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Key Issues in L2 Reading Development

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Abstract: In this article, I provide an overview of key issues for L2 reading development. The goal is a succinct summary of ideas that should support more effective teaching and improve students' reading abilities. The article first outlines the nature of reading abilities, particular in academic contexts, and identifies major component skills and knowledge bases needed for L2 reading comprehension. From this foundation, a set of research implications for instruction are noted. These implications, in turn, form the basis for recommended teaching practices that will build comprehension abilities. Nine specific curricular and instructional themes are then presented briefly and suggestions for teaching and curriculum planning are explored. The article concludes by noting the need for additional research to validate, and to provide new insights into, effective teaching practices.

Introduction

1. The miracle.
2. The nature of fluent reading and the way that reading comprehension is carried out cognitively.
3. The “reading construct” as the goal for the development of reading abilities.
4. Expertise and reading: Get a good coach.
5. Implications from research for reading instruction.
6. Curricular and instructional options for effective L2 reading instruction settings.

The ability to read fluently is, in fact, quite miraculous. Our brains were not designed to be reading brains. But we have learned, from one generation to the next, to take graphic forms on a page and mentally interpret them into our own language, no matter what language. As fluent readers, we do this at a rate that is even faster than our fluent listening abilities. What is more remarkable, we can do this for hours at a time if we choose to, and we often do this for enjoyment! So what is it we do when we read, and how do we do it? I will address this large question, but do so in the context of academic reading because that is the key concern for educators.

The ability to read English efficiently for academic purposes is widely recognized in EFL/ESL contexts as a critical skill in a wide range of secondary and university settings, and especially for more advanced students. I will first review the nature of (English L1) fluent reading and the way that reading comprehension is carried out cognitively. This foundation helps define the “reading

construct” of the fluent reader, here viewed as the integration of many component skills. Determining the construct then provides rationales for the development of reading abilities and various instructional practices. The focus of this chapter will not be an extensive review of the reading construct. That has been developed in more detail in other sources (e.g., Grabe, 2009; Koda, 2005; Perfetti & Adlof, 2012; Rayner et al., 2012). Instead, the goal is to draw connections from the reading construct to potentially effective ways to teach reading.

Defining Reading

Reading can simply be defined as a complex ability to extract, or build, meaning from a text. However, this definition, by itself, is not very informative. The most commonly accepted way for researchers to explain the above definition is to identify the key component abilities and skills that allow reading comprehension to emerge. Reading comprehension involves abilities to recognize words rapidly and efficiently, develop and use a very large recognition vocabulary, process sentences in order to build comprehension, engage a range of strategic processes and underlying cognitive skills (e.g., setting goals, changing goals flexibly, monitoring comprehension), interpret meaning in relation to background knowledge, interpret and evaluate texts in line with reader goals and purposes, and process texts fluently over an extended period of time. These processes and knowledge resources allow the reader to generate text comprehension to the level required.

The identification of these skills and resources has been the outcome of many research studies, and it remains the source of much ongoing research. These skills work together in a complex, finely-coordinated set

of processes (Grabe, 2009; Koda, 2005; Cain & Oakhill, 2012; Perfetti & Adlof, 2012). In this section, research is reviewed that supports the relationship between reading skills and reading comprehension. Much of the research has been conducted in English L1 reading contexts, though increasing amounts of L1 reading research in other languages has also emerged in the past fifteen years (Joshi & Aaron, 2006; Verhoeven & Perfetti, 2011).

Reading Processes: How does Fluent reading work?

In this brief section, I have divided reading abilities into lower level and higher level processes. All processes occur in working memory—which can be understood as the pattern of cognitive neural network activations at any given moment. Lower level processes do not mean that they are easier. In some respects, they are much harder to develop for L2 readers. Lower level processes include fast, automatic word recognition skills, automatic lexico-syntactic processing (automatically recognizing word parts and morphological information and automatically parsing the immediate clause for syntactic information), and semantic processing of the immediate clause into relevant meaning units (or propositions). Higher level processing involves those processes and resources that more closely align with strategies and resources for comprehension with more difficult texts: (a) form main idea meanings, (b) recognize related and thematic information, (c) build a text model of comprehension (an author-driven summary understanding), and (d) use inferencing, background knowledge, strategic processing and context constraints to create a situation model of reading (a preferred personal interpretation) (Hannon, 2011; Perfetti & Adlof, 2012).

Lower level processing: Research on reading has shown that beginning readers need to establish strong linkages between orthographic forms and the sounds of the language (Ehri, 2006; Cain & Oakhill, 2012; Rayner et al., 2012). Extensive research in L1 contexts across languages has demonstrated that training in phonological awareness and letter-sound correspondences predicts later reading development among children and beginning readers (Ehri, 2006). While L1 reading in other languages may not require that same level of instructional effort as does English for phonological awareness, all young learners benefit from explicit instruction in letter-sound correspondences (Lundberg, 1999). The automatization of letter-sound relations is the foundation of all alphabetic reading and supports syllabic reading systems as well. Even Chinese, as a morpho-syllabic system, incorporates information from the phonetic radical within characters to aid word recognition and uses phonological information at the point of lexical access; Chow, McBride-Chang & Burgess, 2005; He, Wang & Anderson, 2005).

Research on English L1 vocabulary knowledge has demonstrated that fluent readers have very large and automatic recognition-vocabulary knowledge and that vocabulary knowledge is highly correlated with reading ability (see Grabe 2009; Grabe & Stoller, 2011). While estimates of English L1 word knowledge vary greatly (from 19,000 to 200,000; Anglin, 1993), the most widely accepted figure is that high school graduates know on average 40,000 words as fluent L1 readers (Stahl & Nagy, 2006). This is a very large number of words to learn and most accounts suggest that many of these words are learned by exposure to new words through continual reading practice. Stanovich (2000) has argued that extended exposure to print (reading extensively) over years leads to major differences in both vocabulary knowledge and comprehension abilities. Research on L2 vocabulary knowledge has also shown that vocabulary is correlated with L2 reading comprehension. Droop and Verhoeven (2003) reported a strong relationship between 3rd and 4th grade L2 students' vocabulary knowledge and their reading abilities. (See also Qian, 2002).

Research on L1 morphological and syntactic knowledge shows that they both have an impact on reading comprehension. A number of studies have shown that morphological knowledge contributes to reading comprehension. Research by Anglin (1993), Nagy et al. (2006), and Wagner, Muse & Tannenbaum (2007) all argue that morphological knowledge (knowledge of word parts) is very important to more advanced word recognition and reading development (see also Bowers, Kirby & Deacon, 2010; McCutchen & Logan, 2011; Kieffer, Biancarosa & Mancilla-Martinez, 2013). There is also evidence that grammatical knowledge and discourse knowledge both play roles in L1 reading comprehension (Lesaux, Lipka & Siegal, 2006; Perfetti and Adlof, 2012; Trabasso & Bouchard, 2002). Research on L2 syntax has shown that there are strong relationships between these language knowledge bases (syntax and discourse awareness) and reading comprehension (see Grabe, 2009; Shiotsu, 2010).

For the fluent reader, automatic semantic processing of texts occurs at the same time that automatic syntactic parsing is being carried out (See Perfetti & Adlof, 2012; Rayner et al., 2012). For a brief explanation, Grabe and Stoller (2011) identify the importance of propositional meaning units in the building of text main-idea comprehension. There is strong research evidence to show that fluent readers automatically process the meaning units that they extract from the syntactic parsing of clauses (e.g., who does what to whom, and how, and when).

Higher level processing: Higher level processing is not better, or harder; it is just processing that is closer

to conscious introspection on the part of the reader. Overall, comprehension of a text is created when the reader builds a semantic network of ideas drawn from the text to form a “text model of comprehension.” This basic text model—what the text is about—is supported and expanded by readers’ use of background knowledge, inferencing, and attitudes to the text information, thus creating a second “situation model of Comprehension” (Kintsch; 2012). The text model of comprehension requires that semantic information from clause-level processing be combined in a network of central ideas and references that recur through the text. Readers form links across ideas that are repeated, are referred to again, or are inferred in order to maintain a coherent interpretation of what they read. This emerging network of ideas is what produces the gist of the text. The situation model is built upon the text model to establish what the reader decides is necessary, relevant, appropriate, and useful. The active reader interprets the text to decide what it should mean to him or her. That interpretation is the information that also is stored in long-term memory as learned information (Kintsch, 2012).

Our ability to attend selectively to certain information and to respond strategically to this information is represented cognitively in working memory as executive control processing. We are all able to focus our attention on some point and “think” about it. During reading that requires learning (including both content and language learning), this attention typically involves strategic reading. L1 research on strategic processing during reading (e.g., inferencing, comprehension monitoring, goal setting) demonstrates that strategic processing and metacognitive awareness influence reading comprehension. Discourse comprehension researchers have shown that inferencing that arises from ‘reading-to-learn’ has an important impact on comprehension (Goldman & Rakestraw, 2000; Perfetti & Adlof, 2012). Similarly, comprehension monitoring appears to be a good predictor of comprehension abilities. At the same time, these abilities, being metacognitive in nature, are not simple reading strategies. Rather, they constitute a range of skills and abilities, and represent a range of strategic responses to text difficulties.

Experimental research on comprehension instruction and strategy training is extensive (see Pressley, 2006; Trabasso & Bouchard, 2002). Many L1 studies demonstrate a causal impact of instructional skills and strategies on reading comprehension. Important evidence supports answering main idea questions as a post-reading task, using semantic mapping of ideas from a text, previewing specific information from the text, asking student to formulate questions about a text, filling in and generating graphic organizers that reflect the organization of the text, visualizing information

from the text, and raising awareness of discourse organization of the text, among others. Overall, a number of effective strategies have been identified in instructional research, though *combinations of strategic responses to texts* appear to be more effective in supporting comprehension (See Grabe, 2009; Grabe & Stoller, 2011).

Research on L2 strategic processing is more limited. There are relatively few studies that demonstrate a direct relationship between reading strategies and reading comprehension. In a recent meta-analysis of L2 reading strategy research, Taylor, Stevens & Asher (2006) reviewed the existing empirical research in L2 reading strategy training (10 published studies and 12 dissertations) and concluded that a low to moderate effect exists between strategy training and L2 reading comprehension improvement. The analysis is encouraging, but it should be treated cautiously due to the limited database available for the analysis.

Purposes for Reading

One of the most important factors in reading comprehension abilities is how reading processes vary depending on the reading purpose. It is clear that reading for entertainment is quite different from reading to learn information or reading to integrate information from multiple sources. It is also clear that skimming a text for a very general idea involves distinct skill combinations from reading for main idea comprehension, the latter being by far the most common type of reading carried out by fluent readers.

A critical factor in teaching L2 reading is helping students understand that different tasks and different activities involve differing levels of demand on comprehension. Some tasks require a high level of detailed comprehension. Other tasks may involve the understanding of main ideas and some supporting information (see Grabe, 2009).

Further Factors: Reading Fluency and Extended Exposure to Print

L1 research on reading fluency has demonstrated that reading fluency, and especially among children, is strongly correlated with reading comprehension (Samuels, 2006; Klauda & Guthrie, 2008). Fuch et al. (2001) have shown that oral passage reading fluency—orally reading a text for one minute—is strongly related to reading comprehension abilities for L1 children. A number of studies have shown that training to recognize words faster will lead to faster word recognition on other words if the training is sufficiently extensive (Martin-Chang & Levy, 2006). However, this type of training appears to have only limited direct benefits for reading comprehension. In the area of passage fluency training, primarily by rereading passages multiple times

(sometimes aloud and sometimes silently), there is good evidence that passage rereading improves both reading fluency and comprehension (National Reading Panel, 2000).

At present, there is less research that demonstrates a relationship between reading fluency and reading comprehension development in L2 contexts. However, Sawaki and Sabatini (2007) reported a strong relationship between oral passage reading fluency and reading comprehension ($r^2 = .36$). In a series of L2 training studies by Taguchi, Gorsuch, and colleagues (see 2008, 2010, 2012), there is evidence that fluency practice leads to increased L2 reading fluency and to some improvement in L2 reading comprehension. Improved word reading fluency through training has also been reported by Fukkink et al. (2005).

L1 research on extended exposure to print (extensive reading) has demonstrated a strong relationship between amount of reading (over long periods of time) and improved reading comprehension (Grabe, 2009; Krashen, 2004; Stanovich, 2000). Stanovich and colleagues, in a series of studies, showed that exposure to print (amount of reading) was an important independent predictor of reading ability (see Stanovich, 2000 for overview).

Research on extensive reading is relatively unexplored in L2 reading (cf. Krashen, 2004, 2011). The one set of studies that has indicated the positive effects of extensive reading on reading comprehension was those studies carried out by Elley over a period of 20 years (see Elley, 2000). In these studies, he has shown that getting students to read extensively over a long period of time consistently improved reading comprehension abilities as well as a number of other language skills. In most other studies on extensive reading, there is little carefully controlled empirical evidence that reading extensively significantly influences L2 reading development.

L1 and L2 Reading Differences

The above section developed the concept that L1 and L2 reading abilities share many of the same component skills and that the reading construct is very similar in terms of underlying cognitive and linguistic components. In most respects, this is a reasonable position to take. At the same time, any consideration of L2 reading abilities has to recognize that there are several ways in which L2 reading differs from L1 reading abilities. Most of these differences center, either directly or indirectly, on the linguistic resources that a reader can bring to bear on text comprehension.

1. Learners have a much smaller L2 linguistic knowledge base when they begin reading. Their knowledge of vocabulary, grammar, and discourse structure is more limited.

2. L2 students, overall, will have much less experience with reading exposure in the L2. They simply will have had much less practice in L2 reading.
3. L2 students will experience L2 reading differently because they have experiences reading in two different languages and because cognitive processing will involve two language systems (e.g., accessing the bilingual lexicon, using a joint strategy system—Kern, 1994; Koda, 2005).
4. Aside from the possibilities of developing somewhat distinct cognitive processing, students engaged in L2 reading will also experience a range of transfer effects (cognitive skills, strategies, and goals and expectations). Some transfer effects will involve interference from the L1; others will facilitate L2 reading processes. (See Dressler & Kamil, 2006; Koda, 2005.)
5. L2 readers rely on different combinations of general background knowledge when reading in the L2. Drawing on information about “how the world works” sometimes varies between L1 and L2 reading experiences.
6. L2 readers will encounter distinct social and cultural assumptions in L2 texts that they may not be familiar with or find somewhat hard to accept.

There has been a growing debate on the extent of the differences between L1 and L2 readers. Drawing on the arguments made by Koda (2005), and Genesee et al. (2006), a number of statements can be developed. First, beginning and intermediate L2 reading abilities are more distinct from L1 reading than advanced L2 reading abilities will be. As an L2 reading becomes fluent and highly skilled in reading comprehension, the reading processes involved become more similar (though perhaps never the same). Second, the extent of the linguistic differences between L1 and L2 (e.g., the linguistic differences between Spanish and English vs. Chinese and English) will have an impact on L2 reading. This impact of L1/L2 differences will diminish with increasing L2 reading proficiency (but will not disappear). Third, higher-level skills relate to comprehension skills more generally, and are not constrained by limited amounts of linguistic knowledge, so they will be essentially the same in both L1 and L2 contexts.

Finally, the actual *underlying cognitive processes* involved in L1 and L2 reading are generally the same, but the linguistic limitations and the processing practice limitations will create real L1–L2 differences until the

L2 linguistic resources and processing practices have grown sufficiently strong and fluent. Nonetheless, overall patterns of component-skills development across L1s suggest that the underlying component skills are essentially the same (see Geva & Farnia, 2012; Lipka & Siegal, 2011; Verhoeven & van Leeuwe, 2012). Moreover, as L2 reading proficiency increases, the reading comprehension process looks increasingly similar; there are numerous reasons for this increasing similarity, including greater amounts of reading practice and exposure to L2 print, greater resource knowledge of the L2 and the social/cultural world of the L2, greater fluency and automaticity of L2 reading skills, recognition of successes in L2 reading, and an increasing willingness to read in the L2 for various purposes. One conclusion to be taken from this discussion of L1/L2 differences is that many results of research on component skills that support reading comprehension will likely apply across both L1 and L2 learner groups.

Expertise and Reading: Get a Good Coach

From time to time, researchers argue that reading extensively is all that a student needs to do to become a good reader. However, there is overwhelming evidence that effective instructional interventions significantly improve students' reading abilities (e.g., Trabasso & Bouchard, 2002; Taylor, Stevens & Asher, 2008), and especially so in combination with an effective extensive reading program. Aside from many studies in reading research, an additional sub-field of cognitive psychology highlights the importance of an effective mentor or coach (or teacher).

Research on expertise (Ericsson, 2006; Ericsson, Prietula & Cokely, 2007) highlights the importance of getting a strong mentor or a good coach. People who develop levels of high expertise in various fields—medicine, physics, law, math, chess, dance, wine tasting, sports, computer programming, and more—all seek out coaches who bring them to higher levels of performance. If we see advanced fluent reading as a level of expertise, and we should, then the notion that students will gain enormously from effective teachers is a straightforward conclusion. Indeed, effective instruction in reading skills does lead to significant reading comprehension improvements. The notion that a person only has to read, and read a lot, does not turn out to be sufficient for students' reading development. Effective and focused reading instruction does make a difference.

L2 Implications for Reading Instruction

Overall, the combination of research on L1 and L2 reading abilities suggests that there are important implications for L2 reading instruction that can be taken from research results. Reading comprehension requires the following skills and knowledge resources:

1. The ability to decode graphic forms for efficient word recognition

2. The ability to access the meanings of a large number of words automatically
3. The ability to draw meaning from phrase and clause level grammatical information
4. The ability to combine clausal level meanings to build a larger network of meaning relations (comprehend the text)
5. The ability to recognize discourse level relationships and use this information to build and support comprehension
6. The ability to use reading strategies with more difficult text and for a range of academic reading tasks
7. The ability to set goals for reading and adjust them as needed
8. The ability to use inferences of various types and to monitor comprehension in line with reading goals
9. The ability to draw on prior knowledge as appropriate
10. Abilities to evaluate, integrate, and synthesize information from a text to form a situation model of comprehension (what the reader learns from the text).
11. The ability to maintain these processes fluently for an extended period of time
12. The motivation to persist in reading and to use the text information appropriately in line with reader goals

In an ideal world, each of these implications from research would be subject to instructional training studies and longitudinal studies to determine the potential for turning implications into effective applications in the classroom. Once interesting specific applications are developed, it would then be important to explore the effectiveness of those applications more generally for the development of L2 reading abilities (see Grabe 2009). In the real world, we cannot wait for all of this research. We need to improve L2 students' reading abilities in the present moment. Fortunately, a number of teaching practices can provide the needed help.

Teaching L2 Reading

The major argument of the chapter to this point is that a number of key reading sub-skills can be taught successfully, and further, that the learning of these sub-skills will contribute to a learner's reading comprehension abilities. How these skills should be taught most effectively is indicated to some extent by the research reviewed above. However, there are many instructional approaches that potentially can contribute to the development of reading abilities. This discussion begins with curricular principles for

organizing instruction and establishing goals for learning. The section then covers eight topics that are important for reading instruction.

Curriculum Development Principles

The goal for reading instruction, at a general level, is to incorporate key component skills and knowledge into a reading curriculum in a principled and consistent way (see Grabe & Stoller, 2011, 2014). Specific instructional activities included in a curriculum should follow from the major themes developed earlier in this article and the resulting implications. To frame instructional options for the reading classroom, a set of more general principles are needed for building a reading curriculum. These principles include:

1. A curricular framework for conceptualizing L2 reading instruction that should integrate major skills instruction with extensive practice and exposure to print (building upon a needs analysis, goals and objectives or teaching and testing, plentiful resources, appropriate curriculum planning, and effective teaching materials)
2. Reading resources that are interesting, varied, good-looking, abundant, and accessible
3. Some degree of student choice in selecting major reading sources
4. Reading skills that are introduced and taught by examining the primary texts used in the reading course. There should not be a need for special materials to introduce reading skills (though additional activities for further practice are necessary).
5. Lessons that are structured around pre-reading, during-reading, and post-reading activities, and these activities should be varied from one major reading to the next
6. Opportunities for students to experience comprehension success while reading
7. Expectations that reading occurs in class every day and that many extended reading opportunities are provided on a regular basis
8. Instruction that is built on an integrated curriculum framework and can support the following developmental goals:
 - A. Promote word recognition skills
 - B. Build a large recognition vocabulary
 - C. Practice comprehension skills that combine awareness of grammar, main idea identification, and comprehension strategies:
Strategy instruction is not separate

from text comprehension instruction

- D. Build awareness of discourse structure (recognize main ideas, recognize major organizing patterns, recognize how the information is organized in parts of the text, recognize overt signals of text structure, recognize anaphoric relations in texts, recognize other cohesive markers in texts)
- E. Promote strategic reading
- F. Practice reading fluency (build reading rate, build text passage reading fluency, read and reread at home with parent or tape or self)
- G. Develop extensive reading
- H. Develop motivation
- I. Combine language learning with content learning

Promoting Word Recognition Skills

Students at beginning and low intermediate levels need to be able to use letter sound correspondences easily and recognize frequent words rapidly and accurately. Most L2 students will have reasonable control over these basic skills, but checking how quickly and accurately students can read a word list provides a useful diagnostic tool, particularly if a teacher is concerned about a student's reading progress (see Wang & Koda, 2005 for an example list). Students who have difficulty with letter-sounds correspondences should be given training in more consistent associations between letters and sounds. Most students will not have significant problems at this level if they are in academic settings at secondary or higher levels. Beyond the ability to read a basic word list reasonably well, many students should get the needed practice in word recognition skills through vocabulary development, extensive reading, and fluency practice.

Building a Large Recognition Vocabulary

If student are to become good readers with a wide range of texts, they need to recognize at least 95 percent of the words they might encounter in these texts, and fluency generally occurs when a reader can recognize 98-99 percent of the words in a given text. The number of words that would be needed for 95 percent coverage of most texts seems to lie somewhere between 10,000 and 15,000 words; 98-99 percent of words probably requires a recognition vocabulary of about 40,000 words (Stahl & Nagy, 2006). The real goal for more advanced L2 reading is an L2 recognition vocabulary level anywhere above 10,000. At the same time, the need to know the first 2,000

word families still retains its force as a key argument for vocabulary instruction. In order to institute an active vocabulary development framework in the L2 curriculum, a carefully designed framework for instructional activities must be built around the following nine goals:

1. A framework for understanding vocabulary learning in the classroom
2. Procedures for selecting words to focus on
3. Techniques for introducing new words
4. Ways to practice using words
5. Activities to build word learning strategies
6. A vocabulary-rich environment to support learning
7. Activities to help students collect words
8. Ways to build motivation for word learning
9. Activities that recycle texts and vocabulary

There are a number of good resources for exploring each of these principles. In L1 settings, useful ideas are outlined in Beck, McKeown and Kucan (2008), Graves (2009), and Stahl and Nagy (2006). Good L2 vocabulary instruction ideas can be found in Anderson (2009) and Nation (2001, 2008).

Practicing Comprehension Skills

The ability to understand a text requires a reasonable knowledge of basic grammar, an ability to identify main ideas in the text, an awareness of discourse structure, and strategic processing with more difficult texts. Reading comprehension instruction—helping students find the main ideas and be able to say what a text is about—should give some attention to directed grammar teaching, particularly at beginning and lower-intermediate levels. In certain cases, teaching or reviewing a key grammar point will support the material that students are reading.

Most reading instruction occurs beyond the level of the beginning ESOL student, and it is not necessary for a reading course to have a full grammar review. In some cases, grammatical knowledge can make a difference in reading comprehension with more difficult texts, particularly *if the grammatical form occurs multiple times and plays a role in comprehension*. Some subset of this knowledge should be taught, first directly from the text material itself, and then through additional activities and a review of other text material if needed. However, a reading course is not the place in which to embed a grammatical syllabus.

Main idea comprehension is not an easy skill to teach and, more commonly, teachers assess comprehension rather than teach comprehension through post-reading questions. Post-reading comprehension questions

can offer good instructional opportunities if teachers have students explain why an answer is appropriate and explain where the text supports his/her answer. Two other ways to teach comprehension skills include strategy instruction that requires comprehension of the text (involving discussions around comprehension and specific strategy uses) and instruction that emphasizes discourse structure awareness (especially the use of graphic organizers) (see Grabe & Stoller, 2014).

Building Awareness of Discourse Structure

Teaching students to become more aware of text structure is a further critical aspect of reading instruction and curriculum planning. Teachers need to be aware that texts have larger units of structure that achieve writers' purposes. Moreover, writers' goals and task requirements determine basic discourse organization, and the specific information that a writer presents has a major impact on how a text is organized. A teacher with some knowledge of text organization and discourse signaling markers can help students build their knowledge of text structure and discourse organization. Eight specific activities are noted below, though many more could be incorporated into a reading curriculum

1. Preview texts and highlight key words that signal text structure.
2. Highlight a paragraph and decide its function in the text.
3. Fill in an outline of the text and determine main units of the text. Decide what makes each unit identifiable as a separate unit.
4. Fill in a table, chart, graph, timeline, tree, etc. How was the information that was taken from the text signaled so that it fits in the given place in a graphic organizer.
5. Find patterns of discourse organization in a text (cause-effect, comparison-contrast, problem-solution) and generate very simple graphic displays.
6. Reorganize scrambled paragraphs and sentences to reassemble a text or to make a good summary.
7. Remove a wrong sentence from a summary or a paragraph.
8. Match main ideas and supporting information across two columns.

Much like other types of knowledge and skills to be learned, there are some key principles for text structure instruction. First and foremost, this type of instruction must be consistent and continual. Second, teachers must also use the texts that they are reading for other purposes so that students see the pervasiveness of discourse structure—Students shouldn't be provided

with special texts to show the discourse structure. Finally, students need to explain to teachers and classmates how texts are structured and how discourse structure is signaled (Grabe 2009; Grabe & Stoller, 2011, 2014).

Promoting Strategic Reading

Strategies for reading comprehension build on the linguistic resources (words, phrases, and structures) and support the basic comprehension model developed by the reader. When good readers read for careful comprehension, they actively engage academic texts through multiple strategies and a heightened level of metacognitive awareness (Pressley, 2002:294-296):

1. They plan and form goals before reading.
2. They form predictions before reading.
3. They read selectively according to goals.
4. They reread as appropriate.
5. They monitor their reading continuously.
6. They identify important information.
7. They try to fill in gaps in the text through inferences and prior knowledge.
8. They make guesses about unknown words to keep reading.
9. They use text structure information to guide understanding.
10. They attempt to integrate ideas from different parts of the text.
11. They build interpretations of the text as they read.
12. They build main idea summaries.
13. They evaluate the text and the author, and form feelings about the text.
14. They attempt to resolve difficulties.
15. They reflect on the information in the text.

These strategies and associated goals, as well as a few other strategies, are often applied in combinations that support each other to achieve comprehension. Among good readers, these strategies are often applied initially without a lot of conscious thought. It is only when the initial set of strategies does not lead to successful understanding that a much more conscious problem-solving mode of attention is activated.

Training students to become strategic readers requires that strategy development be given a high priority throughout the curriculum and that strategy instruction be seen as a long-term goal. Strategies are introduced, usually one or two at a time, and developed in the course of instruction. Teachers provide direct teaching of strategies while students are reading the course texts. The key for students to become strategic readers

is for them to experience many subsequent iterations of practice in using effective strategies. This continual recycling of key strategies is a process that textbooks typically are not able to incorporate in a curriculum, and most teachers do not know how to do this successfully. These two limitations are a major reason why most reading strategy instruction is not useful.

Teaching for strategic reading involves consistent modeling, scaffolding, extensive practice, and eventually independent use of the strategies by students. Consistent discussions about how to understand the text are a major way to introduce and practice strategies, and comprehension monitoring is a regular feature of instruction. In this way, strategy instruction is seen as part of everyday reading instruction, and not as separate lessons. A long-range goal is to automatize strategy use for fluent reading. Teaching students to become more strategic readers is central to comprehension instruction and deserves greater instructional attention.

The best program for developing students as strategic readers is through the English L1 program known as Concept-Oriented Reading Instruction (CORI). There is no space to describe this program involving motivation instruction, strategy instruction, content learning, and extended reading input, but there is over 15 years of empirical research evidence to demonstrate the effectiveness of this approach in L1 contexts (Guthrie, Klauda & Ho, 2013; Guthrie, Wigfield & Perencevich, 2004; Taboada et al., 2009). CORI has yet to be implemented in any L2 context. At the same time, there is some evidence that L2 reading strategy instruction can be useful based on the meta-analysis by Taylor, Stevens and Asher (2006).

Practicing Reading Fluency

The development of reading fluency is an important component ability for advanced reading comprehension skills (Gorsuch & Taguchi, 2008; Grabe, 2009; Klauda & Guthrie, 2008; Taguchi et al., 2012). Building word and passage reading fluency also requires an extended commitment in the reading curriculum. One cannot build reading fluency by practicing for a month or two. It is critical to explain to students why they are working on fluency and to “sell” students on fluency, rate, and recognition activities. At the same time, if these activities are done right, students enjoy fluency activities and look forward to them.

Developing word-recognition fluency can be carried out through repetition and “beat the clock” practice with flash cards and timed reading of lists of words that have been introduced. Students can also improve in word-recognition fluency through practice in rereading texts, reading along in a text as the teacher reads aloud, and engaging in extensive reading. Passage-level fluency

can be developed with consistent practice in rereading texts, both silently and aloud. Passage fluency also is developed through extensive reading, recycling through previously read texts to carry out new tasks, timed reading activities, and paced reading activities.

In English L1 reading settings, repeated reading is becoming an important aspect of reading curricula, and many alternative options exist for providing repeated reading practice (Rasinski, 2010). Repeated reading can either be unassisted or assisted. Unassisted Repeated Reading involves students reading aloud short passages alone until they reach a set rate of reading speed. Assisted Repeated Reading can involve students reading a passage silently along with an audio-tape, reading a passage aloud with an audio-tape, reading a passage with a teacher or aide, or first listening to a passage and then reading along (among other variations).

Developing Extensive Reading

Extensive reading, to be reasonably successful, generally requires a significant effort in motivating students. Students need to be aware of the goals for working on extensive reading. They also need to be sold on the benefits of extensive reading, encouraged to read extensively at every reasonable opportunity, given many good opportunities to read extensively, and provided with many excellent extensive reading resources (e.g., graded readers and level-appropriate reading material). The following list simply sketches some of the ways to engage students in extensive reading

1. Provide many attractive reading materials.
2. Provide time for free reading or SSR in class.
3. Create many opportunities for all types of reading, in class and out.
4. Have a good class library.
5. Read interesting material to students.
6. Find out what students like to read and why.
7. Create ways to interest students in reading topics.
8. Let students read magazines, comic books, newspapers in class.
9. Talk about what you read and why that material is interesting to you.
10. Have students share and recommend reading material.

Building extensive reading skills requires long-range curriculum planning if it is to have a major impact on fluency and reading comprehension development. Extensive reading in class also requires scaffolded support from the teacher while students are reading silently (see Reutzel, Jones & Neuman, 2010). In addition, extensive reading in classroom contexts requires some type of accountability and evaluation,

though this should be simple and not threatening. Despite these cautions, it is important to point out the obvious: *There is no way to get around the fact that students only become good readers by reading a lot.*

Promoting Motivation for Reading

It is now clear that motivation training and teaching positively impacts the development of reading comprehension abilities (Guthrie, Klauda, & Ho, 2013; Schiefele et al., 2011). Teachers commonly think that they do not have a major role to play in student motivation for reading. This view couldn't be further from the truth. Most students take a dim view of becoming good, fluent L2 readers. Students know that reading development is a hard task and they need effective motivational support from teachers and the curriculum itself. Moreover, there are important ways in the classroom for teachers to promote student's motivation for reading. Motivation growth can be supported in the following ways:

1. Talk about what interests you and why.
2. Have students share their interests.
3. Promote the development of group cohesiveness
4. Create communities of learners who support each other with difficult tasks.
5. Increase students' expectancy of success in many particular tasks
6. Have good lead-ins for major texts and tasks in order to build initial interest.
7. Match student skills with challenge.
8. Make the curriculum relevant to students.
9. Make learners active participants so learning is stimulating and enjoyable
10. Build real levels of expertise in topics of readings (CORI, Content-Based Instruction).
11. Give students some degree of choices within the curricular framework.

Combining Language and Content Learning

A priority in building a reading curriculum is to consider which goals will have a high priority and how to combine all of the priority goals into a coherent overall educational plan. Any careful consideration of academic reading development has to take into consideration the various component skills outlined in this article. While not every component skill and knowledge base can receive equal amounts of attention, one approach to building a coherent and effective reading curriculum would be to combine an emphasis on content learning as well as language learning (and language skill use), often labeled as content-based instruction.

Sustained content and language learning, if developed appropriately, provides opportunities for the

development of various language skills and resources (much as other curricular models would). However, combined content and language learning also provides many opportunities for extended reading, motivational learning experiences, strategic responses to increasing complex tasks, greater choices in reading materials, and growing challenges to match growing skills. The combination of content and language learning brings in opportunities for project learning, the recycling of important skills and strategies on a regular basis, the rereading of many text resources, and more realistic needs to interpret, integrate, and evaluate information from multiple texts. These types of activities are what students should be trying to do with information resources in academic settings (Grabe & Stoller, 2014; Guthrie, Wigfield & Perencevich, 2004)

CONCLUDING COMMENTS

While there are a number of additional recommendations that can be made for building L2 reading instruction and planning appropriate reading curricula, this article describes key skills and knowledge bases needed for academic reading, and suggests ways to develop effective instruction. This article first described the research foundations for L2 reading comprehension and noted ‘implications for reading instruction.’ It also outlined a simple array of instructional practices that can be integrated into an innovative and effective framework for teaching L2 reading. A short article of this type can only begin to identify the potential instructional options and variations that could help make a difference in reading success with L2 students. The key to these on-going efforts is to continue exploring effective practices for reading instruction based on persuasive instructional research studies.

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