text and prior knowledge • not obvious</td>
<td>• prediction • evidence • clues • conclusions • inference</td>
<td>• know-wonder • qars • graphic organizers</td>
<td>• critical minded • attention to detail</td>
</tr>
<tr>
<td><strong>Extract</strong></td>
<td>• genres • themes • literacy devices (symbols etc)</td>
<td>• based on what is known • makes sense in the text</td>
<td>• synthesize • evidence • clues • conclusions • main idea • supporting details</td>
<td>• skim • scan • concept map • reaction codes • think aloud • i think i know • read between/ beyond the lines • 5ws</td>
<td>• persistence • attention to detail</td>
</tr>
<tr>
<td><strong>Challenge</strong></td>
<td>• knowledge of fiction and non-fiction • knowledge of variety of purposes</td>
<td>• relevant • grounded in the text • fair to author and yourself • comprehensive</td>
<td>• evidence • argument • stereotype • bias • point of view • facts • assumptions • argument • counter arguments</td>
<td>• story boards • sq3r • character sociogram • evidence charts</td>
<td>• open minded • seeks corroboration • fair minded</td>
</tr>
<tr>
<td><strong>Deliberate</strong></td>
<td>• knowledge of issues/themes in the text</td>
<td>• relevant • beyond the obvious • reflect important considerations</td>
<td>• hypothesis • conclusions • assumptions</td>
<td>• used to think • so what? • discussion circles</td>
<td>• reflective • inquisitive</td>
</tr>
</tbody>
</table>
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