

**Critical secrets: tensions between authoring texts and the readability of leveled books**

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Tiffany L. Gallagher\*, Kari-Lynn Winters\*\*

\* Brock University, Canada; [tgallagher@brocku.ca](mailto:tgallagher@brocku.ca)

\*\* Brock University, Canada; [kwinters@brocku.ca](mailto:kwinters@brocku.ca)

**Abstract**

*In this inquiry an educational researcher and children's book author interrogated the process of the authorship of leveled readers, reconciling publishing protocols and readability formulae in order to encourage critical viewpoints for readers and educators. Data included publishers' guidelines, interviews, journaled field notes, readability scores, and draft samples of leveled book manuscripts. Qualitative analyses yielded three themes that offer a glimpse into the tensions that a leveled text author contemplates prior to and during the writing process. Issues of engagement, power, identity and agency are peppered throughout the author's process. Finally, there is a discussion of the impact of text readability calculations. This paper brings to light critical questions that educators and administrators might ask about leveled text readability in relation to their students' needs and considerations for educators to bring a critical literacy approach into the classroom during the use of leveled texts.*

**Keywords:** readability, leveled readers, book authoring, publishing, critical literacy, engagement, identity, agency

**Introduction**

In this current educational climate, there are several priorities for elementary reading instruction and assessment including: multimodal approaches to literacy, traditional print-based methods, and critical literacies that actively engage readers with a text while analyzing aspects of power, identity, equity, and its messages (Clarke & Whitney 2009, Janks 2014). Among these methods is guided reading, a common instructional approach in elementary schools that emphasizes ongoing learning and assessment with students, alongside small group or individualized guidance and often in conjunction with leveled texts (Fountas & Pinnell 2016). Here, educators evaluate what students already know in order to design lessons, monitor how the students are progressing, and determine how students have grown. Focal areas of guided instruction might include (but are not limited to) decoding, encoding, fluency, comprehension, and vocabulary building. The ultimate goal is to enable readers to work their way through a text independently, in order to read and understand it. As students progress from simple texts to more sophisticated texts, they become more efficient and discerning readers. Questions are offered, usually after the reading regarding literal and global comprehension. According to some researchers, guided reading "is the heart of an effective literacy program" (Fountas & Pinnell 2016: 13). This pedagogy has been a trend in language and literacy education for over a decade and continues to be practiced widely in North America and worldwide. As mentioned above, three aspects are highlighted in this practice: individualized instruction, ongoing assessment of students' literacy skills and use of leveled texts. This paper will focus on the veracity of the authoring and readability of leveled texts.

Despite being a common instructional practice, guided reading still holds potential for improvements and innovation, especially in today's social and political literacy climate (Fountas & Pinnell 2012, Swain 2010). For example, traditional guided reading practice tends to highlight the text, rather than contextualizing the socio-cultural and political frames that shape these texts, and hence the critical nuances that inform the reading practice. This is problematic because focusing primarily on inward approaches to reading (e.g., decoding skills, letters, word-work, literal comprehension questions) may

not give readers the range of critical skills they need (e.g., taking multiple perspectives, critiquing taken-for-granted assumptions) to be successful in this social and political climate. In addition to making guided practices broad (i.e., moving beyond the text) and encouraging analytical discussions, teachers need essential understandings about leveled texts. Teachers not only help students summarize and make conclusions while they read, but they need to encourage their students to question the authorship of these leveled texts to build understandings of how texts are part of a bigger context. Indeed, given the extensive use of these leveled texts in elementary guided reading programs, a close examination of how readability is considered during the authoring process is warranted.

This article aims to take a close, nuanced (and behind-the-scenes) look at the leveled readers educators are using for their students, the authorship of these leveled texts, and the readability of these texts in order to encourage broader and more critical perspectives. Additionally, this study explores some of the tensions between the expectations and assumptions that educators hold in relation to authors' and publishers' intentions. Indeed, concerns arise when educators use 'blind faith' when they adopt leveled texts in their guided reading practices, and do not consider the factors that contribute to the authorship of these texts and the calculated text readability.

### **Background literature on leveled reading and readability**

Sets of leveled books, compiled into one resource, sometimes called literacy readers, are written in an attempt to correlate with learning outcomes from various curriculum or standards policy documents (Bainbridge & Heydon 2013). According to one commercial publisher (McGraw Hill, n.d.), leveled reading books have existed since the 1950s and been using in over 60 countries. These leveled books are different from trade books in that the purpose for writing trade books is to tell a compelling story or convey non-fiction information in an engaging way. During the authorship of trade books, authors often have their own agency when writing. In many cases, trade books might be given a readability level *after* the publishing process. Literacy readers, on the other hand, are constructed with guidelines for readability at the forefront of the creation process; the goal is to write and publish a particular readability level of fiction or nonfiction text. In this article we are focusing on the latter type of book, and specifically the authoring of leveled literacy readers.

Leveled texts themselves range from easy to more complex. For example, an easy text for an emergent reader from Fountas and Pinnell (2016) includes levels A, B, or C, and in Developmental Reading Assessment (Beaver & Carter 2003) levels 1, 2, 3, or 4. These short texts, written for kindergarten and first grade level readers include repetitive phrases and simple sentence structures. More complex texts, for example at a third grade reading level, are Fountas and Pinnell (2016) levels N, O, or P or Developmental Reading Assessment (Beaver & Carter 2003) levels 30-38. These longer texts have more sophisticated narratives and more complex sentence structures. For complete reading level conversions, there are tables and charts to summarize level correlations (e.g., see: Harcourt 2005)

Readability of these texts is determined by readability formulae. These formulae, such as the Spache (1953), Chall & Dale (1995), Gunning (1952), Fry (1977), Lexile (MetaMetrics 2015) and Flesch (1948) are, as mentioned, often used to determine the difficulty of these texts and to identify where readers are situated in regards to their instructional reading levels. But an intriguing question persists: Are readability measures a good estimate of text difficulty when often texts are used for classroom instruction to support students' reading development? Investigations have uncovered a lack of correlation among indices and teachers' estimates of readability qualities (Begeny & Greene 2014, Heydari 2012). For example, in a recent study of Canadian texts (literacy readers, trade books and online articles), there was a gross lack of correlation among readability measures for texts from Grades 2-6 (Gallagher, Fazio & Ciampa 2017). These indices appear to be inexact or improperly applied; perhaps this is because authors of leveled texts are often unfamiliar with fields of literacy assessment, instruction, and how leveled texts fit into classroom practice.

Over the past eight decades, over 200 readability indices have been proposed and utilized (DuBay 2004). Many use frequency lists and limited vocabulary (Spache 1953, Chall & Dale 1995, Gunning 1952). In addition, the Fry Readability (Fry 1977) and Flesch-Kincaid (Flesch 1948) factor in the number of sentences, words, and syllable counts. The Lexile Framework (MetaMetrics 2018) is a licensed formula that is available to publishers and libraries for use in calculating both published trade and educational texts. Although this formula is unavailable to the public as it is proprietary-protected, it is known that the Lexile text measures are based on semantic difficulty (word frequency) and syntactic complexity (sentence length) (MetaMetrics 2018). Interestingly, investigations into the reliability of readability formulae has uncovered the lack of correlation among the Lexile Framework and other indices as well (Ardoin et al. 2010, Heydari 2012).

### **What do leveled texts and readability have to do with critical classroom practice?**

An important aspect of guided reading is finding appropriate books, in other words, the 'just-right leveled book' for a student's development in reading fluency and comprehension (Fountas & Pinnell 2012). Then, as that student continues to develop literacy skills, the teacher continues to find future 'just-right leveled books', ultimately scaffolding the student's learning and confidence, and giving the student opportunities to become a more proficient reader (Lipp & Helfrich 2016).

However, in practice, finding that 'just-right book' is challenging for teachers for three reasons. The first reason is the books themselves. Many leveled readers are packaged by publishers, usually containing a variety of reading levels or topics. Included in these packages are assessment tools for determining what constitutes an appropriate book at a particular level. Yet, some of the readers may not be motivated to read about the topics of the texts that are in a particular package; readers often prefer one text genre over another. In other words, even if teachers find that 'just-right book', chances are the level of the book may not be what students were engaged to read. And more importantly, as mentioned above, investigations have uncovered a lack of correlation among indices and teachers' readability estimates (Begeny & Greene 2014, Heydari 2012). The reality is that authors might be unfamiliar with the reading developmental levels of students as well as classroom practices of literacy instruction and assessment. Authors, like educators, are highly dependent on readability formulae and have 'blind faith,' that text levels are calculated properly and are exactly what readers at certain levels need. Consequently, if the calculated readability is slightly off and the 'just-right' leveled book isn't just-right, a reader may not perform well on a leveled reading assessment for miscue analyses and/or comprehension. In other words, a reader may not succeed simply because of the text chosen.

The second reason that finding that 'just-right book' is challenging for teachers, is that reading is a complex process requiring decoding, but also literal and inferential comprehension, as well as critical reflection (Fountas & Pinnell 2016). Reading needs to be internalized for readers, but at the same time, readers do not function as isolated beings within diverse communities. Rather, their ongoing social and critical experiences shape their beliefs, values, and preferences (Winters & Vratulis 2013). In this way, it is important for educators and students to think critically and holistically about the texts they are choosing. With both leveled literacy readers and trade books, educators and students might want to inquire, "Who wrote this book?" or "What perspective is the author taking?" or "How does this book relate to my life?" In fact, many leveled books are authored by non-educators and then designed and packaged by publishers. Pragmatically, because these leveled book packages are expensive to produce, access to diverse texts can become problematic with sets of leveled readers. For example, if a student attains a certain level of skill in reading and reaches a particular competency, a teacher may put a certain appropriately, leveled text in front of him/her. This text may not be motivating for the student or it may not even connect to his/her schema. Additionally, sometimes the author is unknown or not even listed on the book's cover. If this were the case, how might a reader relate to the authorship of the book or even be motivated to read it? For these reasons this reader may have challenges reading and

understanding a particular text. Moreover, what does this imply to the teacher for subsequent instruction?

### **Theoretical background: critical literacies and authorship**

One solution is to approach literacy instruction with an awareness of these issues around text readability, as well as with an openness to building a student's critical literacy skills in order to facilitate reading development and build success. This approach is happening in unique ways in classrooms worldwide (Fisher 2008, Janks 2014, Jones & Clark 2007, Labadie, Wetzel & Rogers 2012, Lewison, Leland & Harste 2014). For instance, Kim and Cho (2016) have documented how a Korean preschool teacher fosters perspective taking and challenges dominant ideologies inherent in texts. Yiola Cleovoulou (2018), from Toronto, Canada demonstrates how a teacher uses inquiry as a way to promote critical dialogue and reflective practice in a first grade classroom. Additionally, Lewison et al. (2014) suggest four dimensions of critical literacy that develop reflection and aid in students' reading comprehension. These dimensions include: disrupting the commonplace; interrogating multiple perspectives; addressing social justice; and taking action. They suggest that students need opportunities to build empathy and practice critical literacy skills before, during and after interactions with text through careful selection of books, "You think so?" questions and "I wonder" prompts, and a willingness to let silence reign. Important aspects for teachers are to ensure the scaffolding is appropriate, purposeful prompts, and letting the student voices be heard. Clearly, appropriate and thought-provoking text choices are necessary for supporting the four dimensions of critical literacy.

Teachers might also focus on developing students' awareness of how different audiences perceive and interpret the text, discussing differing perspectives of both the characters and the authors of the text, and building an understanding of who produced the text (e.g., the publisher) and for what reasons. Although research has demonstrated that guided reading practices can be thoughtful and critical (e.g., Swain 2010), there are few articles that critically examine the leveled texts that educators use (Ford & Opitz 2008, Glasswell, Ford & Opitz 2010) and a dearth of articles that critically question the authorship and publishing process of these texts.

Traditionally, authorship has been viewed as a series of actions that were primarily print-based, linear, and overly focused on the writer's process. Yet, authors do not function as isolated and linear individuals, disconnected from their lived lives. "Rather authors move among different worlds, within different space/time structures, including the imaginary worlds they are forming, the ongoing social world within which they are acting, and the wider world of experiences that they are drawing upon" (Dyson 1997: 4).

More recent definitions of authorship include anyone who denotes meaning to a text (Winters 2019). Thus, authorship includes not only the writers, but also the illustrators, publishers, and packagers who, create, and promote the texts through words, artwork, fonts, art design, physical formatting, and marketing. Authorship, by this definition includes the publishing companies that determine readability criteria, as they also affect the production of the book. Currently, an expanded definition of authorship also incorporates the readers who, alongside the writers, contribute to the authorship of the book by constructing the text in their own minds. Indeed, authorship is an orchestration of multiple perspectives, modes, and positions (Winters & Vratulis 2013).

Reconceptualizing authorship in this expanded way with students in guided reading settings provides new opportunities to think critically about leveled books. For example, educators might ask questions about the books themselves: "Who authored or produced them and with what intent?" "Do the illustrations add to or distract from the meaning the text portrays?" "Do the books relate to their students' lives?" "How are the books created and marketed?". Ultimately, moving away from skills-based approaches to reading during guided reading practice towards an authorship approach embedded in personal histories and collective inquires where readers investigate important topics, broadens

notions of literacy. Critical awareness in guided reading circles, where students integrate inquiries such as these, have the potential to shape readers into nuanced and critical life-long learners, while still attending to their basic needs for decoding and understanding texts (Fisher 2008, Fountas & Pinnell 2016).

Given the extensive use of leveled texts in elementary classrooms, a close examination of the implications of readability formulae and the authoring process is warranted. The purpose of this paper was to identify the issues related to writing leveled texts that might provide insights into the process and inform educators' use of these texts. This prompted the following inquiry questions that were examined in this research paper:

What considerations and tensions should educators be aware of, especially in regards to the text readability and the authorship of leveled texts?

How might educators think more critically about leveled texts, as well as how might they apply this criticality within their classroom practices?

### **Methodology**

This paper is the product of an inquiry, where the two authors interrogated the process of the authorship of leveled readers, reconciling publishing protocols and readability formulae in order to encourage critical viewpoints for readers and educators. Data included 12 documentations of publishers' guidelines, two interviews, 12 sets of journaled field notes, 18 screenshots of readability scores, and work samples of 148 drafts of the 10 leveled book manuscripts.

Tiffany's background is as a literacy researcher, professional learning facilitator and special education/remedial teacher. She has researched and written about the utility of readability formulae in contemporary texts including literacy readers, trade books, and digital texts. Kari-Lynn is a literacy and arts researcher, trade book author and presenter. Here, Kari-Lynn reflects on her identity and recent writing as both author of literacy readers and trade books. Both Tiffany and Kari-Lynn identify as professors of teacher education in language arts teaching methods. Given that Tiffany has been researching the application of readability formulae for some time and she was interested in Kari-Lynn's perspective as an author. This was the impetus for data collection that subsequently informed this study.

Tiffany asked Kari-Lynn to share documents such as publishers' guidelines, topic lists, and recommended learning outcomes. Kari-Lynn maintained a working document of the background information to include in her writing, as well as draft copies of the texts including their readability measures. During the drafting process, Kari-Lynn took screenshots of her drafts and journaled reflections as field notes. Tiffany interviewed her after she had completed twelve leveled texts for three different publishers. This interview interrogated Kari-Lynn's identity as an author, researcher and teacher educator with respect to how she thinks and feels about language as well as how she uses language in her craft of writing.

Qualitative data were first coded by Tiffany for themes using open-coding methods and then the themes were member-checked by Kari-Lynn (Creswell 2012). There were seven themes that were then collapsed into three of findings (Merriam 2009) that express the tensions of authoring under topical and readability guidelines. The three findings are elucidated as: (1) a glimpse into the considerations and tensions that a leveled text author contemplates prior to and during the writing process; (2) issues of engagement, power, identity and agency are peppered throughout the author's process; (3) a presentation of what is proposed as the 'secret sauce': the impact of text readability calculations.

### **Results**

Following is a description of the three findings accompanied by a selection of representative quotes from the dialogue between the authors as well as artifacts that illuminate the text author's process.

These findings are discussed as deliberations for educators to think critically about when using leveled texts in their classrooms.

### (1) Considerations and Tensions for Text Readability

Authors of leveled texts are given style guidelines and readability targets to work with as they create texts. The reality is that most authors of leveled texts are uninformed about the nuances of calculating and manipulating text readability and find this process nebulous. Tiffany asked Kari-Lynn to reflect on the process of writing to specific levels of text readability.

*I do feel that the parameters of readability are constraining. To be honest, it makes the project seem so much bigger, insurmountable in some ways... Sometimes I worry about the end product too much (Kari-Lynn, Interview).*

Typically, authors write with a narrative or a topic in mind and bring their unique style and personality to the writing. Leveled texts seem devoid of this distinction as competing priorities are what the author is considering first and foremost (e.g., Lexile Framework level or word count), and thus creativity can be stifled.

*In order to meet the deadline (a huge priority in publishing) and write solid leveled readers that follow the guidelines (a huge priority in educational publishing and in this project), creativity has to come third (Kari-Lynn, Interview).*

Kari-Lynn shared an example of these authoring guidelines as an artifact (see Figure 1). These guidelines are concise and straightforward, but also constraining at times.

Figure 1: Sample of author guidelines.

<p><b>ABOUT YOUR MANUSCRIPT:</b></p> <p><b>GRADE: 1</b></p> <p><b>GENERAL INFO:</b> Social Studies / Connections / History / Making History</p> <p><b>ESSENTIAL QUESTION:</b> Why is the past important? *The book you are writing should address this essential question throughout.</p> <p><b>TITLE/TOPIC:</b> Please submit a tentative title and summary for approval (for contract).</p> <p><b>READING LEVEL: H</b> Please see attached documents (Word document and PDF) for specific criteria for this reading level. It is crucial that the guidelines in the <b>Word document</b> are followed. The PDF is a helpful resource with a visual representation of your level. If guidelines differ between documents, please follow the Word document guidelines.</p> <p><b>LEXILE LEVEL: 440L</b> If you choose to check the reading level for your document, you can use the Lexile Analyzer found at <a href="https://lexile.com/analyzer/">https://lexile.com/analyzer/</a>. (You will need to set up an account.)</p> <p><b>PAGE COUNT (Including title pages, TOC, etc.): 16 pages [15 pages of text]</b></p> <p><b>WORD COUNT:</b> Approx. 400 words (320-500)</p> <p><b>GENRE:</b> Fiction</p> <p><b>GENRE FOCUS (if applicable):</b> N/A * If applicable, please see attached document for specific guidelines regarding required text features.</p> <p><b>TEXT TYPE/TEXT FORM:</b> Please consider the Common Core State Standards when you are writing your manuscript. The link to the website is <a href="http://www.corestandards.org/">http://www.corestandards.org/</a>.</p> <p><b>SENSITIVITY ISSUES:</b> Please see document entitled "Sensitivity Guidelines" for content considerations. It is important to remember to be inclusive and diverse in terms of content.</p>
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Tiffany then commented during the interview about the guidelines and the perceived impact on the writing process; Kari-Lynn concurred with this judgement.

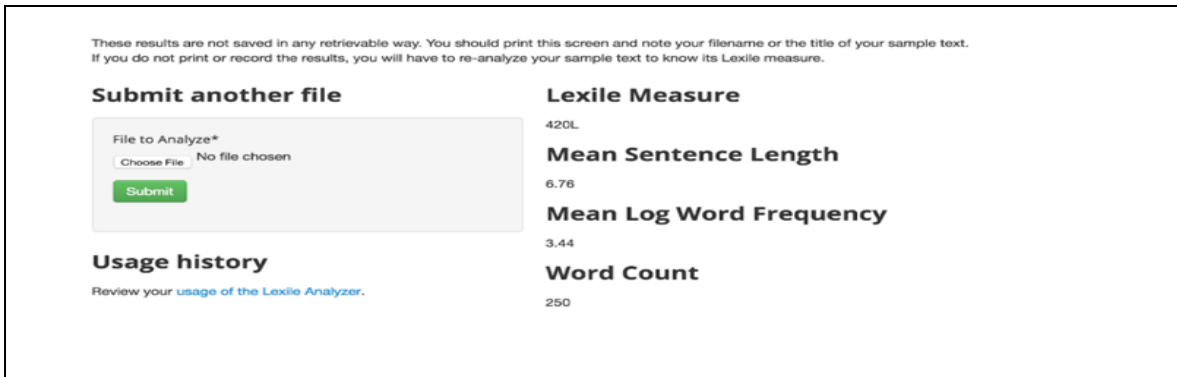
*You are becoming almost mechanical about the writing process.... gone are all references to cadence and voice, much less humor or emotion. What happened to the aesthetic purposes of reading?*  
(Tiffany, Interview)

*I agree. Though this puzzle-solving is kind of fun, gone are the joys of writing for pleasure—including creating unique characters and perspectives, dialogue, plot, and constructing voice* (Kari-Lynn, Interview).

As illustration of how Kari-Lynn was compelled to write to the guidelines provided and the targeted text level, Kari-Lynn provided an initial draft of a story (see Figure 2) that demonstrates how the characters are devoid of personality, specifically demonstrating how the sibling characters are flat and how the dialogue lacks voice or compelling words.

**Figure 2:** Sample of an initial story draft.

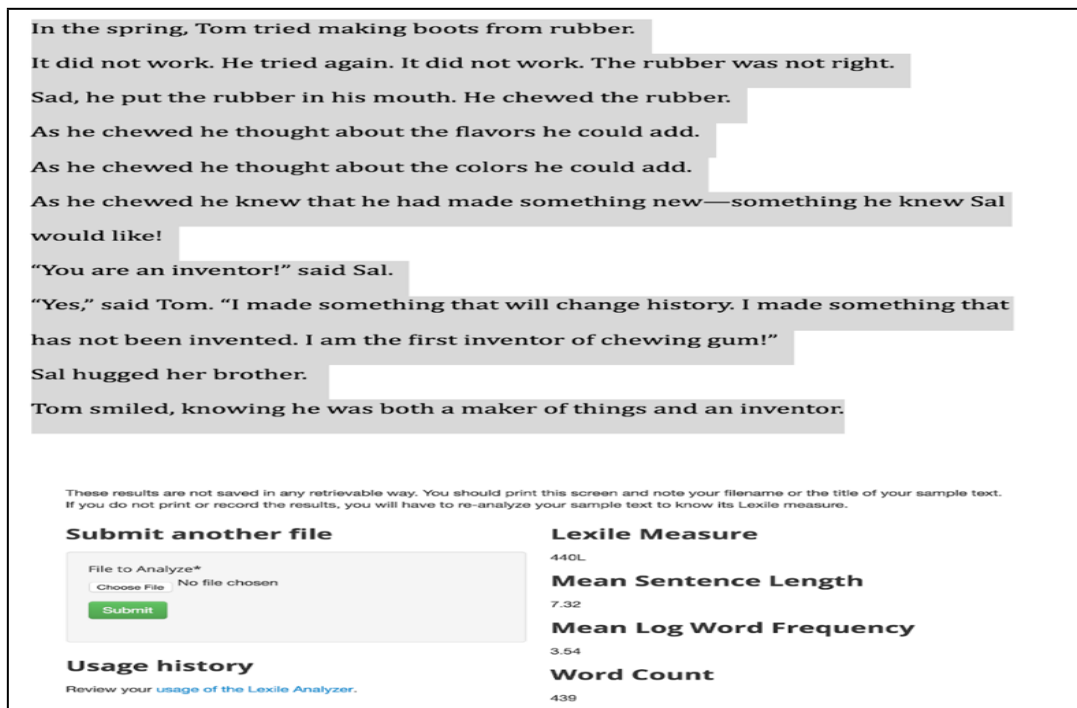
"You are an inventor!," said Sal.  
"No," said Tom. "I told you what I am."  
"That means the same thing," she said.  
Tom shook his head. "An inventor changes history. I just make things. I am a maker of things."  
"Oh," said Sal. "I see. Do you want to be an inventor?"  
Tom nodded. "I do!"  
"I see," said Sal. "Then do it! Just do it."  
"I wish I could be." Tom lowered his head. "I told you that I am just a maker of things, not an inventor. An inventor is smart."  
"You are smart," said Sal. "You make things from wood. You make things from cloth. You even make things from steel."  
Tom nodded.  
"Try making things from new things," said Sal. "Try making things in a new way."  
Tom nodded.  
"Try making things from rubber," said Sal.  
"From rubber?" said Tom.  
Sal nodded.  
Tom liked making things from rubber.  
He tried making boots. But it did not work. The rubber was not strong enough. It didn't work because the rubber was not right.  
Sad, he put the rubber in his mouth.  
As he chewed he knew that he had made something new for Sal.  
"You are an inventor!" said Sal.  
"Yes," said Tom. "I am the inventor of chewing gum!"  
Sal nodded. "Yes! You are!"



Kari-Lynn noted that there are the linguistic properties that writers constantly consider: words that have rich meaning are often challenging to decode, multisyllabic, and therefore inflate text readability. *...authors are trained to be succinct and clear. At the same time, authors are invited to think about “juicy” or “delicious” words--those that evoke images or that sound interesting...[It would be too difficult to read for an emergent reader, if a word for example] contains three syllables and includes a “soft c” at the beginning and a “silent e” at the end. Even if the Lexile index said that I could use it, knowing what I know about literacy, that would be very unfair to a young reader. So I need to find another way to communicate my ideas (Kari-Lynn, Interview).*

This speaks to the reality that the readability formulae cannot capture all of the nuances of the English language, how words are contextualized in the book (e.g., shown in the illustrations) and readers’ language experiences. Figure 3 is a sample of the previous text (see Figure 2) illustrating how Kari-Lynn revised the work to convey the same ideas with different word choice to remain within the constraints of the readability measure.

**Figure 3:** Sample of second story draft.





Authors have a generalized sense of the vocabulary that their readers are capable of decoding and comprehending regardless of the readability indices. For example, an author might know that a word like “right” might be difficult for a young reader to decode because of the irregular vowel/consonant digraph pattern (i.e., igh). However, “right” on a readability measure contributes to a lower readability score because it is a short (one-syllable) word. Whereas, an author might know that a word like “experimented”, which could be shown in the illustrations and be easily contextualized, and therefore read by a young reader, would not be a good word choice as it contributes to a higher readability score because it contains four syllables and because it is a less commonly used word.

## **(2) Engagement, Power, Identity and Agency**

Engaging readers comes naturally when the text evokes compelling ideas and extends their thinking beyond its boundaries. However, this engagement is harder to achieve with beginning readers because there is a “tension between children’s conceptual knowledge (e.g., in science, social studies) and their decoding skills” (Tiffany, Reflections on Author Guidelines from Publisher). Authoring at low levels of readability (for beginning readers) makes text engagement difficult as there is a gap between what readers are drawn to (e.g., interesting topics, vivid language) and what they can actually read.

Furthermore, there is also the issue of topical agency to engage readers. Teachers rely on texts to address social issues in contemporary and accurate ways. Authors of leveled texts are often bound by guidelines that,

*...offer culturally and politically correct considerations for the topics and content of the texts. Suggestions regarding characters’ gender roles, religion, race, disability, and ageism are offered. There are topics to be avoided such as risk taking, death, sexual behavior, drug/alcohol use, betting, violence, terrorism, hunting, the supernatural, politics, and consequences for unethical behavior. There are topics to be incorporated such as environmental stewardship, respect for authority, and healthy and active living. Some of these topics, such as gender roles, are contemporary instances that are present in the lives of children (e.g., gender neutral restrooms) and worthy of critical inquiry. As well, cultural stereotypes might be fodder for critical literacy discussions in classrooms (Kari-Lynn, Reflections on Author Guidelines from the Publisher).*

It is understandable why these guidelines are put in place: to ensure that identities are honored, stereotypes are expounded and cultural contexts are considered, but this does, nonetheless limit an author’s creative freedom and voice.

Another underlying struggle that speaks about the topic of agency is that the text consumer (the student or the teacher) is being denied the power to choose the texts, because often these leveled texts come already packaged. Moreover, the publisher, who creates the guidelines for these books may not have knowledge about the variability among readability formulae and merely ascribes to a user license or adopts a formula. Finally, the authors’ power is thwarted by issues of control; this control is both implicit (e.g., in the application of a readability formula) and explicit (e.g., in the details of the writing contract).

*It really is more than quality and creativity of writing. It is also about agency. Agency for these kids who are being asked to read these books. They are always in the forefront of my mind. I endure constant questioning as I write. Questions that I ask myself are:*

*Will kids at this level be able to read this?*

*Will this book, with its difficult vocabulary be enough to hold a child back from moving to a new reading level?*

*Am I being culturally sensitive?*

*Will kids find this book interesting?*

*How might this book motivate children reading it? (Kari-Lynn, Interview)*

As experienced by the readers and their teachers, the power relationships in text consumption reside in the choices that they can and cannot make; this also impacts with the ability to align with their identities. Since leveled texts are compiled in sets and sold as units to school districts, there is little opportunity to customize a set for the demographic and/or interests of any one particular classroom.

**(3) The ‘Secret Sauce’: Understanding the Impact of Readability Calculations**

Readability formulae include different factors in the algorithm calculations. Different publishers adopt different readability formulae. As publishing is a competitive business, not all companies are transparent with their chosen algorithms. It is like a ‘secret sauce’ used by a restaurant: it tastes great and it adds value to the food, but no one really knows the ingredients. Different publishing companies are trying to create a unique product for consumers that is both sellable and lucrative.

Yet, authors and educators both use and must apply readability formulae in their work with texts. It is essential that authors and educators hold an understanding of the factors that influence text readability as well as how a formula impacts readability. Sometimes it is length that impacts readability and sometimes it is word choice. For example, for the formula being used by Kari-Lynn in the present study, the total number of words used in a text contributes to its readability in an inverse relationship: the greater the number of words, the lower the readability.

*This readability formula writing goes against everything that I know about literacy. Emergent readers usually read shorter texts. How on earth can an author expect that in order to lower a Lexile reading score, he or she needs to add more words? (Kari-Lynn, Interview).*

However, the ambiguities of applying readability tools with certain word choices may complicate the author’s pathway for writing. This is demonstrated below in Figure 4. where Kari-Lynn provides a side-by-side comparison of the same text. The later version has a lower readability.

**Figure 4:** Sample of texts written to lower readability.

<u>Early Version</u>	<u>Later Version</u>
<i>Without Art</i>	<i>Without Art</i>
Art can be beautiful. Art can be powerful. Art can be fun.	Imagine a world without imagination. Imagine a world without artists. Imagine a world without art?
People make art. People who make art are artists.	Visual art is art. Imagine a world without statues.
Imagine a world without creators? Imagine a world without art?	Imagine a world without paintings. Artists play with shapes and lines. No crayons. No clay. No paint.
Visual art is art. Imagine a world without statues. Imagine a world without drawings. Artists bring together shapes and lines in paintings. No crayons. No clay. No paint. What a colorless world it would be!	What a colorless world it would be!

Here, the later text is more repetitive as the word “imagine” was repeated numerous times in order to lower the overall Lexile Framework score. There is a tension that writing leveled texts causes for authors between the quality of the writing (e.g., using word variety and keeping a rhythm) and the text’s purpose or guidelines (e.g., Lexile Framework score and word count).

Perhaps, the frustration that authors might experience is that they are not informed about the intricacies of readability formulae despite the profound impact on their work as authors. Authors may not be given information about the use of different resources to create and then label a text’s readability. This contributes to a sense of secrecy and lack of understanding of what impacts text readability calculations.

*This is not a good system. Not an exact science. The story’s content and flow doesn’t seem to matter (Tiffany, Interview).*

Authors create texts and then insert them into readability programs often with a lack of understanding of the formulae. Then texts are labeled by publishers using commonly referenced text level gradients such as from Fountas and Pinnell (2016) with an arbitrary descriptor.

*The cross referencing that is given (e.g., Reading Level D and Lexile Level 140L) is also debatable depending on the level conversion chart you are employing. In other words, there are differences among level conversion charts that are in circulation. This is not an exact science of converting text readability levels...this issue has a cumulative impact on the authoring process and the reader’s accessibility (Tiffany, Reflections on Author Guidelines from the Publisher).*

It would seem that there is great potency in the ‘secret sauce’: the impact of text calculations.

### **Discussion: considerations and tensions when using leveled texts**

The findings above elucidate some of the issues related to text readability and the authorship of leveled texts that educators should be made aware of. The influence of guidelines, restrictions, and standards that are given to authors before and during the writing process do play into the ways leveled texts are structured and rated. This is especially the case when the author is writing to a prescribed text level. Authors add words or delete them in order to target the right level; this can compromise the contents of the text, making the texts themselves more convoluted or more abstract.

Literacy researchers contend that no one knows students’ reading levels better than their teachers (Begeny & Greene 2014, Morris 2015). Instead of trusting the pre-packaged books and their levels ‘in blind faith,’ teachers might scan leveled texts applying qualitative criteria guidelines for each level to check the veracity of the assigned gradient. Teachers might also consider their students’ social and cultural backgrounds and their students’ interests and knowledge in order to determine the best fit for their emerging readers.

Additionally, if a student is struggling during a guided reading session, it is suggested that teachers might consider that it may not be the student who is not developing, but rather the choice of text itself. Teachers should be cautious when making instructional decisions based on purported text levels, using their own knowledge to determine if the difficulty of text is due to simply relying on readability formulae (Begeny & Greene 2014). Educators can be critical of both the contents and the process by which the text went through to get into the classroom. Thousands of decisions were made during its creation, by authors, editors, illustrators, designers, publishers, packagers and even companies that establish the standards for leveling these texts.

Many of authors know only part of the text leveling puzzle. For example, authors might know how to formulate the words so that the manuscript meets expectations set by the publisher, however they may not ever see their book in its final form and they may not understand how it will be used with students in classrooms worldwide. Future research should seek to interview and garner the perspectives of a cross section of different authors to gain an understanding of their varied experiences. Conversely,

publishers might be aware of meeting the readability criteria set by formulae, the guidelines for students in certain grades and how certain packages of texts might go well together (e.g., grouping them by themes), but publishers may have no idea how students might read their books. Reading is complex and reading development is shaped by the histories, experiences, identities, and social interactions of the students themselves. Each geographic region, each culture, and each student has his/her own needs and own reading development trajectory.

For this reason, it is important for educators to think critically about leveled texts, as well as how might they apply this criticality within their classroom practices. One way to do this, if possible, is to choose texts from a wide source of publishers. Different groupings of texts will offer unique writing styles, topics, and genres that have the potential to motivate students and encourage reading development.

Another option is to ask questions and encourage discussions with students about all types of books, including trade and leveled texts. Teachers might raise awareness that books are authored by numerous people. Encourage students to take on perspectives and to think critically about the intentions of the authors, the illustrators, the publishers, and even the packagers. Additionally, inquire into students' thoughts about the text itself. Do students like the topics? What connections can students make? What is cumbersome for students to read? What do students regard as fun about the book? Which characters do students perceive to hold power?

### **Conclusion**

This paper exposes the tensions and secrets among text readability measures and the authoring process of leveled books. The aim is to build educators' critical awareness of leveled texts, specifically the authoring process of these books in both educational and trade publishing, in order to critique various books and text packages, modify individual texts, and provide informed and evidence-based literacy programming for students. It is essential that teachers adopt the role of being critical literacy educators thereby modelling for their own students what critical consumers of texts should do.

Educators rarely consider text readability, but use leveled books with students in their classrooms. These educators often work in isolation in their language arts classrooms, or perhaps in small school-based literacy programming groups; they don't often have the opportunity to engage in nation-wide or international discussions about the readability of leveled books. Becoming a critical thinker of leveled books and readability measures (i.e., not being blindly lead by educational and trade publishers) shapes a literacy educator's capacity to evaluate books, to build critical conversations into authentic literacy lessons, and to make informed choices or modifications to texts for their students (Morris 2015). These are all exemplary practices of critical literacy educators (Fountas & Pinnell 2016).

Research demonstrates that today's literacy educators need to not only be consumers, but also thoughtful and critical inquirers of educational practices (Clarke & Whitney 2014, Lewison et al. 2014). Learning how leveled books are authored gives educators the awareness to uncover the secrets behind educational and trade publishing programs. Educators need to be given opportunities to collaborate and co-construct an understanding of how they apply readability measures with classroom texts (Morris 2015). Teachers also need time to moderate the subjective nature of readability formulae applications. They might seek out programs that allow them to review or modify texts themselves in order to differentiate for their readers' needs and local curriculum contexts. In this context, teachers could collaborate using exemplars to determine text readability levels based on quantitative and qualitative factors and their students' characteristics and instructional tasks.

This paper has brought to light considerations and critical questions that educators and administrators might be asking related to leveled text readability in relation to their students' needs. As well, it highlights ways that educators can bring a critical literacy approach and critical thinking into the classroom during the use of leveled texts.

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